

27 PAGES OF EXPERT TUTORIALS

FREE 160 minutes of pro CSS videos



# designer™

HTML5 CSS3 jQuery WordPress

www.webdesignermag.co.uk

WHAT'S SET TO BE BIG IN 2015  
TOP INDUSTRY EXPERTS UNVEIL MUST-KNOW TECH & TRENDS

PSD TO CSS  
GO FROM DESIGN TO CODE WITH BRACKETS

OCULUS RIFT AND THE WEB  
LEARN HOW AMAZE COMBINED VR, HTML5 AND 3D FOR A UNIQUE EXPERIENCE

45 designer resources worth £26

Responsive templates, mockups, 3D retro text creator & Recharge font



Est. 2009



HTML5 WEB APPS  
STUNNING BUILDS WITH KENDO UI

CSS HOVER EFFECTS  
CODE CLEVER ANIMATED LINKS

FAST FRONTENDS  
BUILD AMBITIOUS APPS FROM THE COMMAND LINE

ANIMATED HAMBURGER ICONS  
FROM MENU ICON TO CLOSE BUTTON

YOUTUBE MASTERCLASS  
UNLEASH ITS APIs TO CREATE CUSTOM COMPONENTS

ip DigitalEdition  
GreatDigitalMags.com  
ISSUE 231



# CHEAPER THAN YOUR DAILY MORNING COFFEE.

(AND MUCH EASIER TO ORDER)

£3.45  
PER DAY



DOUBLE SHOT, VENTI  
FRAPPUCCINO WITH EXTRA  
MILK, WHIPPED CREAM,  
AND CHOCOLATE SYRUP

ONLY  
£2.45  
PER DAY



27" iMAC

## OUR FLEXI-LEASE PACKAGES INCLUDE:

- 3 year full warranty
- Tech support and loan machinery
- Option to upgrade after 2 years
- Buy for just £1 at the end of the lease

# Welcome to the issue

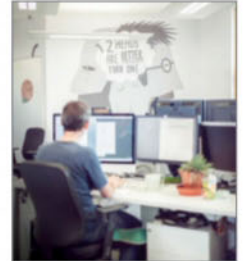
## THE WEB DESIGNER MISSION

To be the most accessible and inspiring voice for the industry, offering cutting-edge features and techniques vital to building future-proof online content



Steve Jenkins

## Highlight



"We don't put as much time into it as we would like but one thing we don't lack is good ideas!"

Web Designer chats to customer engagement specialists Sequence Page 32

## Welcome to the future



new year brings with it new hope, excitement and a fresh perspective. What will the web bring us in 2015? What new technologies, tools and practices are on the horizon? What beautiful and innovative sites will the established order unleash? What exciting talent will emerge refreshing different genres? The questions, and the possibilities, are almost endless.

The beauty of web design and development is that it is an ever-evolving animal. It is a forward moving entity and there is always going to be something new and exciting, or simply exciting.

Who knows what is going to emerge in 2015? There is no one better placed to answer this question than the industry itself. They will be the ones creating the latest libraries, future frameworks and introducing hot new design aesthetics.

Web Designer has called in favours and scoured its contact book to make sure that this year's HOT 100 is packed with the thoughts of those closest to the future of web design.

Back on a learning level we take a close look at YouTube's APIs and how they can create custom components (page 64). Plus, find out how to transform PSD mockups into CSS with Brackets and build pretty HTML5 apps with Kendo UI. As always, enjoy the issue.

Get ready to unlearn everything you know about web layout and pick up a whole new and much better set of tools

Follow us on Twitter for all the news & conversation @WebDesignerMag Visit our blog for opinion, freebies & more www.webdesignermag.co.uk



FREE - exclusive with this issue

# 45 Designer resources

- Video Tuition** - CSS 3D (Part 2): Three hours of expert video guides
- Actions** - 30+ Photoshop 3D retro text styles
- Templates** - 3 Bootstrap templates from W3 Layouts; Interno - multipurpose use, Flat Corp - Portfolio style & Two Bytes - minimal style
- Mockups** - 8 Clean identity and branding mockups from SparkleStock
- Font** - Recharge regular font from Typodermic



www.filesilo.co.uk/webdesigner-231



Imagine Publishing Ltd  
Richmond House, 33 Richmond Hill  
Bournemouth, Dorset, BH2 6EZ  
+44 (0)1202 586200  
Web: www.imagine-publishing.co.uk  
www.webdesignermag.co.uk  
www.greatdigitalmags.com

## This issue's panel of experts

Welcome to that bit of the mag where we learn more about the featured writers and contributors...

2015 is going to be different. It will be a year of consolidation and adaptation. HTML and CSS will become more sophisticated



### HOT 100 2015 experts

The first issue of the new year means that it's time for the annual **Web Designer HOT 100**. We have employed the assistance of some of the finest minds in the industry, who reveal their thoughts and opinions on what we should be looking out for 2015. **Page 38**

#### Mark Shufflebottom

Mark is a professor of Interaction Design at Sheridan College, Ontario. This issue he shows us how to use the open source editor Brackets to transform code hints from a PSD into CSS code snippets. **Page 58**



#### Tam Hanna

Tam is a veteran in the world of coding and has worked on a host of coding languages. He breathes code and this issue he takes a closer look at YouTube and its collection of APIs. Find out how to create your own custom components. **Page 64**



#### Matt Gifford

Matt Gifford is a lead RIA consultant developer and industry author from Cambridge who specialises in mobile development. This issue he reveals the power of the command line with his five-page feature on Ember CLI. **Page 76**



#### Richard Lamb

Richard is a web designer, writer and founder of Inspired Lamb Design. He has a passion for creating great content and design. This issue he demonstrates how to introduce a fade effect on scroll using CSS. **Page 56**



#### Sean Tracey

Sean is a creative technologist at a well-known south coast digital agency. He lives for all forms of code and relishes a challenge. This issue he reveals the secrets of Browserify and how to use modules to create simple applications. **Page 82**



#### Mark Billen

Mark is a freelance technology journalist with a background in web design and development. This issue he tackles the Lightbox pages and reveals how to create a host of quick-fire techniques you need to know. **Page 14**



#### Tim Stone

Tim is a front-end developer at Redweb and has a first class degree in Interactive Media Production. Coding is second nature to Tim and this issue he reveals how to use the HTML5 Kendo UI framework to build web apps quickly. **Page 70**



#### David Howell

David is an experienced writer, author and journalist who runs his own publishing company Nexus Publishing. This issue he takes his interview skills to the office of Cardiff-based UX innovators Sequence. **Page 32**



**Got web skills?**  
We're always looking for the hottest web-design talent. Email [webdesigner@imagine-publishing.co.uk](mailto:webdesigner@imagine-publishing.co.uk) with examples of your creative work

#### Magazine team

**Editor Steve Jenkins**  
steve.jenkins@imagine-publishing.co.uk  
01202 586233  
**Designer Benjamin Stanley**  
**Production Editor Carrie Mok**  
**Photographer James Sheppard**  
**Senior Art Editor Will Shum**  
**Editor In Chief Nick Roberts**  
**Publishing Director Aaron Asadi**  
**Head of Design Ross Andrews**

#### Contributors

Eric Meyer, Nadav Shoval, Rob Percival, Mark Billen, David Howell, Mark Shufflebottom, Neil Pearce, Richard Lamb, Tam Hanna, Matt Gifford, Tim Stone, Sean Tracey. Plus, a big thanks to all our HOT 100 contributors

#### Cover

Laser engraving by Viking Signs - [www.vikingsigns.co.uk](http://www.vikingsigns.co.uk)

#### Advertising

Digital or printed media packs are available on request.

#### Head of Sales Hang Deretz

01202 586442  
hang.deretz@imagine-publishing.co.uk

#### Advertising Manager Alex Carnegie

01202 586430

#### Account Manager Daniel Gunton

01202 586421

#### FileSilo.co.uk

Assets and resource files for this magazine can be found on this website.

Register now to unlock thousands of useful files.

Support [filesilohelp@imagine-publishing.co.uk](mailto:filesilohelp@imagine-publishing.co.uk)

#### International

**Web Designer** is available for licensing. Contact the International department to discuss opportunities.

#### Head of International Licensing Cathy Blackman

+44 (0) 1202 586401  
licensing@imagine-publishing.co.uk

#### Subscriptions

subscriptions@imagine-publishing.co.uk

To order a subscription to **Web Designer**:

0844 848 8413 +44 1795 592 878

Email: [webdesigner@servicehelpline.co.uk](mailto:webdesigner@servicehelpline.co.uk)

13-issue subscription (UK) - £62.30

13-issue subscription (Europe) - £70

13-issue subscription (ROW) - £80

#### Circulation

#### Head of Circulation Darren Pearce

01202 586200

#### Production

#### Production Director Jane Hawkins

01202 586200

#### Founder

#### Group Managing Director Damian Butt

#### Printing & Distribution

Printed by Southernprint Ltd, 17-21 Factory Road Upton Industrial Estate, Poole, Dorset, BH16 5SN

Distributed in the UK, Eire & the Rest of the World by Marketforce, Blue Fin Building, 110 Southwark Street, London, SE1 0SU, 0203 148 3300, [www.marketforce.co.uk](http://www.marketforce.co.uk)

Distributed in Australia by Network Services (a division of Bauer Media Group), Level 21 Civic Tower, 66-68 Goulburn Street, Sydney, New South Wales 2000, Australia, +61 2 8667 5288

#### Disclaimer

The publisher cannot accept responsibility for any unsolicited material lost or damaged in the post. All text and layout is the copyright of Imagine Publishing Ltd. Nothing in this magazine may be reproduced in whole or part without the written permission of the publisher. All copyrights are recognised and used specifically for the purpose of criticism and review. Although the magazine has endeavoured to ensure all information is correct at time of print, prices and availability may change. This magazine is fully independent and not affiliated in any way with the companies mentioned herein.

If you submit material to Imagine Publishing via post, email, social network or any other means, you automatically grant Imagine Publishing an irrevocable, perpetual, royalty-free license to use the materials across its entire portfolio, in print, online and digital, and to deliver the images to existing and future clients, including but not limited to international licensees for reproduction in international, licensed editions of Imagine products. Any material you submit is sent at your risk and, although every care is taken, neither Imagine Publishing nor its employees, agents or subcontractors shall be liable for the loss or damage.



© Imagine Publishing Ltd 2015  
ISSN 1745-3534



When you have finished with this magazine please recycle it.



# WEB HOSTING

TOP APPS NOW EVEN BETTER!

## WordPress and more with 1&1!

- Easy installation with 1&1 WP Wizard
- **1&1 Expert App Support 24/7**
- Evaluation version for all applications
- Security notifications and automatic updates
- Up to 2 GB RAM guaranteed
- Optimised for WordPress and over 140 more apps (Drupal™, Joomla!™, TYPO3...)

## Powerful Tools

- NetObjects Fusion® 2013 – 1&1 Edition included
- 1&1 Mobile Website Builder
- **PHP 5.6**, Perl, Python, Ruby, ASP.NET and more...

## Successful Marketing

- 1&1 SEO Pro
- 1&1 Search Engine Marketing
- Facebook® and Bing® credits
- 1&1 Newsletter Tool

## State-of-the-Art Technology

- **Geo-redundancy** for maximum availability
- Over 300 Gbit/s network connectivity
- 1&1 CDN with Railgun™

## All Inclusive

- Free domain for package lifetime (.co.uk, .com, .net...)
- Unlimited power: Webspace, Monthly Traffic, E-mail Accounts and MySQL Databases



COMPLETE PACKAGES

Starting at

**£0.99**  
per month\*  
excl. 20% VAT



0330 123 0274



1and1.co.uk

\* 1&1 Basic £0.99 per month for 12 months with 3 month billing cycle, paid in advance, then regular price applies. Prices exclude 20% VAT. Visit [www.1and1.co.uk](http://www.1and1.co.uk) for full offer details, terms and conditions. Rubik's Cube® used by permission of Rubik's Brand Ltd.



# contents

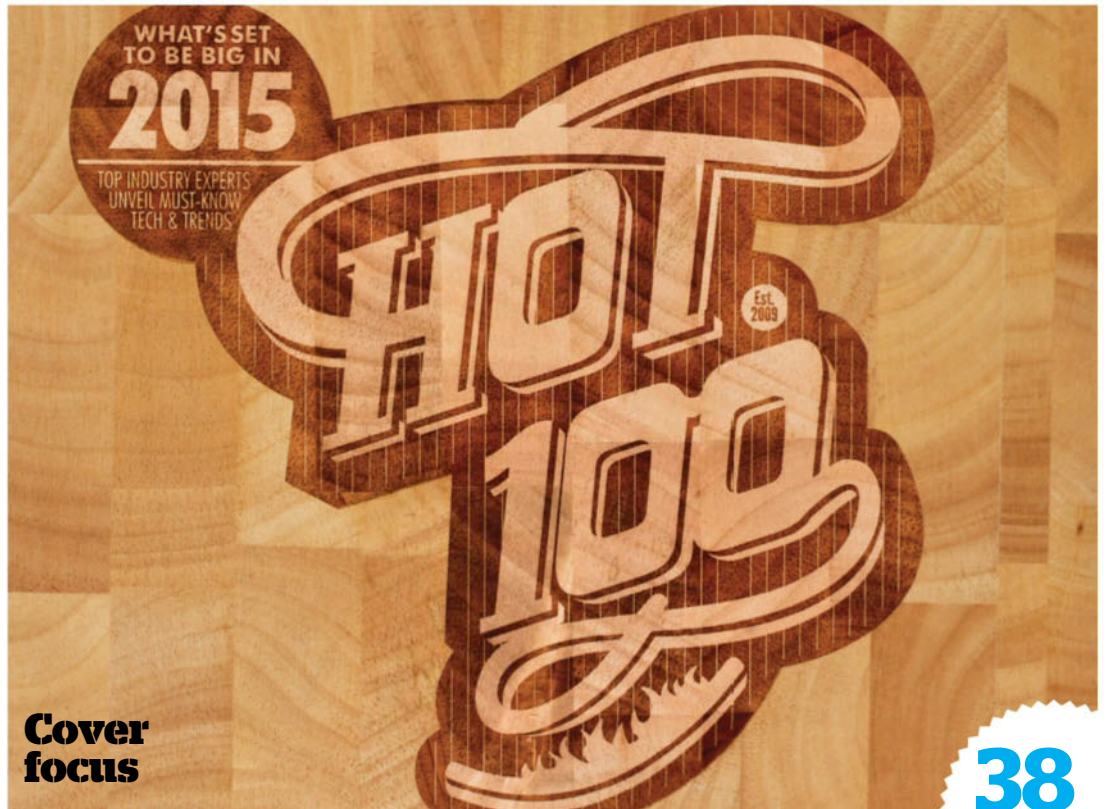
Cutting-edge features, techniques and inspiration for web creatives

Chat with the team and other readers and discuss the latest tech, trends and techniques. Here's how to stay in touch...

✉ [webdesigner@imagine-publishing.co.uk](mailto:webdesigner@imagine-publishing.co.uk) [@WebDesignerMag](https://twitter.com/WebDesignerMag) [www.webdesignermag.co.uk](http://www.webdesignermag.co.uk)

## Quick look...

- 08 Eric Meyer talks 2015**  
The cofounder of An Event Apart talks about how the coming year will be about refinement
- 10 Webkit: The best must-try resources out there**  
Front-end engineer Rafa Garcia-Lepper unveils the libraries and frameworks that will make your site a better place to visit
- 11 The rise of niche networks**  
Spot.IM CEO Nadav Shoval suggests that users will be looking for more intimate social experiences online in 2015
- 12 Future learning**  
Rob Percival and Shannon Hughes of online learning marketplace Udemy discuss how the web is going to be the best way to learn
- 14 Lightbox**  
A showcase of inspirational sites and the techniques used to create them
- 26 A next-gen test drive**  
Discover how Amaze combined VR, HTML5 and Oculus Rift for a truly out-of-this-world online experience
- 32 Experience makers**  
Now in its 20th year, UX innovators Sequence take time out from a busy schedule to talk shop
- 38 HOT 100 2015**  
Which technologies and trends are set to change your life in 2015? **Web Designer** asks the people in the know
- 64 YouTube masterclass**  
Unleash the king of online video's APIs and create the custom components you want
- 88 Hosting listings**  
An extensive list of web hosting companies. Pick the perfect host for your needs
- 98 Next month**  
What's in the next issue of **Web Designer**? Find out what you can look forward to



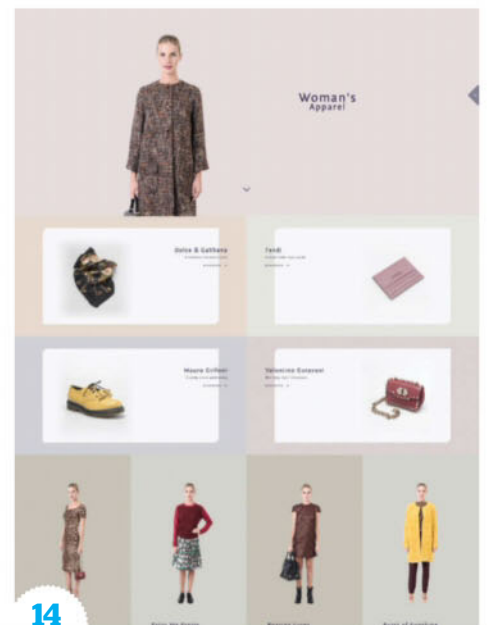
Cover focus

38



32

**Profile: Sequence**  
Long time digital creatives who love to talk



14

**Lightbox: Mario Bruschi**  
A Quest unleash a touch of Italian style



# FileSilo

94 Get the latest must-have resources and videos

A comprehensive collection of free designer resources!

- 160 mins of expert video guides
- 30+ Retro 3D text actions
- Recharge regular font
- 8 Branding and Identity mockups



64

Unleash the power of YouTube's APIs to implement custom components

## <header>

The tools and trends to inspire your web projects

- 8 2015: A year of refinement**  
Eric Meyer offers up his valued opinion on the coming 12 months
- 10 Webkit: The best must-try resources out there**  
Need a new framework or library? Rafa Garcia-Lepper tells you where to start
- 11 Comment: Nadav Shoval**  
Spot.IM CEO and cofounder discusses how users will be looking to create their own niche social networks in 2015
- 12 Interview: Shannon Hughes**  
The Udemy marketing director teams up with tutor Rob Percival to talk about the here, now and tomorrow of online learning



“The inescapable conclusion is that people tend to stay where they can be social”

Nadav Shoval

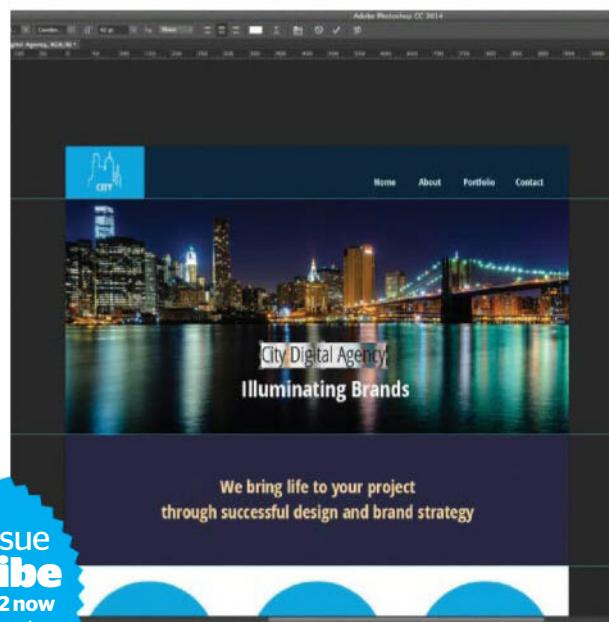
Never miss an issue  
**Subscribe**  
Turn to page 62 now  
USA readers turn to page 87 for an exclusive offer

Visit the **WEB DESIGNER** online shop at **imagineshop.co.uk**  
for back issues, bookazines and DVDs

## <tutorials>

Web gurus take you step-by-step through professional techniques

- 52 Create clever CSS hover effects**  
Use CSS3 animation to save space and reveal information with stylish on-hover effects
- 58 From PSD to CSS**  
Learn how to write CSS snippets in the Brackets editor with code hints from PSD files



## web workshop

- 50 Animate a hamburger icon**  
[www.risotteriamelottinyc.com](http://www.risotteriamelottinyc.com)  
From menu icon to close button
- 56 Code a page fade effect**  
[www.lexus-int.com/magazine](http://www.lexus-int.com/magazine)  
Build scroll-activated pages with transparency

## web developer

- 70 Build a HTML5 app with Kendo UI**  
Use Kendo's configurable widgets and AngularJS to build attractive front ends quickly
- 76 Develop with Ember CLI**  
Learn how to utilise the command line for better client-side app development
- 82 Build with Browserify**  
Discover how to build an emoticon translator with the Browserify modules



## The tools and trends to inspire your web projects

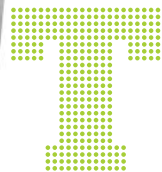
If you have a creative project, new web product or great designer story, contact the editorial desk

✉ [webdesigner@imagine-publishing.co.uk](mailto:webdesigner@imagine-publishing.co.uk)     @WebDesignerMag



# 2015: a responsive, empathetic and flexible web

Eric Meyer believes that this year will be about refining the craft and putting what we know to compassionate use



This is the year when there will be a rediscovered focus on performance. We've been here before, and most of us are concerned with

performance at least to some degree. Arising out of the responsive images standard is the ability to tune the images we serve for the browsing

environment. There are going to be more efforts along those lines, both from a markup angle and a JavaScript angle.

Frankly, it's about

time (in both senses of that phrase) that we worry about performance. Retina displays make us want to hand over ultracrisp images, and support for web fonts makes it tempting to typeset the whole site in SuperSmoothSlabSerifwoff, but the price users pay can be steep.

I can't count the number of times I've tapped a link, only to give up a minute or two later because all I can see is element borders and a couple of small images adrift in a blank expanse of 'our custom font is far more important than you actually reading our content'. That's a dial-up level of user experience and not even 28.8KBPS dial-up. More like 2400 baud.

Realising that this is a problem and doing something about it can be considered one facet of another trend I see starting to emerge, which is empathetic design. By that,

I mean designing not to impress the user or win annual design awards, but instead designing with a full awareness of what users want to do and how they want to do it. One aspect of that is to ask what happens if the user is coming with a handheld device over spotty Wi-Fi or slow mobile connection.

Another aspect is taking into account the likely state of mind of users. Our design personas are generally assumed to have plenty of time and mental bandwidth. What if they don't? Will your design still work for them, or will it confuse and frustrate them?

But to end on a CSS note, since that's still kind of my thing, advanced layout via flexbox is going to get pretty huge, and grid layouts aren't too far behind.

Get ready to unlearn everything you know about web layout and pick up a whole new and much better set of tools!

☞ Arising out of responsive images is the ability to tune the images we serve for the browsing environment. There are going to be more efforts along those lines ☞



Eric is an author, speaker, blogger, web designer, sometimes teacher and cofounder of An Event Apart. He's been working on the web since 1993, on CSS and HTML, and still finds it all utterly compelling.

**Eric A. Meyer**  
Cofounder, An Event Apart  
<http://meierweb.com>  
<http://twitter.com/meierweb>



A collection of inspirational visuals

# <design notes>

## Convert your street bike into a racer

[www.fix.com/blog/convert-your-street-bike-into-a-cafe-racer](http://www.fix.com/blog/convert-your-street-bike-into-a-cafe-racer)

**1** The illustrative style, colours and textures add a very retro feel. This combination instantly gives it a touch of era-related realism.

**2** Minimal editorial content ensures that the images relay the information - it suggests a style and the graphic reinforces the message.



## Colour picker

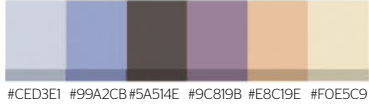
Hot hexadecimal codes

**Pink crystal**  
<http://bit.ly/16IIBEU>



## Soap tones

<http://bit.ly/13U7Y4r>



## Typesetter

The best fonts you need

**ABC ABC**

## Trend Rough

[bit.ly/1vfXBOV](http://bit.ly/1vfXBOV)

A family of vintage slab serifs with a host of styles including 3D, inline and shadows.



## Big John/Slim Joe

<http://bit.ly/1rxB4i6>

Ion Lucin offers this contemporary fat font style accompanied by a slim version.

## Graphics

Great visuals to inspire



## Agatha

<http://bit.ly/1s2du9R>

A poster created for Spoke Art's Bad Dads, an art show tribute to the filmography of Wes Anderson. This is a project by Bartosz Kosowski.



## Design+

Colours are subjective but bright shades are definitely an antedote to pastels. Fonts will still be fat and thin and classic four-colour screenprints will be back in vogue.

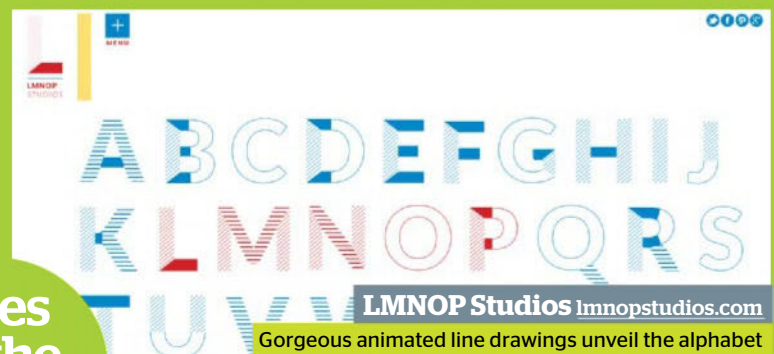


Good-looking designer on Web Designer  
**Ben Stanley**



**Future Terminal 1** [lyonaeroports-t1.com/en](http://lyonaeroports-t1.com/en)

A video extravaganza revealing the future of airports



**LMNOP Studios** [lmnopstudios.com](http://lmnopstudios.com)

Gorgeous animated line drawings unveil the alphabet

## Sites of the month



**#7MML** [www.7mml.org](http://www.7mml.org)

An animated intro screen leads to a world tour



**Meanwhile in Candyland** [candy-land.com](http://candy-land.com)

Illustration at its finest, cleverly interspersed with Street View styling



# <webkit>

Discover the must-try resources that will make your site a better place in 2015



**InuitCSS**

**github.com/inuitcss/getting-started**  
 If you spend more time customising the framework than you'd spend coding your own, then InuitCSS could be for you.



**React**

**facebook.github.io/react**  
 Performance is key in the design of React. For high-traffic apps, it's probably the right framework to use. Try it by dropping a React component inside your application.



**AngularJS**  
 angularjs.org

## AngularJS

AngularJS is a fantastic framework to work with. It is based on the idea of manipulating data instead of the DOM and it has been gaining momentum since early 2013. It's being actively developed by Google, and it's an open source project contributed to by a very active community.

005



### Building with libraries and frameworks

"Over the next year, libraries and frameworks will be more important than ever. This is simply because they have become the building blocks of modern web development."

**Rafa Garcia-Lepper**  
 Front-end engineer  
 at rafa@lepper.com



**EmberJS**

**emberjs.com**  
 EmberJS is a framework built on the concept of convention-over-configuration inherited from Ruby on Rails.







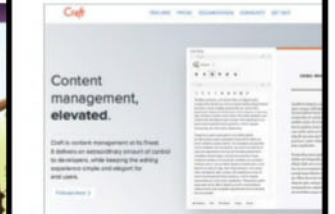
**Ampersand.js**

**ampersandjs.com**  
 After years of developing with Backbone and Node.js, the team at &yet wanted to bring the modularity of Node to the frontend.

# TOP 5 Alternatives to WordPress

006

If you want to try something different, check out these alternatives

<p><b>01</b></p> 	<p><b>02</b></p> 	<p><b>03</b></p> 	<p><b>04</b></p> 	<p><b>05</b></p> 
<p><b>Ghost</b>  <b>ghost.org</b>      A new blogging platform that's highly customisable and written in JavaScript. It enables users to write in markdown and is self-hosted too.</p>	<p><b>Medium</b>  <b>medium.com</b>      Medium seems to have been here forever, but it's still relatively young. If all you want to do is write then this is the perfect platform for you.</p>	<p><b>Locomotive</b>  <b>locomotivecms.com</b>      Want to customise everything? Then consider Locomotive. It's well thought through and you don't have to 'bend' the system like you do in WordPress.</p>	<p><b>Perch</b>  <b>grabaperch.com</b>      If you're a designer who makes websites, is good at HTML and CSS, but know little about back-end code then what you need is Perch.</p>	<p><b>Craft</b>  <b>buildwithcraft.com</b>      Craft is for those who write custom HTML, CSS and JS. There are no themes and it's built to be scalable and to adapt to your project's scope.</p>



# The rise of the niche network

Users will increasingly look for more intimate social experiences online in 2015

**Bill Gates once argued that there would be two types of businesses, those that are on the internet and those that are not, and “if your business is not on the internet, then your business will be out of business.”** He’s been proven right, and as of September 2014 there were one billion registered websites on the internet.

Attempting to amend Gates’ statement for 2015 and beyond, the new standard is quickly becoming social media engagement. This statement is borne out by data: Facebook sees 21 billion monthly visits, with visitors spending an average of 20 minutes on site to view around 15 pages (<http://www.similarweb.com/website/facebook.com>). By contrast, the *New York Times* sees only 206 million monthly visits. The inescapable conclusion is that people like to be social, and even if the average website can’t (and doesn’t want to) be Facebook, there’s no doubt that the more social the experience, the more traffic and engagement. The question is then: how can site owners jump on this trend to ensure their survival and success moving forward?

The immediate answer seems obvious at first – build a presence on existing social network giants like Facebook and Twitter to take advantage of the large traffic volume on those sites and redirect it to your own. These social networks also provide a useful service as they are able to host the social interaction and engagement that your website visitors will invariably want to have – a social experience that you are unable to deliver on your own site because you simply don’t have the technology. Eventually, the ideal social situation is one where you have amassed thousands or millions of Facebook followers who are engaging with your content there, then heading back to your site to read it.

The problem with this approach is that it ultimately leaves website owners beholden to an external company to get access to their own community of site visitors. When Facebook changes its regulations about promotional posts from brands, site owners are suddenly in a position of being locked out of the room where their own fans are interacting – and only money will grant them access. Another problem is



## Nadav Shoval

CEO and cofounder of Spot.IM  
[www.spot.im](http://www.spot.im)

Nadav founded Spot.IM while in the Israeli Army, Spot.IM is his fifth venture. He founded several internet companies and teenage web services and has been working on building startups since he was 11.

007

Author profile

that relying on a news feed presence to get people to read your article is a risky strategy considering that most people end up reading the headline and moving on quickly to the next item in their feed.

What website owners need is a way of bringing social on-site and owning their own community, as opposed to competing for the attention of their own site visitors on larger sites like Facebook. As a website your site visitors are already united by their common interest in what you have to offer – what they need is a way to talk to each other and to you.

The potential success of this strategy isn’t just proved by the data we’re seeing at Spot.IM, where website owners using our technology are seeing a 50 per cent jump in page views on average, but is already demonstrated by all the smaller, more intimate social networks that have sprung up in the past year or so. For example, Take Path is a social network that caps your friends at 150 whereas Couple (formerly Pair) has reduced social networking to just two people.

If Facebook gives you access to hundreds and thousands of people you already know and Twitter lets you be part of a global conversation, then what people are clearly starting to look for is the more intimate and potentially targeted experience that a niche network can give them. While for some people it’s about privacy, for others it’s about looking to have conversations about shared interests without having to condense their thoughts into 140 characters. What these niche networks are really offering is a way to mimic the way people enjoy conversing in real life – settling on a topic that interests them and being able to freely talk about it with a limited number of people.

Ultimately, the social media giants like Facebook, Twitter and Instagram will continue to thrive. But their success doesn’t preclude the rise of micro or niche networks that will be built on the web, within websites and on mobile apps. It’s clear that people are searching for an additional social experience beyond just being able to look at the photos of a distant cousin or ex-boyfriend. Bringing people together over shared interests and content will be one, powerful way of giving that experience to them.

# THE FUTURE OF ONLINE LEARNING

Udemy's mission: to help anyone learn anything online

**Q. As the world's online learning marketplace what can Udemy offer its potential users?**

Shannon: At Udemy we have more than 20,000 courses that offer people around the world the opportunity to advance their careers, change professions and develop personal passions. Udemy is creating an impact by bringing knowledge to over four million students via online courses on everything from Java to Excel to photography. We are focused on exponentially increasing the number of people in the world who have access to content to improve their skills. We're empowering individuals and companies to survive and thrive in a global economy where 65 per cent of kids will have jobs that don't exist today.

Udemy is different from other online learning sites because many of our instructors are everyday people teaching content they are passionate about in their areas of expertise. You do not need a credential or degree to teach on Udemy. As a result, we have instructors around the globe sharing their diverse expertise. Our instructors include retirees seeking a source of continuous income, stay-at-home parents looking to make extra cash as well as people who have been able to pay off their student loans, travel the world, and have the freedom to not work full-time as a result of their ongoing source of Udemy income.

**Q. The way we learn has evolved from just the more traditional in class face-to-face learning. How does online learning re-create the traditional learning experience?**

Rob: The experience of following along with an instructor on a video is actually very intimate - it re-creates the one-to-one feel of personal tuition, while giving the learner the ability to pause and rewind the teacher - generally not

an option in real life! With more advanced assessment tools (such as online coding test environments), the whole of the learning process could be automated, freeing up teachers to spend more time offering help and advice to students. This is something computers won't be able to do for a while!

**Q. Does Udemy provide official certification at the end of a course?**

Shannon: Udemy does not offer formal certification. However, we do integrate with LinkedIn so that students can add course completion certificates to their LinkedIn profiles.

**Q. Online is an ever-evolving arena, what new tech do you expect to see make its way into online learning?**

Shannon: Mobile will continue to be huge. Education content must be accessible to people on the go on the device of their choosing. We project that we will see more gamification in online learning, that will make learning more engaging, fun and social. It will be interesting to see if wearables actually make it to education.

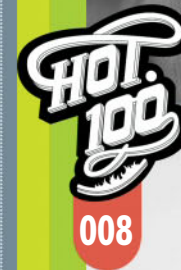
**Q. Finally, how do you think online learning will change the learning landscape in 2015 and beyond?**

Shannon: We don't expect online learning to replace traditional education. But the incredible thing about online learning is it makes a great education accessible to people around the world. The primary problem with education right now is accessibility. In some areas of the world, thousands of schools would need to be built and thousands of teachers hired in all those locations to meet the needs for in-person education. At Udemy, we are offering another vehicle to learn new skills. We project that in the next three years, one in six people will be taking Udemy courses globally.



Rob refers to himself as a coding geek and teaches five Udemy courses on web development. He has over 80,000 students.

**Rob Percival**  
Teacher at Udemy



Shannon leads corporate marketing and communications at Udemy. She holds two degrees, an MBA and a BA.

**Shannon Hughes**  
Sr. marketing director at Udemy



Receive £25k  
tax-free to train as a  
computing teacher

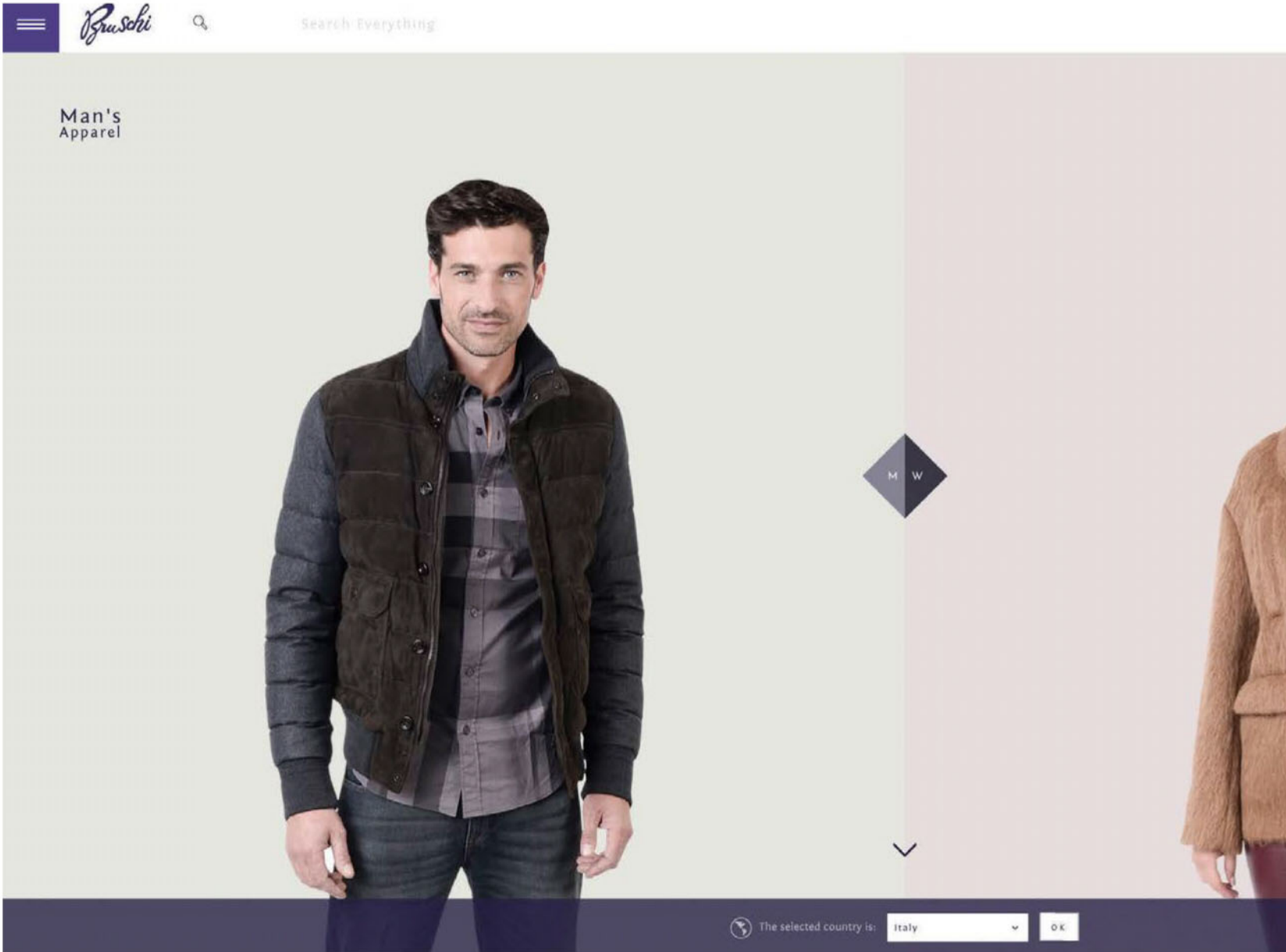
and help develop  
the great minds  
of tomorrow.



As someone who is passionate about computing, you know how an interest in the subject can be sparked by the right teacher. You have the opportunity to create that interest. With a minimum starting salary of £22k to £27k and the possibility to receive a £25k\* tax-free training bursary or a £25k\* scholarship provided by BCS, The Chartered Institute for IT, it's easy to see why teaching can be such a rewarding career.

**Applications are now open.**

Search [get into teaching](#) to find out more.



**<Above>**  
 • Opening on a “double homepage”, the site filters content for the user depending on the type of fashion they want to look at

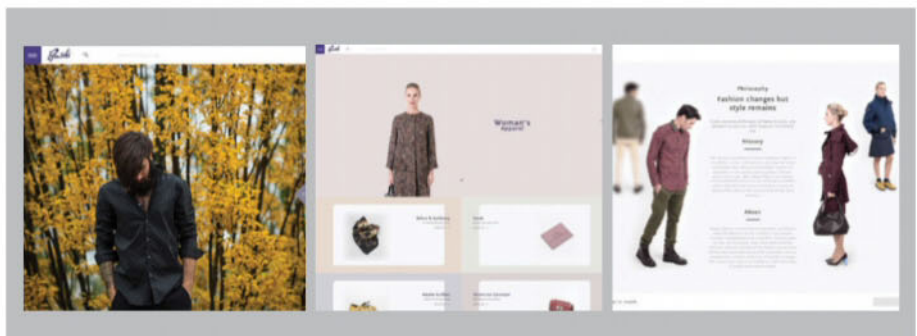


**Interactive storytelling**

009

“Stories generate emotions that leave a lasting and deeper impact. They are a kind of motif to customers. They touch people’s hearts and minds, and thus they have an ability to inspire, to motivate and to activate. If you combine a good story with interactivity and engagement, you will slam dunk web design.”

**Fabio Merlin**  
 CEO & creative director  
 at AQuest



**<Above>**  
 • Sultry, glossy fashion photography is employed to give [MarioBruschi.com](#) a catalogue feel

**<Above>**  
 • Longer pages leverage interesting layout configurations to guide the eye down inspiring “lookbooks”

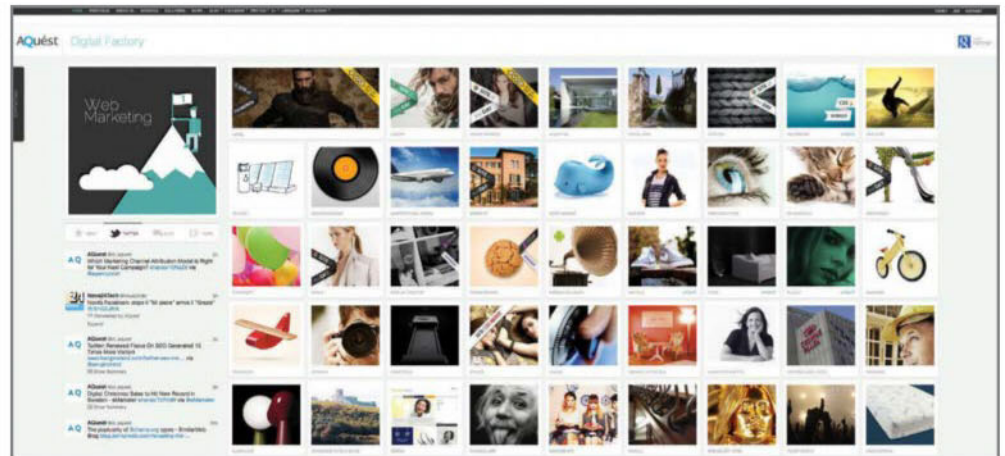
**<Above>**  
 • The identity of the client is skillfully embodied by the web design direction of AQuest



# Mario Bruschi

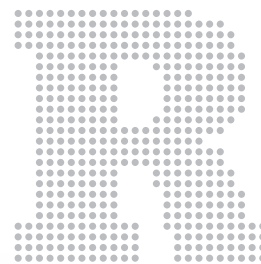
[www.mariobruschi.com/en](http://www.mariobruschi.com/en)

**Development technologies** HTML5, CSS3, jQuery, Modernizr, Sass, Velocity.js, Ajax, Webform, ASP.NET



Designer **AQuest**  
[www.aquest.it](http://www.aquest.it)

The great Italian eye for stylish clothing meets the cream of Verona-based web design



ather like the clothing industry, the fashions of modern web design come and go. This is why the best designs tend to adopt a timeless sense of style, avoiding any outlandish aesthetics that date too early. There is then a real synergy with this classy brochure-like website for Italian fashion

brand Mario Bruschi, synonymous with a philosophy of "fashion changes but style remains". Splitting featured collections between men and women, content is kept concise and focused around cohesive "lookbooks". It does not dare bombard visitors with too many options, clouding their accessibility.

Intuitive navigation with a pop-out panel menu or via a footer enables deeper delving into wider product ranges and accessories. Designers AQuest, a local Verona studio, are no strangers to building fashion-conscious eCommerce experiences. "We were asked to visually embody the brand's originality and create a unique digital face and distinctive look that would put the accent on the garments," explains their senior digital designer. "Following recent trends in web development, we adopted a mobile-first approach. We built the site around pure minimal graphics in order to make the products stand out. A distinctive aspect of the site is that you can choose from women and men's apparel directly from the home page, so it's like having a double homepage. It is visually capturing, easy to navigate and simple."

abcABC  
1234567890

<Above>  
• Fontin Sans Regular renders most of the page text, headings and menu items throughout

abcABC  
1234567890

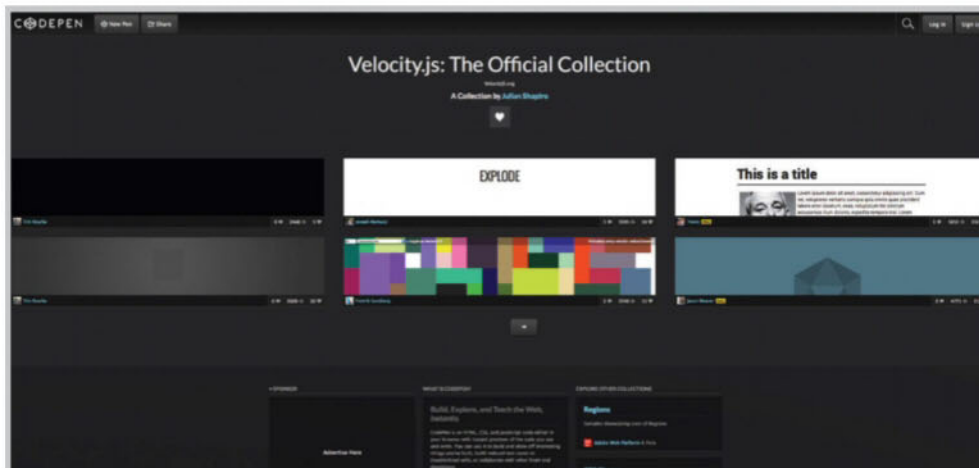
<Above>  
• Museo Sans by Exljbris Font Foundry provides a less distinct typeface and is available via Typekit

**We built the site around pure minimal graphics in order to make the products stand out**



## Animate page elements using the Velocity.js UI Pack

Apply more simplified, slicker and app-like motion effects with a JavaScript library employed beautifully by [mariobruschi.com](http://mariobruschi.com)



### 01 Introduction to Velocity.js

Put most simply, Velocity.js is a JavaScript library or plugin for applying effects and transitions to HTML page elements. Written by NameLayer founder and web programming guru Julian Shapiro (check out his website for more info at [julian.com](http://julian.com)), the plugin behaves just like jQuery's \$.animate() function while offering performance gains. A special UI Pack provides rapid access to an array of motion effects, which we will be using to observe a few quick animations.

### 02 Attach the Velocity.js library

To get started quickly we can add Velocity.js alongside jQuery from online CDNs, inserting the following <script> tags into the head of our page. Should you prefer you can download the velocity-master.zip plugin repository via GitHub (<https://github.com/julianshapiro/velocity>). You can then simply copy the core JS files into the root of your page and link locally, making sure you add jQuery also.

```
001 <script src="http://code.jquery.com/jquery-1.11.0.min.js"></script>
002 <script src="http://cdn.jsdelivr.net/velocity/1.1.0/velocity.min.js"></script>
003 <script src="http://cdn.jsdelivr.net/velocity/1.1.0/velocity.ui.min.js"></script>
```

### 03 Basic page setup

We'll use a variety of page objects for showcasing each effect and you can check the examples in the supplied index.html document on FileSilo (<http://www.filesilo.co.uk/webdesigner>).

Fundamentally we're using <div> elements and applying prebuilt Velocity effects, these being transitions and callouts. So our basic example page has a heading, text paragraph and email input box arranged like so and styled in the head of our page:

```
001 <div id="container">
002 <div id="myHeading"><h1>Velocity.js</h1></div>
003 <div id="textBlock">This is my descriptive block of text...</div>
004 <div id="emailBox">Email signup: <input type="email" value="yourname@email.com"></input></div>
005 </body>
```

### 04 Transition effects

So to animate our heading we use JavaScript's setInterval() method to loop a function at a desired interval. In here append .velocity() with the name of the chosen UI Pack effect, so in this instance we're going to be using a transition effect to make the text slide downwards into view. By adding a delay we are now able to slow the effect before the next loop or chain additional .velocity() animations:

```
001 <script>
002 setInterval(function() {
003     $("#myHeading")
004     .velocity
005     ("transition.slideDownIn")
006     .delay(5000)
007 }, 300);
008 </script>
009
```

### 05 Invisible effects

Using that same basic principle we can change up the previous code slightly to animate our text paragraph instead. On the Mario Bruschi site, a particular velocity transition is used to 'swing' item description text into view. So here we'll use the transition.flipXIn effect to mimic it, setting the durations again to change things up. If you set the opacity of your element to zero or display to none in your CSS you can ensure it is initially invisible on load:

```
001 <script>
002 setInterval(function() {
003     $("#textBlock")
004     .velocity("transition.flipXIn")
005     .delay(6000)
006 }, 500);
007 </script>
```

### 06 Callout effects

One of the next aspects of the UI Pack are the range of callout effects, used to add subtle motion to



call user attention. This is great for prompting data from the user for example. Here we'll add a bounce to our email input field. Again it's merely a case of changing the event name and setting your preferred timings. Be sure to check out [julian.com/research/velocity/#uiPack](http://julian.com/research/velocity/#uiPack) for full documentation and experiment with our example page!

```
001 setInterval(function() {
002     $("#emailBox").
003     velocity("callout.bounce");
004 </script>
```





# THE BEST TOOLS FOR RESPONSIVE DESIGN\*



## Responsive **LAYOUT MAKER**

Prototype device-agnostic layouts from the content out with custom breakpoints. The result? Rock-solid layouts with code that is crisp, clean and production ready!

## Responsive **SITE DESIGNER**

Create complete, one-of-a-kind, responsive websites without coding. All the power CSS offers is available through intuitive visual controls. 'Nuff said!

## Responsive **EMAIL DESIGNER**

Drag-n-drop to create beautiful emails that work wonders on any device. Full story-driven design freedom, unrestricted by rigid templates. Need to tweak that font size for smaller devices? Do it!

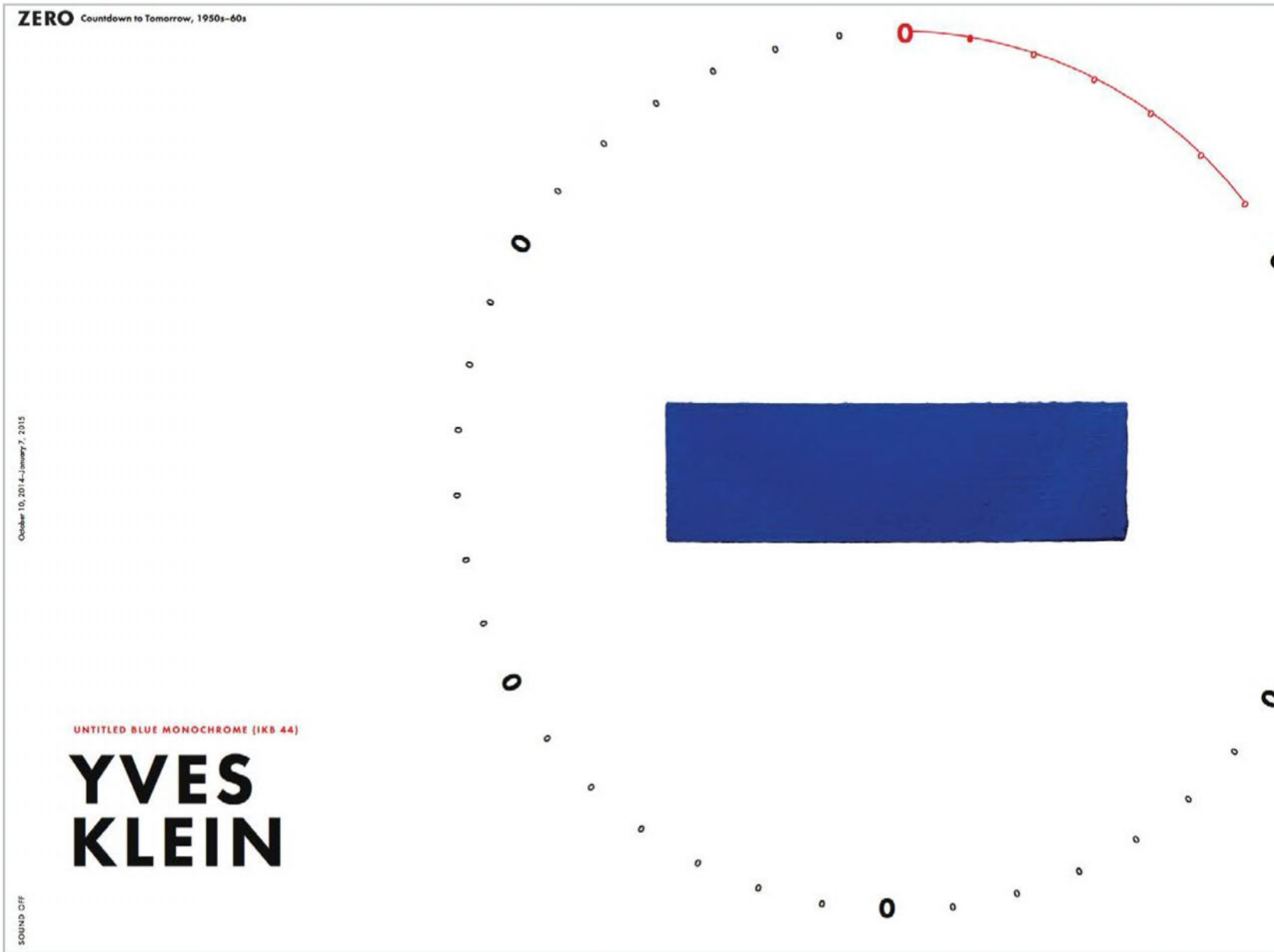
**\* IT'S A CONTEST!!**

tweet **#[\[insert:wordfoundabove\]tools](#)** @coffeecup for a chance to win one of the apps. More info at [www.coffeecup.com](http://www.coffeecup.com).

by



**CoffeeCup**



**<Above>**  
 • Around the Countdown to ZERO clock you'll find featured artists and close access to the artworks



**User interaction and IoT**

010

"Multiuser sites and applications are on the rise, and will become much more widely used, creating new layers of interaction. The Internet of Things will flourish even more - going from experimental uses to useful applications that people can interact with, taking user interactions on a website into the real world."



Technical director at Hello Monday  
**Anders S. Jessen**



**<Above>**  
 • A tasteful arrangement of images and text gives the exhibition plenty of vacant space for content

**<Above>**  
 • An injection of red catches the eye and this fullscreen navigation menu lets you jump between sections

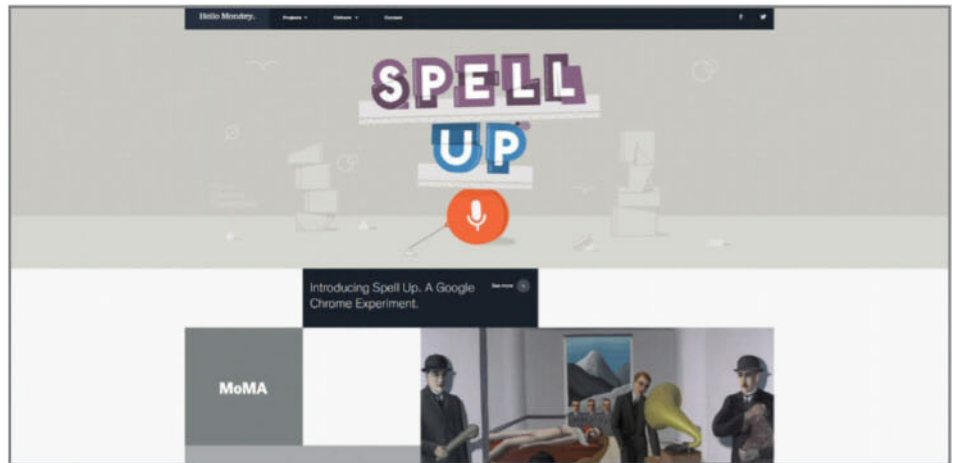
**<Above>**  
 • The Network area plots where and when landmark exhibits within the ZERO movement took place



# Guggenheim ZERO

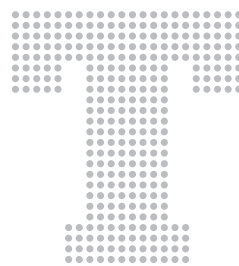
exhibitions.guggenheim.org/zero

**Development technologies** HTML5, CSS3, Minified.js, BrightcoveExperiences.js, Facebook, fast.fonts.net, MP3



Designer **Hello Monday**  
hellomonday.com

It's called ZERO, but there's nothing modest about this virtual catalogue for an art retrospective



**he Solomon R. Guggenheim Museum on Fifth Avenue New York is one of the most iconic art galleries in the world.** The cylindrical, shell-like building, designed by Frank Lloyd-Wright in 1959, typically plays host to art exhibitions - with ZERO currently running until January 2015. Titled ZERO:

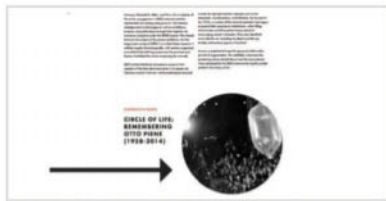
Countdown to Tomorrow, this dedicated website provides a rich, virtual preview of the featured exhibits and links to booking viewings. Opening on an intriguing abstract video sequence and landing within a clean white template, artworks are arranged within a clock-like rollover wheel. Clicking on a node reveals

each example, moving to neighbouring pieces left and right or zooming in for closer inspection. Everything is kept very gallery-like and true to Guggenheim's identity, using a palette that seldom strays from white, black and red. Delve deeper and the story of the ZERO movement is explained with longer poster-like pages where subtle image effects, fading backgrounds and Futura PT styled typography maintain a stylish experience across multiple devices. A combination of CSS transitions and the jQuery-like Minified.js provide the slick moments of dynamism, while atmospheric audio design recommends headphones for added immersion. Celebrated agency Hello Monday, again based in New York, take credit for a project that has already scooped honours such as FWA's Site of the Day.

abcABC  
1234567890  
abcABC  
1234567890

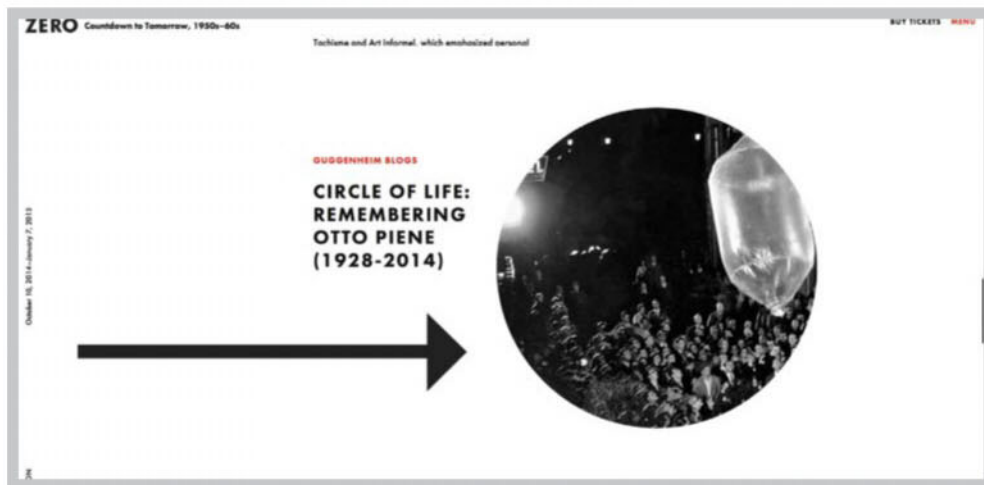
<Above>  
• Futura PT by ParaType, and available via Typekit, handles the text in Book, Medium, Heavy and Heavy Oblique (700)

Everything is kept very gallery-like and true to Guggenheim's identity, using a palette that seldom strays from white, black and red



## Draw CSS arrow shapes and style circular images

Create arrow and circle background frames, inspired by the custom post styling of Guggenheim ZERO



```
001 CSS:
002 #arrow-stem, #arrow-head, #arrow-
003 wrapper, #circleImg {
004   float: left;
```

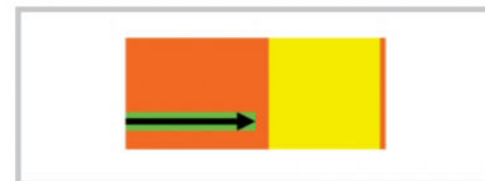
```
001 HTML:
002 <body>
003 <div id="container">
004   <div id="arrow-wrapper">
005     <div id="arrow-stem"></div>
006     <div id="arrow-head"></div>
007   </div>
008   <div id="circleImg"></div>
009 </div>
```

### 01 The arrow elements

Let's start with this idea of creating an arrow shape purely with CSS. On Guggenheim ZERO, the arrows are images but in fact these arrows can also be made more elegantly. It begins with two <div> elements, one to form the arrow stem and the other to be the pointed head. We give these an id to suit and nest them inside another <div> we'll call 'arrow-wrapper' like so:

```
001 <div id="arrow-wrapper">
002 <div id="arrow-stem"></div>
003 <div id="arrow-head"></div>
004 </div>
```

```
001 #arrow-stem {
002 background: transparent;
003 width: 600px;
004 height: 33px;
005 border-bottom: 34px solid black;
006 }
007
```



### 02 Arrow wrapper styling

We want the two parts of our arrow to be joined so when we move them around the page they remain as one. Later we will also ensure the head element floats to the head of the stem on the right. In our CSS class we'll set the desired width and height, while the top margin pushes it down inside a main container:

```
001 #arrow-wrapper {
002   width: 700px;
003   height: 100px;
004   margin-top: 400px;
005 }
```

### 04 Create the arrow head

The arrow head <div> will append to the right of the stem to form our arrow. This is formed by adding the following CSS class and rendering a triangle shape. This technique is derived from <http://css-tricks.com/examples/ShapesOfCSS> - a page with some excellent solutions for drawing CSS-based shapes. Essentially, our <div> again becomes merely a left border by making the top and bottom ones transparent:

```
001 #arrow-head {
002 border-top: 50px solid transparent;
003 border-left: 100px solid black;
004 border-bottom: 50px solid
005 transparent;
006 }
```

### 06 Style the circle image

Our example image is added as a background for circleimg in the associated CSS class setting the desired width and height dimensions squarely to 600 by 600 pixels. The property background-size can then be set to 'cover' if you want the source image in a better size within the frame. We then simply use the border-radius property and set it to a value exactly half of our edges, so in this case it will be 300px. The margin-left of 70px is merely a spacer between the arrow point and image.

```
001 #circleImg {
002 background-image: url('myImage.
003 jpg');
004 width: 600px;
005 height: 600px;
006 border-radius: 300px;
007 margin-left: 70px;
008 }
```

### 03 Style the arrow stem

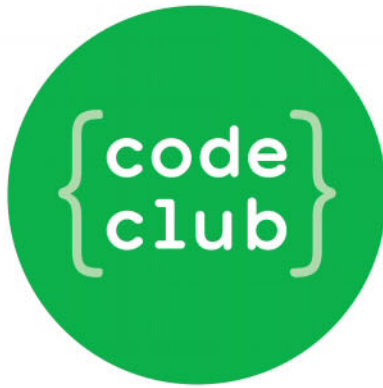
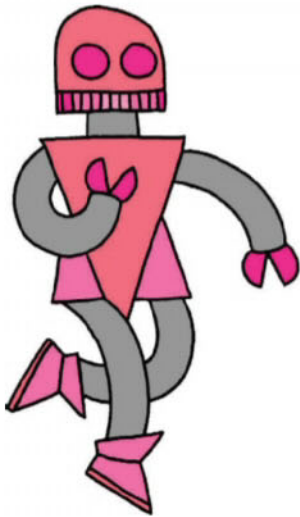
The arrow stem <div> is styled so that we actually only see the element's bottom border, set to black. Setting the background to transparent and the height as required means the 34px solid border line is pushed down to meet the centre point of what will be the arrow 'head' sitting directly to the right:

### 05 Add image and float left

The next vital part in our CSS is floating all our <div> elements left, so we not only force our arrow into line but also line up the wrapper to our new circular image. So in your HTML just after the arrow-wrapper add a fresh <div> called 'circleimg' as shown. The container <div> is merely a box for positioning everything centrally on the page:







# Can you volunteer for Code Club?

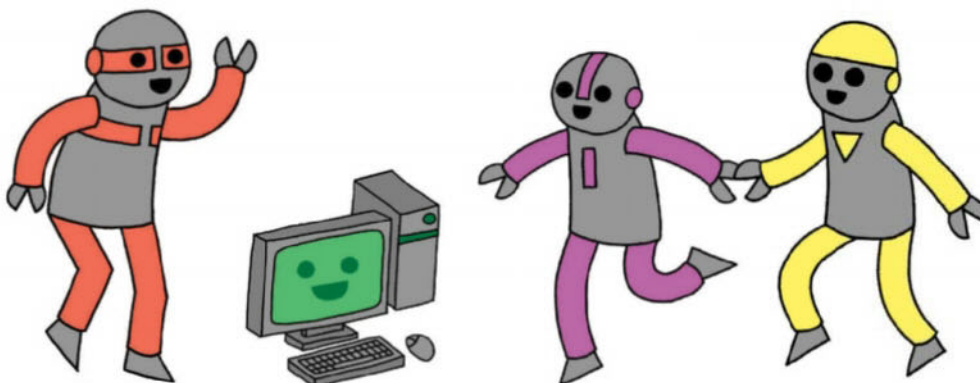
Code Club is a nationwide network of volunteer-led after school coding clubs for children aged 9-11.

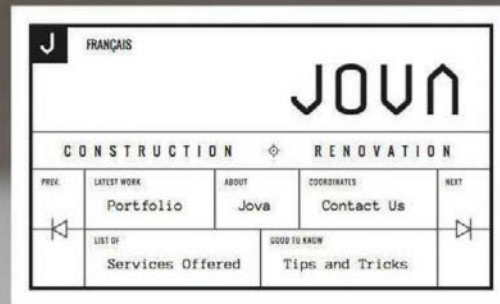
We need people who know how to program computers to volunteer to run a club at their local primary school, library or community centre for an hour a week.

We create the projects for our volunteers to teach, the projects we make teach children how to program by showing them how to make computer games, animations and websites.

Get involved, let's teach the next generation to code!

Visit [www.codeclub.org.uk](http://www.codeclub.org.uk) to find out more





**<Above>**  
 • Subtle motion effects and parallax-scrolling techniques are deployed to make the content feel richer

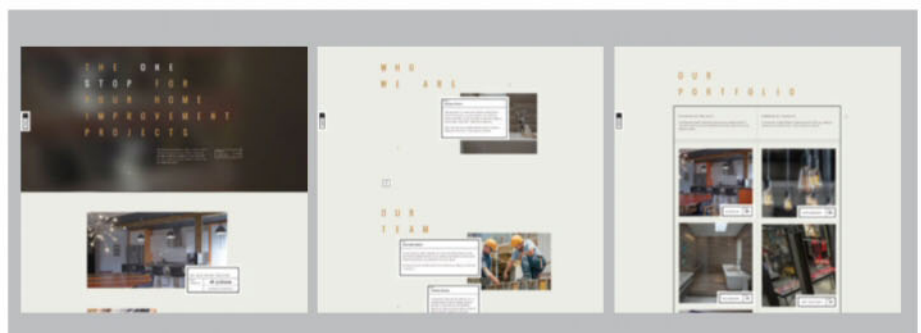


## RWD images & typography

011

“2015 will be the year of true responsive design, typography and HTML5 animated content. With more gadgets available for browsing, it is primordial to rethink UID. We have seen responsive typography and images but it will be truly on the rise this year. We will also see parallax being taken to new highs and dimensions.”

**Fouad Mallouk**  
 Founder and CEO  
 at Phoenix



**<Above>**  
 • Floating content blocks blend sumptuous imagery with text boxes styled to fit architectural iconography

**<Above>**  
 • The site is cool but not aloof - remaining happy enough to share the corporate story of the client

**<Above>**  
 • A portfolio section switches to a two-column layout with neat rollover labels leading into featured projects





# JOVA Construction

[www.jovaconstruction.com/home](http://www.jovaconstruction.com/home)

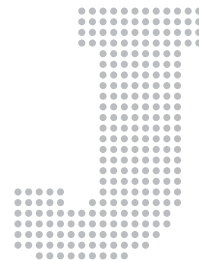
**Development technologies** HTML5, CSS3, jQuery, jQuery.easing.js, StackBlur.js, infiniteSlider.js, Modernizr, Google Fonts



Designer **Phoenix the Creative Studio**

[www.phoenix-m.co](http://www.phoenix-m.co)

Beautiful building spaces are communicated with panache throughout this Canadian masterclass



**JOVA Construction are all about taking something old and making it stylish and contemporary.** A property renovation specialist with offices in Montreal and Toronto, JOVA has built bespoke retail spaces, art galleries and condo apartments, all with a keen eye on interior design. This

promotional online home neatly tells their story of a family business dating back to 1986, theming the content around building industry blueprints. Core sections are kept sparse, favouring dialog-like floating text boxes that roll down parallax-laden pages.

"For the website of JOVA Construction, we wanted to create something different," explains

Louis Paquet who is Phoenix's director of creation. "We wanted a clean and functional design that could still surprise the user. The concept behind the website was to work with a very geometrical grid and integrate the title blocks that can be found on architectural plans."

Designers Phoenix, a playfully creative studio who are also from Montreal, placed a big emphasis on connecting how the site would function with the way it looked. A tight integration of the two aspects ensured a seamless experience true to JOVA's identity. "The artistic director worked closely with the front-end developer to animate the content, bringing life to the website in an unusual and interactive way. This relationship between the designers and the developers is very important at Phoenix. Both departments work hand in hand on every web related projects."

abcABC

1234567890

<Above>

• Anonymous Pro by Mark Simonson is the main typeface of choice, appearing in regular and bolder weights

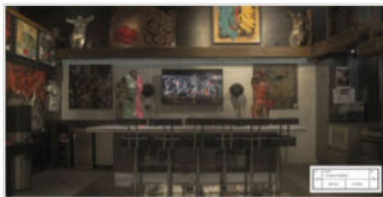
abcABC

1234567890

<Above>

• Oswald by Vernon Adams is a typeface optimised for the pixel grid of standard digital screens

For JOVA Construction we wanted a clean and functional design that could still surprise the user



## Create and add custom web cursors with CSS

Inspired by a technique within the JOVA design, we take a closer look at the options for implementing alternative CSS cursors

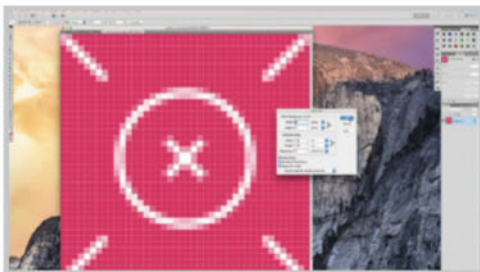


### 01 Stick to the point

Within the gallery section of [jovaconstruction.com](http://jovaconstruction.com) you'll notice that the photography zooms out to fill the browser. To close these images and return to the browser, users only need to click. This is conveyed to visitors in a more subtle way by switching the cursor to a custom icon. It's a relatively simple technique, here we'll examine the key steps to creating a suitable image file and then the CSS required to switch it.

### 02 File types and dimensions

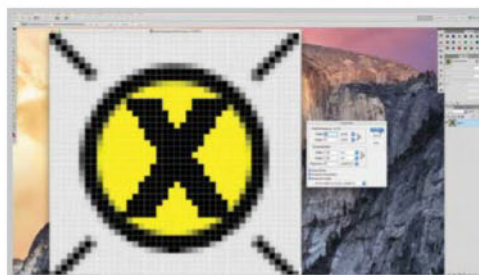
The custom JOVA gallery cursor is a white crosshair icon on a transparent background that uses the PNG file type. But you can, in fact, use any of the PNG, GIF, JPG, BMP and the CUR formats. This is because they are all supported, along with SVG, in Gecko browsers. JOVA's cursor measures 42 by 42 pixels in size and although 32 by 32 pixels is a universal standard. Gecko browsers like Firefox for example, should actually enable cursors up to a maximum size of 128 by 128 pixels.



### 03 Draw your cursor

We'll follow our example and create a new 42 by 42 pixel image in the graphics editor of your choice, in Photoshop or equivalent software. Working on a transparent layer, you'll want to zoom in to see the pixel grid and ensure your cursor icon is perfectly central and symmetrical. Adding a small amount of anti-aliasing helps to smooth the edges, plus you'll want to think

about the significance of your chosen icon in terms of where it is being used.



### 04 The basic CSS styling

Save the image in your favoured file format, here we've named it 'myCursor' and used the PNG extension. Place it within the root of your page or the image folder for your site. The CSS required is then very simple, although there are a few optional parameters to examine. We'll start with the basic syntax, first for switching the cursor to popular alternative system pointers, then to our custom image:

```
001 myTargetElement {
002 /* Use one of following to revert
to default arrow, hand pointer,
bidirectional arrows or text bar
003 cursor: default;
004 cursor: pointer;
005 cursor: move;
006 cursor: text;
007 /* Sets to our own cursor image */
008 cursor: url('myCursor.png');
009 }
010
011
```

### 05 Define cursor fallbacks

Another way of handling your chosen cursors and ensuring cross-browser support, is by listing some inline fallbacks. This way you can stipulate a preference for certain designs in a single image format, which if not supported will revert to an alternative. This process is as easy as listing each inline fallback with commas like the following, and it even provides a preferred system option if all else fails:

```
001 myTargetElement {
002 /* Sets to cursor image, falling
back to alternatives */
003 cursor: url('myCursor.cur'),
url('myCursor.png'), move;
004 }
005
```

### 06 Set the cursor hotspot

An important final detail is the cursor hotspot or where the point of focus is on your cursor icon. If your image is arrowed and has a particular point that is off-centre, or you wish to override the default top-left (0,0) coordinates or those defined within the file (CUR/XBM files), you can add hotspots to your CSS property. Our example has a central hotspot like that of JOVA, so with our image being 42 by 42 pixels we'll make the x,y coordinates 21,21 like so:

```
001 myTargetElement {
002 /* Sets to cursor image, with
centre hotspot */
003 cursor: url('myCursor.png') 21 21,
auto;
004 }
005
```





there's no fancy advert here  
just the details that you need to read

we are a **trusted** provider, **reliable** hosting for over 12 years  
we **care** about your website, **daily** backups that are held for 7 days  
we are **real** people providing real support, **caring** for our customers  
we make things easier, **FREE** web applications with point and click installation

for **feature-packed** web hosting

<http://ukwebsolutionsdirect.co.uk>

WDM readers get 15% off hosting services with coupon WDM15

GIVE YOUR DATABASE AN  
INFORMATION IMPORT.



We'll share our knowledge to improve yours.

100% of our clients rate our PostgreSQL training courses as excellent. Book your place and gain access to unrivalled knowledge of the core code.

+44 (0)870 766 7756  
[2ndquadrant.com/knowledge](http://2ndquadrant.com/knowledge)

**2ndQuadrant**   
Professional PostgreSQL

 **COMPILA**  
Web Hosting You Can Trust

Call Today  
**0843 506 8902**

Kick Start The New Year  
**SAVE 50%**  
On Award Winning Hosting

**50% OFF**



These are just some of the benefits you will enjoy with Compila hosting:



- ✓ Free UK Domain
- ✓ Fast UK Web Servers
- ✓ Huge Web Space Limits
- ✓ Free 24/7 UK Support
- ✓ Free Software Apps
- ✓ and lots more ...

The Only UK Web Host To Offer A  
Lifetime Money Back Guarantee!

To claim your 50% discount simply visit  
[www.compila.com](http://www.compila.com) and choose your plan  
To SAVE enter **save15webd** at the checkout

ONLY  
**£0.58**  
+ VAT pm



# A NEXT-GEN TEST DRIVE

The progressive web reality is anything but virtual with Amaze's stunning VR experience for the new Lexus NX. Here's how they steered it home by making full use of Oculus Rift

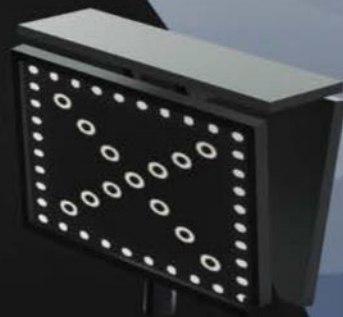


**W**hen we utter the phrase 'Virtual Reality', what are your initial thoughts? Excited or underwhelmed? Well either way, VR is an entertainment buzzword again after years of questionable PR to put it mildly. If it isn't Hollywood latching on to the idea for the garishly silly *Lawnmower Man* in the Nineties, it has been a favourite of video gaming brands for marketing an iffy glimpse of the future. In the arcades of old we had those Virtuality pods, while Nintendo tried in vain to conquer the home market with Power Gloves and Virtual Boy peripherals. In truth, Virtual Reality in 2014 has come an awfully long way since those clumsy efforts. The convergence of processing, graphics, motion detection and indeed HD displays make VR a much more viable proposition. We also enjoy an internet reality growing rapidly richer, alongside a tactile mobile experience ever essential to daily life. So by extension of concepts like Augmented Reality, VR is rearing its mounted display-clad head

again in interesting ways. None more so than the recent marketing push for carmaker Lexus' new SUV crossover vehicle, the NX.

As part of an integrated 'Striking Angles' campaign starring singer and tech philanthropist will.i.am, global digital agency Amaze was invited to deliver something unique. The project would "push the boundaries" in creating a "ground-breaking digital interaction" showcasing the design and driving experience at the heart of the Lexus NX. By blending computer-generated imagery with cutting-edge Oculus Rift technology, the team developed two immersive solutions for exploring the car before hitting showrooms. Users would be able to configure the car and test drive it within eye-catching 3D environments encompassing some six miles of road and cityscapes. "As Lexus' long-standing strategic technical and creative digital partner, we wanted to make sure we built on its heritage of craftsmanship and an underlying passion for advancing technology," explains director of creative strategy James Deeley. "Creating a premium experience for Lexus customers was also key, and was a vital factor in our decision to use CGI rather than film-based imagery."

It would be fair to say then that the project's early phases were 'fuelled' by the existing relationship between Lexus and Amaze. The agency had a substantial awareness of the market and the equivalent content being produced by rival automotive brands. From here the determination would be to craft something distinctive, wholly unique and ambitious in scope. With VR at the forefront, moving away from any previous similar experiences made by other companies with a rethink focusing on a style would achieve these goals. "Early on in the design process we decided that in order to create a truly impactful launch, we would use CGI rather than film, as this not only allowed us to create a premium experience, but also achieved more of a cinematic storytelling angle too," Deeley continues. "It was a decision that not only enabled us to shift control



Project	<b>The Lexus NX launch campaign</b>
Web	<a href="http://www.lexus.eu/nx">www.lexus.eu/nx</a>
Agency	<b>Amaze</b>
Web	<a href="http://www.amaze.com">www.amaze.com</a>
Duration	<b>14 months</b>
People involved	<b>63</b>





These storyboards by Amaze illustrate the design process for the ambitious project



Amaze and Lexus spent 14 months working on this campaign together



The Lexus NX's page also has a button which leads you to building your own NX

directly into the hands of the customer, but the multidimensional and highly stylised digital landscape of this media also allowed us to truly bring the Striking Angles campaign to life. Working closely with Oculus Rift to create the experience, it gave Lexus the opportunity to satisfy its customers' appetite for innovation, as well as the time to savour the NX's stylisation and design." This desire for a seamless fit within a wider Striking Angles initiative was vital, and indeed Amaze's remit for the project went beyond the VR experiences for this purpose. Elements such as an expanding NX House campaign hub site and NX-ify, the branded mobile camera app for iOS and Android devices, all had to be threaded into core brand activities rather than as stand-alone events in the project. These would all feed into a message communicating with a sophisticated consumer base who demand tomorrow's experience today. "To capture the audience's attention early on we created a teaser site content for the NX reveal at the 2014 Beijing Motorshow in April - months ahead of

the car being available to the public. This teaser then evolved into the campaign hub site and acted as the living heart of the Striking Angles campaign. Titled the NX House, this site was a progressively unlocking campaign hub, teasing and responding to the campaign timeline for the forthcoming months."

This fusion of art and technology was key then to the VR focus. The Lexus NX launch would provide Amaze with the first real opportunity to venture into this territory and experiment with what remains a formative digital medium. The approach therefore would be iterative and collaborative between the two companies throughout their 14-month life cycle. "The Lexus way is, and always has been, about continually seeking to innovate and improve, so it is well understood that we had to push ourselves at every stage. Meetings took place weekly, and often there would be daily calls too.

"As we moved into the design and production phase, we would spend days refining and suggesting updates and new ideas together, and this kind of working relationship and collaborative design effort proved to be the crucial foundation on which to build something as new and raw as the OR experiences; there was no room for anything other than exceptional."

Such an approach would hinge on a vivid conceptual design process and the generation of visual assets for conveying a look and feel for ideas beyond what has been seen before. "Our design journey saw three distinct phases," begins art director Wayne Silcock. "Initially, we created a storyboard of key stages to illustrate each experience. We also created a raft of supporting assets, such as mood boards to outline the visual stylisation, animation and film clips to give a sense of the emotion and sensation we aimed for. [This added to music] samples to



give a feel of the tone and pace. Details such as how the rain would look and how the city light would cast onto the wet road were all painstakingly considered. As the launch planning process progressed, we refined the visual designs of our story, as well as the city landscape. Finally, we completed a more detailed, almost frame-by-frame storyboard that outlined the full experience for both the client and the wider design and production teams. With our client happy with the design direction, we worked almost entirely in the developed build, making real-time revisions and amendments."

Development-wise the project leaned heavily on game-building techniques to realise the vision. Built in Unreal Engine 4, the NX car model was rendered from detailed production CAD files and the 3D city was constructed from the ground up. Unreal Engine 4 then provided valuable tools for tweaking materials, lighting and cameras rapidly - essential for revising and testing the results within the Oculus Rift headset. Audio, which is vital for driving games, would layer on immersion by feeding in-car stereo music and the roar of the NX engine. "As an agency, we handle all back-end work internally," admits technical manager Ross Tyler. "This requires a huge amount of upfront planning to coordinate all the updates and pan-European rollout around the existing noncampaign work."

"For this particular campaign, we made the decision early on to bring an element of movement into all the digital elements and platforms. Obviously, this was more straightforward for technology like OR, but a more interesting challenge for the website. This led us to develop animated backgrounds using a Flat Surface Shader rendered on an HTML5 Canvas, giving us the control and ability to make changes in real-time."

Development decisions such as these yielded substantial flexibility regards templates and codes, facilitating good response to fresh requirements. This meant that new features could be enabled and slotted in, such as the 360-degree video translation of the prerendered OR test drive. Aligned to the technical worries however, there were also the practical considerations of

## Unreal Engine 4 provided valuable tools for tweaking materials, lighting and cameras

launch. The experience would need to tour car events and dealerships around the globe so it needed to remain portable and compact. This is where a solution that avoided traditional mouse/keyboard interaction in favour of something totally controlled by head gestures would pay dividends. "These complexities took time and constant refinement during development," reveals Deeley. "Eventually we integrated the use of a heads-up display (HUD) and eye tracking which enabled the user to have full control of their experience. There was also a need to fine-tune and address areas such as the difference between head movements for 360-degree exploring and fixing on a navigable feature, such as selecting the car exterior colour tiles. All these factors had to be considered and refined while also not detracting from the overall experience of the car itself."

These challenges would extend beyond project "completion" with a general ethos from Amaze for the long term. With content rarely discarded and a general dislike of the 'microsite' model, Lexus would know that sufficient "aftercare" was built-in. This would therefore suitably



Storyboards and mood boards were used to get a sense of style

# A HEAD'S UP FOR OCULUS

**In addition to aligning the Lexus NX brand message with future innovation, the project also spreads the word for VR and certainly Oculus Rift.**

The integration of such immersive solutions into a progressive campaign would pull consumers into an "NX-inspired world" in a bold embrace of hotly anticipated hardware available for them to use. "We created two virtual reality technology experiences," confirms director of creative strategy James Deeley. "The first was a head motion-controlled personalised car configurator, which enabled customers to virtually configure and view their own NX. The second, an immersive 360-degree virtual driving experience, enabled customers to 'drive' the new NX through a multidimensional and highly stylised urban landscape."

This ambitious push for a simulated test drive for a vehicle yet to arrive on the dealership forecourt would then rely on Oculus' headsets. Founded by Palmer Luckey, Oculus VR was acquired by Facebook back in March 2014, with a tentative retail release for the Rift devices expected to be in 2015. With developers already accessing kits for creating targeted OR content, Amaze really are ahead of the game with this buzz technology.

"The experiences, which were rolled out across the UK and Europe, used the very latest Development Kit 2 OR headsets and truly pushed the boundaries of the technology by using computer-generated rather than film-based imagery. The launch was also the first time the industry had seen a mass rollout of the new HD devices."



The team went through numerous tests with OR



Oculus Rift was popular on the road for clients

# WHERE THERE'S WILL.I.AM THERE'S A WAY!

It's not on every digital project that a 'Black Eye Pea' has a say in shaping the creative strategy.

As part of Lexus' wider 'Striking Angles' campaign, a certain Mr will.i.am was chosen to lend his face to the marketing drive. Very much an enthusiast for innovation in music production and technology, the global pop star had to be accommodated within the overall project. This would add an extra dimension to the final phases of the schedule, stimulating some crucial decisions on user engagement. "Towards the end of the project, we choreographed the project's digital strategy and delivery around the introduction of will.i.am in the 'above the line' marketing activity," explains James Deeley. "As the face of the campaign, our digital concepts had to provide an integrated campaign experience with will.i.am activities such as the TV commercial release dates. For these reasons we translated the OR experience into a desktop feature, where we switched head controls for a mouse as not everyone would be able to access a headset. Alongside other campaign agencies, we also developed a complementary mobile app, called NX-ify, to enable our audience to participate by creating campaign-stylised photography and video to share socially. Finally, interactivity-rich media was created for customers to sample the campaign and digital activations on brand-sponsored digital channels, such as 4oD."



support a hugely successful rollout phase and September 2014 site launch. "We generated a hugely positive response, enabling us to generate high-quality lead opportunities as well as building an engaged consumer audience for the brand," beams chief strategy officer Rick Curtis. "We visited 13 countries to showcase the OR experience and attended 30 NX launch events over a five month period. Overall, more than 3,000 customers have tried both experiences to date." That's a lot of people using progressive marketing virtual reality technology to make real-life decisions on what remains a significant purchase in their lives these days.

By transferring that VR buzz and customer engagement to the website, it's easy to understand why Amaze and Lexus feel so proud of the achievement. Content spanning 114 downloadable images, 22 on-site videos, and 38 translated site versions have all combined to record an impressive five minutes and 40 second average dwell time on the NX House domain. "The experience was rolled-out across 37 markets, launching first with a teaser site presence that had ten individual updates - totalling 373 'Go Lives' overall," concurs Ross Tyler. "We achieved over 100 per cent increase in Google Trends search returns and met all digital key performance indicators for the campaign." In other words, there's nothing 'virtual' about the 'reality' of this project's success!

## THE BIG QUESTION...

"If you could virtually test drive any vehicle in the known universe, what would you like to get your hands on?"



🎮 Speeder Bike from *Return of the Jedi* 🎮

**Wayne Silcock**  
**ART DIRECTOR**



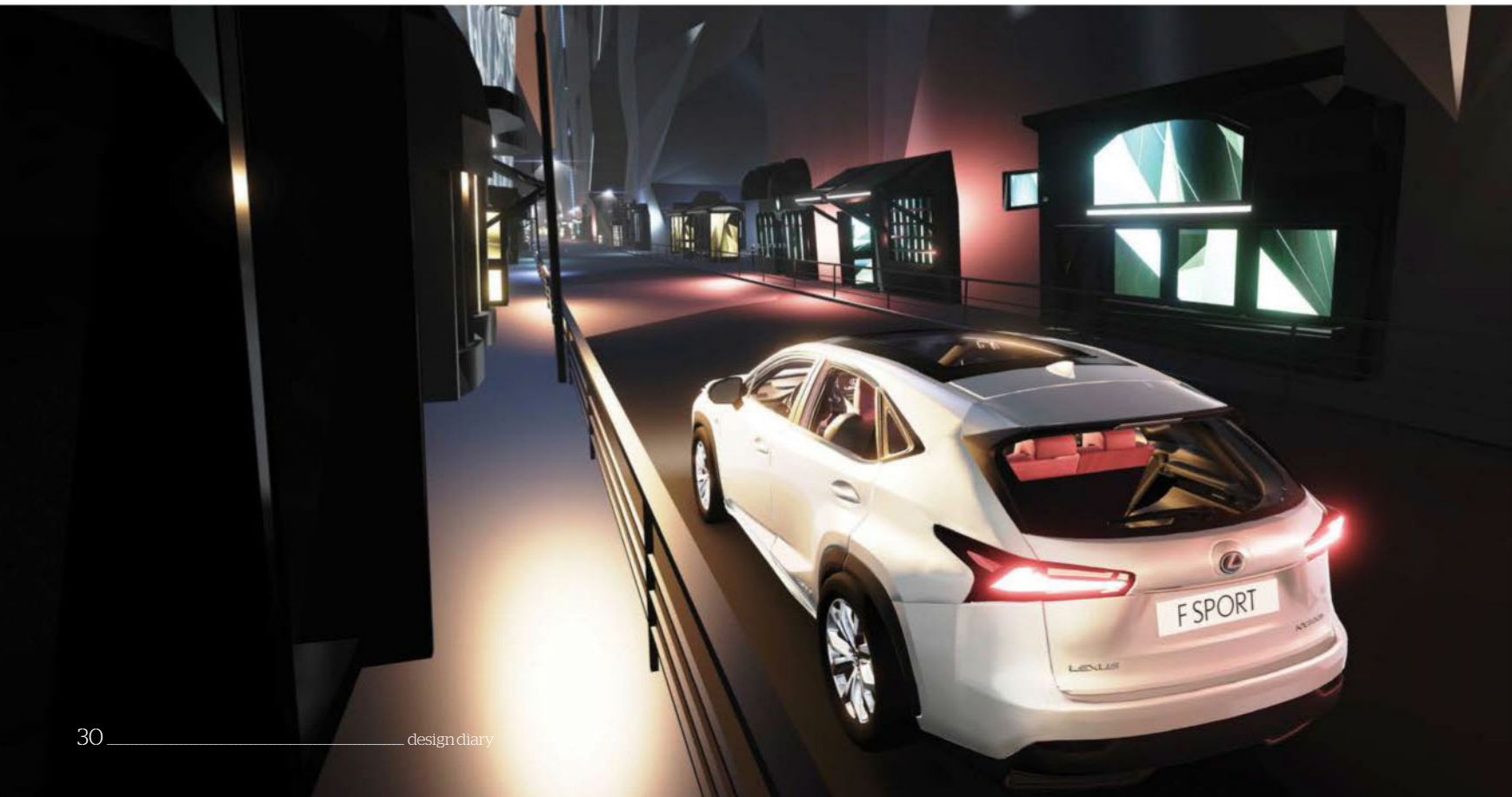
🎮 1968 Ford Mustang 390 GT 2+2 Fastback (the one Steve McQueen drives in *Bullitt*) It's when I first saw the car as an icon 🎮

**James Deeley**  
**DIRECTOR OF CREATIVE**  
**DSTRATEGY**



🎮 FWIW, The Tumbler from *Batman Begins/The Dark Knight*, yes please! 🎮

**Ross Tyler**  
**TECHNICAL MANAGER**





A virtual view from inside a virtual Lexus



## Where next for OR?

012

The Lexus NX OR experience really pushed the boundaries of the OR technology. The launch is the first time the industry had seen a mass rollout of the DK2 HD devices, but it is still very early days for VR maturity. There are many other emerging technologies we should keep tracking, including: wearable technology, augmented reality and motion detection cameras, to name but a few.

We expect to see more brands experimenting with VR in the future yet, like any rich new technology and media, there needs to be an obvious reason for it to be used and even then it needs to be used wisely. VR has been

around for a long time, used typically in military training and gaming, but a new phase is emerging as it becomes a consumer product.

We expect to see VR become a key educational tool, where history lessons can be lived rather than studied and medical students can simulate operations as part of their training. It's also likely that it will be used as an immersive form of entertainment, transporting people directly 'into' a film, theatre show or music gig.

As well as endless possibilities for the technology within the connected retail space, there's also great potential for it within the property market - with

consumers 'visiting' houses, without actually leaving their own home. Despite the possibilities however, it's unlikely that VR will ever forget its heritage in gaming, its natural home.

The more VR matures and integrates with other technologies - such as wearable technology, augmented reality and motion detection cameras - the more revolutionary it will become. The connected retail space is really interesting and the effect it could have on the world has huge potential too. Automotive brands have been quick to seize the opportunity, but others are set to follow and this feels like the start of something big.



James Deeley Director of creative strategy at Amaze



2 HEADS  
ARE BETTER  
THAN ONE

# EXPERIENCE MAKERS

As one of the few digital agencies that can trace their roots to the inception of the sector, Sequence has an impressive breadth of experience that has placed them at the forefront of their industry



**who** Sequence  
**what** CMS-driven websites,  
 customer engagement  
 specialists and UX innovators  
**where** Porth Teigr Way,  
 Cardiff, CF10 4GA  
**web** www.sequence.co.uk

## Key clients

Visit Britain  
 YPO  
 Royal Mint  
 HCC  
 Brains

For two decades, Sequence has been an agency at the forefront of web design



**A** s one of the oldest agencies working today, the perspective that this history gives Sequence is the envy of many other agencies.

Beginning in 1995, founder and current CEO Richard Baker immediately saw that there was a need for what were then new marketing mechanics called websites. Having worked in the more techy side of an embryonic internet industry, Richard could see that marketing was about to be transformed by the opportunity that websites presented consumers and businesses. This organic evolution of the business has continued to today where Sequence constantly innovates leveraging the latest technologies to deliver unique experiences for their varied client base.

Sequence was originally called lcom, but the business felt this sounded too technical, so after a short spell playing with other names and whilst listening to some electronic music in the office one evening the team began thinking about how sequencers were used to build each track. Sequence seemed like a great name as it reflected the natural progression that the web was bringing to technology, and with the domain name available, the new name was quickly adopted.

Beginning as a website design service, Sequence's own web presence has been evolving

over the last two decades. "We think our site is of massive importance to us as an agency," said Sarah Morris, marketing manager. "It's very important as it's the first impression, it very quickly illustrates your agency's character and what you are capable of. Ideally we think that the site should be redone every two years, as things move on so quickly.

"We don't put as much time into it as we would like to but the one thing we don't lack is good ideas! We are always coming up with ideas on what we'd like to do with the site and how we can best use it to express our personality and skills. We make sure that the blog is always updated, as that has proved essential to help users come back to the site and keep us fresh in people's heads. We get leads directly through our site so it works for us."

One of the defining aspects of Sequence is its diverse customer base. Sequence has been able to build a wide portfolio base of clients that have enabled the agency to show their skills and creativity. Sarah continued: "We get a lot of leads come through our site. We then go ahead and find out a little more about the project and figure out if we'd be a good fit.

"When we go for a pitch we tend to go all in - no half measures! We are the biggest independent agency in Wales so a lot of the larger projects come to us. This is because we can help with everything from creating a brand to building a complicated multiplatform app or a large-scale

eCommerce site. We also have close ties with industry partners such as Microsoft and Sitecore. They often recommend us to clients looking for an agency with our expertise and experience. Our marketing activity also goes a long way towards helping to get potential clients attention."

The range of clients that may need an agency and then come to Sequence is also an indication of their technical and creative prowess. "I think



### Be an expert in your field

"I've seen an increase in agencies attempting to offer everything. Clients need experts who specialise in solving specific design problems. Designers or developers looking to enter the industry or improve should focus on becoming experts in their field. There's always a temptation to follow trends and try to master it all. Stay focused and become excellent at something, clients need experts to achieve success."

**James Bearne** Creative director at Sequence



The agency has their own guidelines and requirements to adhere to when meeting new clients and taking on projects



because we have been around for so long, this is a validation of our knowledge and experience," commented Ollie Wells, head of experience design. "Clients, I think, appreciate that, and we don't need to shout about the fact that we have been around for a while. Clients trust us, as they know we will have expertise with the latest tools. But they can also draw on our long experience, which has enabled us to see and appreciate how digital marketing has evolved. We have I think, a maturity that means our work is detailed and also often exceeds the client brief."

As a business Sequence has evolved over time and today, Sequence's process for choosing which projects to take on involves a number of factors that art director Steven Goldstone explained: "Because we have 19 years of experience we know whether we will be a good fit for a client in terms of chemistry and project requirements.

"We have really tightened up our processes over the last couple of years, which is essential as a larger agency. We all need to be on the same page and communication channels have to be open at all times. We are lucky to be in the situation now

where we can pretty much pick and choose which work we take on."

Ollie also said: "When we are approached by a new client we do have our client requirements and our internal requirements, which must be met. We do have certain criteria that we do adhere to when assessing a client. We have our own policies on ethical business, which we do measure clients against before taking them on. Experience also plays a large part in this. We know where we want to take the company and the kinds of businesses we want to work with. After a while I think you just





## industry insight

**Ollie Wells, Head of Experience Design**

“Clients trust us, as they know we will have expertise with the latest tools, but can also draw on our long experience, which has enabled us to see and appreciate how digital marketing has evolved. We have I think, a maturity that means our work is detailed and also exceeds the client brief”

get a feel for this kind of thing. We have criteria, but this isn't expressed as a checklist for instance. I think we also have the maturity to say no to the right clients.”

Agencies can become known for a particular type of work. Sequence has been able to shine in a number of digital design sectors, but are there clients that clearly illustrate the ethos of the agency? Sarah explained: “We think collaboration is what we are best at here at Sequence. Some recent projects highlight this.

“Go Compare. A very collaborative project between Steve, our art director, John our video specialist and another Jon, one of our front-end devs. We made a really fun interactive game that is beautifully designed. Together we made sure we used the right technologies, we nailed the UX aspect of the project early on and then thoroughly enjoyed building the project from there.

“Dailymotion is another example. In building a new video player site for Dailymotion (which is the 31st most visited website in the world) we executed some first class UX design and frontend, working really closely with the client, we collaborated together to build an effective and well-designed platform.”

With such a wide-ranging portfolio, does Sequence have any set working practices? Steve explained: “In terms of timelines we work on a huge variety of projects. We've spent a couple of days on a project and a whole year working on projects! We work using an agile methodology and therefore split projects into our multidiscipline teams so they can decide on a timescale that suits them.”

Ollie also commented: “We have always taken the approach that we involve all of the people across our business that can bring something to a client brief. We build teams for each project, with every member having the freedom to contribute to the project - but of course they have their specialism and technical knowledge. We do however also offer targeted skills if these are needed. We do have creative, developers and UX designers if this is all a client needs.”

The tools that have become available to digital

design agencies are now manifold. Steven explains how Sequence approaches its toolset: “HTML5 and CSS3 will carry on being central to the development of web design. jQuery is a framework that uses JavaScript but more and more people are moving back to writing their own JavaScript. The technologies that are and will build the web going forward are things like Node that manipulate these web languages in a useful way. Technologies that exploit the advantages of these are those that will thrive in site building in the next couple of years.

“As a default everything we build now is responsive. We think that is the only way to develop these days and it's what the user expects - we have our own device lab to help us with the exhaustive testing that goes along with this approach!”

Steve said: “We are finding Webflow quite interesting as it enables our design team to prototype the responsive elements of their designs and see what will and won't work for our projects. It's also a more realistic way to view designs as opposed to the pixel-perfect Photoshop mock-ups. We don't see it as something we would use to

build sites, as it is still limited as to what you can do with it. Macaw is a promising tool but there's still a lot we can't do with this either. Adobe Muse is interesting and really good to use - but it doesn't do responsive mock-ups, which would make a real difference. We wish it had that functionality.”

As Sequence has developed its marketing strategies, social media has become an increasingly influential force. “Social media is integral to our marketing strategy and campaigns,” said Sarah. “We use it to share blogs we publish, events we attend and organise, developments in the industry, to share our achievements - individually and collectively - and much more.

“We think it's important to be open and share the Sequence culture and talent because we feel that is one of our biggest strengths. After all, what is an agency without its people! We've seen this approach attract new clients and new, brilliant people to work on our staff. We use social media to



## Visit Wales

[www.visitwales.com](http://www.visitwales.com)

We created an award winning website for Visit Wales to showcase the country and enable visitors to the site to easily find and book activities. Tourism is big business in Wales and Visit Wales wanted a website that was worthy of such a stunning and diverse destination. The new website needed to be a hub of activity, showcasing all the beautiful places to stay in the country and the things to do and see here.

A clear focus on the user journeys was essential in this project, as the site needed to act as an eCommerce funnel allowing visitors to discover places to visit on the site and then provide an easy transition to booking elsewhere.

We used Sitecore to provide a flexible site that enabled new content to be added to the site really quickly and easily using Page Editor. We also worked out an extensive taxonomy with every piece of new content being tagged with relevant information. Doing this helped the site to be very intuitive to use, helping users to find more items that are useful and interesting to them.

The focus of this site is all about the content. We wanted to showcase it and make it the central focus of the site. Our design team were committed to creating a site that reflected the beauty and feel of Wales's rich heritage and stunning landscapes. This attention to detail is typical of the Sequence approach. We're a fastidious bunch!

**10 GREAT THINGS**  
Attractions for the whole family



“ Webflow is interesting as it enables our design team to prototype the responsive elements of their designs as opposed to pixel-perfect Photoshop mock-ups ”

support our industry partners like Microsoft, Sitecore and Umbraco and try to keep our followers up to date with their new products. To be part of that community and reap the rewards from it, we need to support others and contribute in a meaningful way. We publish new material weekly on our blog and we make sure we keep an eye on the figures via Google Analytics to make sure we are on the right track with providing content that people want to see.”

An agency is effectively only as good as the people it employs. What qualities do Sequence look for in a prospective employee and what advice would they give to anyone looking to take a step into the industry? “We are always on the lookout for exceptional creative people,” said Sarah. “We look for proactive people who show us what they can do. We love it when applicants write in and include examples of what they have made or created - design is very subjective but when someone’s ‘got it’ it’s usually pretty obvious from the get go.

“We look for creative thinkers, people who can come up with creative solutions to technological problems. It’s really important that new starters are a good fit culturally as well. We are a friendly and fun bunch, but we are all really passionate about only putting out really high quality work - people need to be able to understand that dynamic. One bit of advice would be for students: they need to put their own stamp on their portfolios - we can tell straight away if it’s a piece of work set by their uni or college. You need to stand out to get noticed.”

Steven also commented: “Finding the right people can be a challenge. Often when we advertise for a junior post we will get a lot of people apply that have a good design book and can use

the basic tools, but they lack the extra creativity we are looking for. We want to see that people have used the skills that university have taught them, but then have thought creatively about how they can use those skills and tools. These are the creative selfstarters we are looking for.

“We are quite closely involved with the University of South Wales, where we regularly speak to the students about our industry. The difference between university and real world is massive. We try and get this over to students we speak to about how our industry is structured and what it expects from the people working in leading agencies. You know, a deadline means a deadline and is not a flexible notion. Also, we have just finished defining a new digital design apprenticeship scheme.

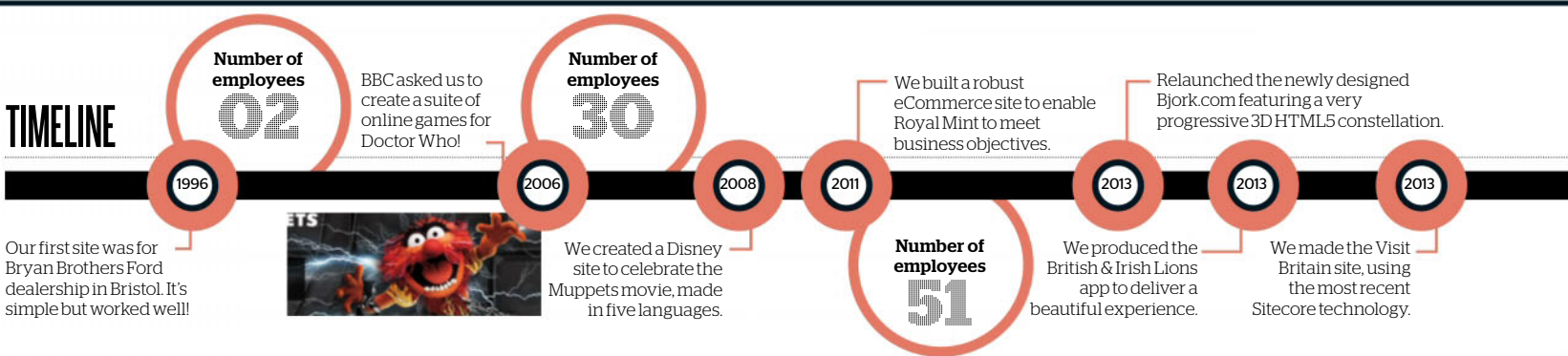
“When we do take on someone new, it’s often the attention to detail that makes one candidate stand out from another. One recent example was impressive. He presented very well even holding his pieces of work in precisely the same place. That tells us that the work he would do will also have that level of attention to detail.”

And what does the future hold for Sequence? Sarah concluded: “We are coming up with our next marketing campaign at the moment, which we love doing as it allows us to really show what we are made of in terms of design.

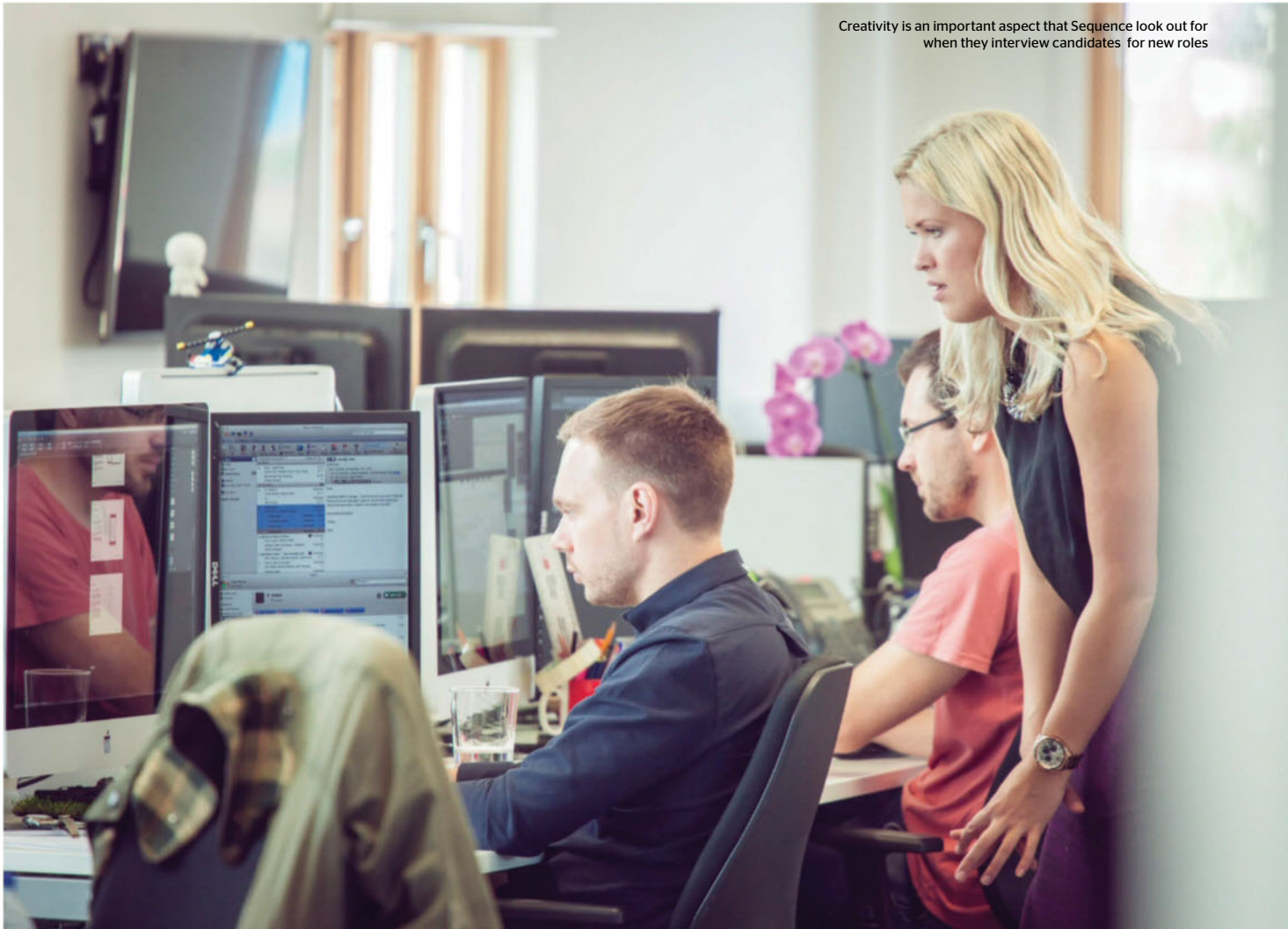
“Client work is subject to lots of expectations from many quarters, which is a challenge we thrive on, but the marketing campaigns let us experiment and try things with no fear. It keeps us fresh! We are starting to look at expanding on our experience design team, so focusing more on the experience that our clients and their customers have.

Personalisation is going to be a big consideration.”

Everyone that can be involved in a project will be involved to bring their own levels of expertise to each campaign







Creativity is an important aspect that Sequence look out for when they interview candidates for new roles



Social media has been very influential to Sequence, being central in supporting their clients and promotion strategies

## Sequence

**WEB** ..... [www.sequence.co.uk](http://www.sequence.co.uk)  
**FOUNDERS** ..... Richard Baker  
**YEAR FOUNDED** ..... 1995  
**CURRENT EMPLOYEES** ..... 51  
**LOCATION** ..... Cardiff Bay

### SERVICES

- > Web design
- > App development
- > Web development
- > UX
- > Sitecore specialists



## HOT 100 INDEX

- 001 ERIC MEYER p.008
- 002 COLOUR p.009
- 003 TYPESETTER p.009
- 004 GRAPHICS p.009
- 005 FRAMEWORKS p.010
- 006 NEW CMS p.010
- 007 SPOT.IM p.011
- 008 UDEMY p.012
- 009 STORYTELLING p.014
- 010 IOT p.018
- 011 RWD IMAGES p.022
- 012 OCULUS RIFT p.031
- 013 BE AN EXPERT p.033
- 094 VECTORS p.052
- 095 FULL SCREEN p.057
- 096 BRACKETS p.058
- 097 MOBILE VIDEO p.069
- 098 ANGULAR 2.0 p.070
- 099 EMBER 2.0 p.076
- 100 WEB APPS p.082

### 014 EMPATHY AND SOPHISTICATION

2015 is going to be different. It will be a year of consolidation and adaptation. HTML and CSS will become more sophisticated and frameworks, libraries and tools will be tweaked to give users even greater control over workflow and user experience and we can't wait. **STEVEN JENKINS** - WEB DESIGNER EDITOR

**WHAT'S  
SET TO BE  
BIG IN 2015**  
TOP INDUSTRY EXPERTS  
UNVEIL MUST-KNOW  
TECH & TRENDS





# UX SUPERHEROES

UX DESIGNERS WILL NEED NEW METHODS AND SKILLS. GET READY FOR A NEW BREED

## 015 FULL STACK DESIGNERS

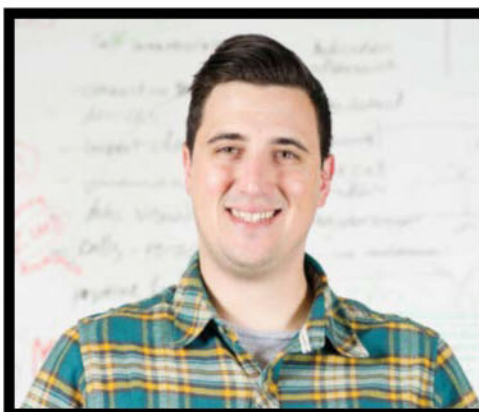
For the last few years, great UI designers have felt the pressure to put down their Wacom tablets, pick up their Sharpies and switch careers to UX design. This has resulted in a huge talent drain from the visual design space, not to mention lots of mediocre UX designers. However in 2015 we're going to start seeing the 'full stack designer' job title imported from Silicon Valley to describe what I've been calling digital product designers. Basically, folks who are as good at IA, interaction design and usability as they are at UI design, icon design and typography.

## 016 ANIMATED PROTOTYPING

Last year we saw a few companies start experimenting with animated prototyping tools. This year, we will see more UX designers using animation as a better way to communicate design decisions to clients and expose affordances to users, especially in the mobile space. So if you want to be ahead of the curve, check out tools like Origami, Framer and Swift today.

### ANDY BUDD

FOUNDER AND MD AT CLEARLEFT  
WWW.CLEARLEFT.COM



## A SMARTER RESPONSIVE DESIGN

2015 WILL SEE RWD MOVE INTO ITS NEXT PHASE AND GIVE MORE PRECISE CONTROL

## 017 LAYOUTS

Float-based layouts have ruled the web for over a decade, but we will now start seeing a shift towards other technology that can help us to create some really complex layouts. More and more people will start to really utilise Flexbox in the coming year to produce those app-like layouts.

## 018 DEVICE ACCESS

The mobile web will gain more access to native phone features. Pressure will be put on OS creators to better support things like push notification and camera access.

## 019 ELEMENT QUERIES

We'll see more element queries to change content style, based on container size rather than browser size.

### BRANDON ARNOLD

FOUNDATION DESIGN LEAD AT ZURB  
WWW.ZURB.COM





# 020 FUTURE SOUND

THE WEB AUDIO API COMBINES WITH WebGL FOR FUTURE AUDIO VISUAL EXPERIENCES

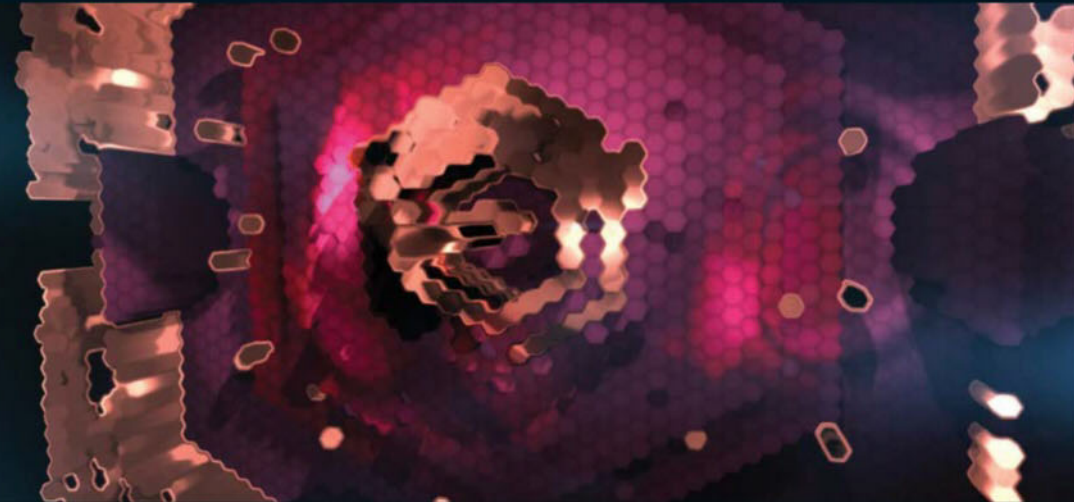
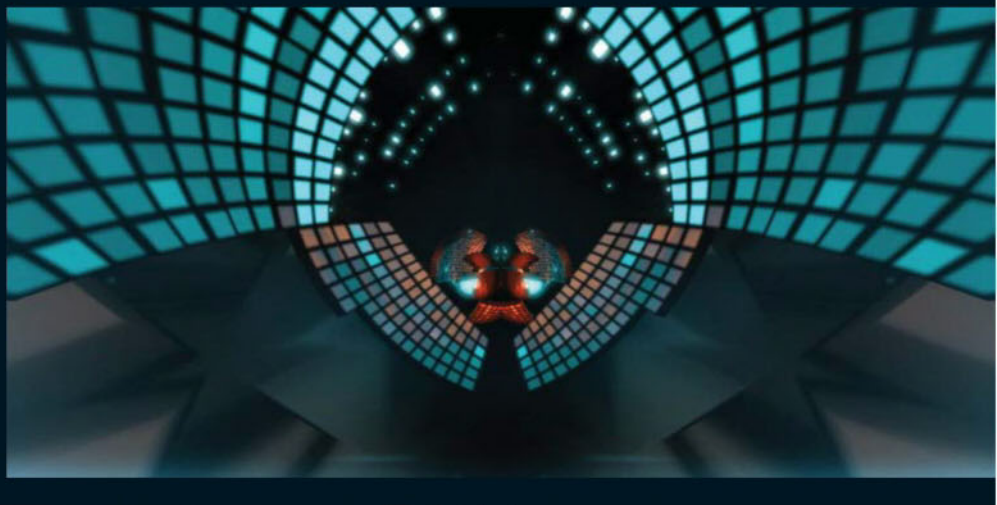
APEXvj runs on a browser and uses technologies such as WebGL and WebAudio. But, behind all that is Fuse - a tool with a framework, compiler and a new programming language called Uno.

Uno compiler makes code lightweight and extremely fast using modern tricks like runtime shader mutation and I can compile the same code as native applications for mobile and desktop.

Fuse is in closed beta, but I think it will be available in 2015 and it is something that should not be missed.



**SIMO SANTAVIRTA**  
FREELANCER AND  
MONARCH OF APEXVJ  
[WWW.APEXVJ.COM](http://WWW.APEXVJ.COM)



## NEW EXPERIENCES

2015 is another year meaning that users will be introduced to new methods

### 021 EXPERIENCES AS APPS

Most apps are either functional or games, but there is a whole world in between.

### 022 INTERACTIVE FILM

2015 is the year when premium brands realise how to make the move from TV to online



**JOHAN BELIN**  
CREATIVE DIRECTOR AT  
[WWW.DINAHMOE.COM](http://WWW.DINAHMOE.COM)





Hyper-Reality by Keiichi Matsuda

## 023 LOOK TO THE FUTURE

IS 2015 THE YEAR WHEN AUGMENTED REALITY MOVES TO EYEWEAR AND FINALLY DELIVERS? 2015 waves goodbye to the unwieldy smartphone and tablet flavours of AR, and makes tentative footsteps into the world of unwieldy eyewear.

In the wake of Google Glass comes a slew of new hardware from established brands and from companies you've never heard of. They are promising us true vision in the style of *Terminator*, and in 2015 we will finally see if they will deliver what they promised us.

But deliver what exactly? Productivity? Efficiency? In 2015 we will be questioning if this is enough. Now the magic is fading, the next big splashes in the AR world will need real utility, and real vision.



**KEIICHI MATSUDA**  
CRITICAL DESIGNER  
WWW.KM.CX

## 024 HYPER LOCAL

Beacons are introducing a new way for mobile applications to include hyperlocal features such as indoor location and offline retail interactions. In a few years beacons will become ubiquitous, enabling mobile apps to become a lot smarter and context aware. At Fidel we're paving the way for this emerging and invisible infrastructure.



**ANDRE ELIAS**  
COFOUNDER AND CTO OF FIDEL  
WWW.FIDELAPP.COM

## 025 REAL-TIME COLLABORATION

Connected digital applications are becoming an essential requirement for real-time collaboration with diverse global teams, but can only be effective when accompanied by well-developed working relationships.



**DAVID MCCALL**  
MANAGING DIRECTOR,  
UK, HYPER ISLAND  
WWW.HYPERISLAND.COM

## 026 NATURAL INTERACTION

As the popularity of mobile platforms continues to grow and web design becomes more of an enjoyable experience, scrolling will continue to dominate clicking. It's easier, more intuitive and skips the loading of new page(s).



**SIMON PARMEGGIAN**  
DIGITAL DESIGN LEAD AT BBH  
LONDON  
WWW.BARTLEBOGLEHEGARTY.COM

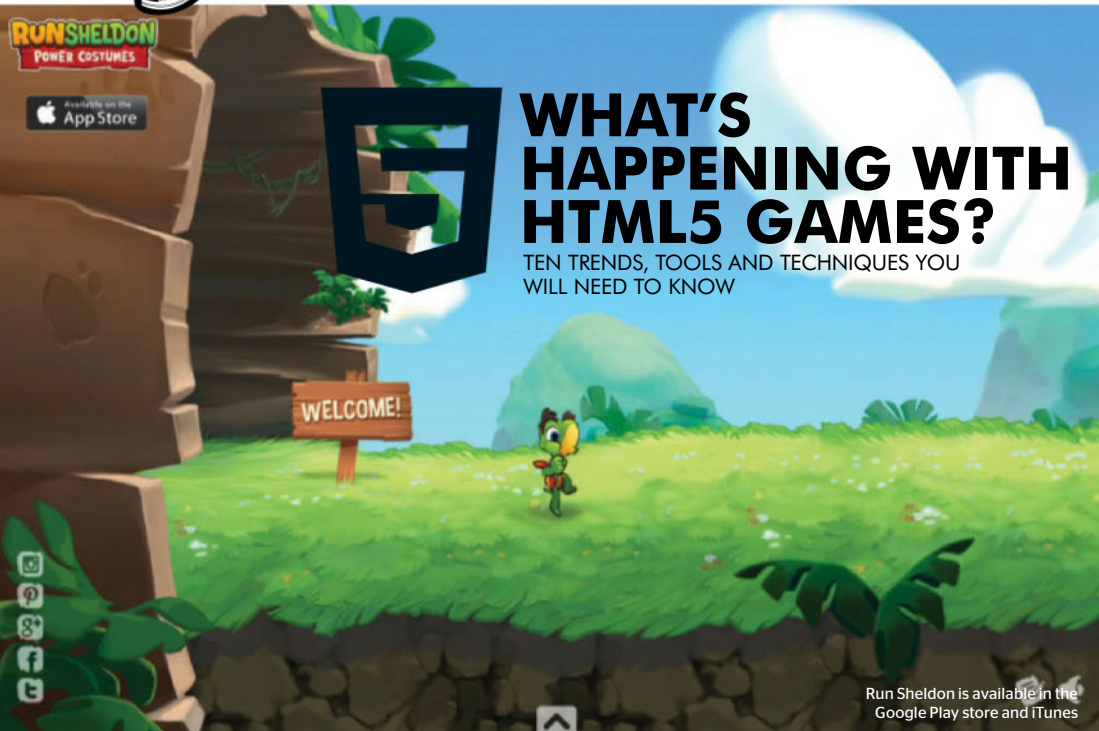
## 027 CONTEXT OPTIMISATION

Google have started tagging mobile-friendly websites in search results, lowering their ranking if there are errors. Marketing campaigns can no longer overlook context optimisation.



**ALBERTO GIORGI**  
HEAD OF CREATIVE TECHNOLOGY,  
TOASTER LTD  
WWW.TOASTERLTD.COM





# WHAT'S HAPPENING WITH HTML5 GAMES?

TEN TRENDS, TOOLS AND TECHNIQUES YOU WILL NEED TO KNOW

## 028 HTML5 GAMING LIFT-OFF

HTML5 has arrived as a viable medium for games and 2015 will see them explode.

## 029 HTML5 PORTALS WILL RISE

But on the other hand, Flash portals will begin to fade away from our screens.

## 030 GAME PORTAL APPS

Now WebView in apps (iOS 8) has matured, its App portals will become big.

## 031 VR

We're just looking into it, but Oculus and WebGL is a match made in heaven!

## 032 PIXI.JS

2D WebGL engines will become more popular with the rise of WebGL capable devices.

## 033 PHASER.JS

The strongest game engine out there will be the go-to tool for new and experienced people alike

## 034 PLAY CANVAS

A fantastic game engine with fantastic tools that lives entirely on the web.

## 035 HTML5 - THE FIRST 'LIVE PROOF OF CONCEPT'

Games will be built in HTML5 (at a much lower cost) and then 'grown' into apps.

## 036 HTML5 TO APP

Cocoon.js, Phone gap etc will make it easy to take a HTML5 game and turn it into a full fat app.

## 037 THE POWER OF FILTERS, EFFECTS AND SHADERS!

So much more can be done than just moving stuff around on screen.



### MATHEW GROVES

TECHNICAL PARTNER & COFOUNDER OF GOODBOY DIGITAL  
WWW.GOODBOYDIGITAL.COM

## WEB HOSTING IN 2015

FIVE HOSTING TRENDS YOU WILL NEED

### 038 NTLDS

Consumers will enjoy quicker online searches

### 039 GEO NTLDS

New geo domains will boost local search and online communities, as well as drive awareness for nTLDS

### 040 OPTIMISED APP HOSTING

Hosting will be focused on overall site performance.

## 041 CLOUD HOSTING

Cloud servers will have more features for better scaling and new resilience standards.

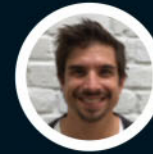
## 042 MOBILE SITE

Moresite owners will prioritise mobile compatibility and performance.



### RICHARD STEVENSON

HEAD OF PR, 1&1 INTERNET  
WWW.1AND1.CO.UK



### TOM WITTLIN

CREATIVE DIRECTOR AT FOLK

WWW.WEAREFOLK.COM

After the complete departure

from lengthy Flash movies of the late Nineties to early 2000s, we're starting to see things in a new form, and Stink Digital are some of the folk leading the way in it. By skilfully using film or CSS animations to form the first page of the site, it feels more inclusive than the pointless old-fashioned efforts and helps to tell the story.

## WORLD-CLASS LEADERS

FIVE AGENCIES CONSISTENTLY CREATING STUNNING PROJECTS

### 043 NORTH KINGDOM

WWW.NORTHKINGDOM.COM

FORMED: 2003

GOOGLE, WARNER BROS, ADIDAS

### 044 JAM3

WWW.JAM3.COM

FORMED: 2004

TOYOTA, HAAGEN-DAZS, ORANGE

### 045 HELLOENJOY

WWW.HELLOENJOY.COM

FORMED: 2007

ELLIE GOULDING, SAMSUNG, DISNEY

### 046 MEDIA MONKS

WWW.MEDIAMONKS.COM

FORMED: 2001

GOOGLE, ADIDAS, IKEA

### 047 STINKDIGITAL

WWW.STINKDIGITAL.COM

FORMED: 2009

JOHN LEWIS, HONDA, NIKE

## ONES TO WATCH

UP AND COMING AGENCIES

### 048 BLUECADET

WWW.BLUECADET.COM

FRANKLIN INSTITUTE, LAPHAMS, CHEMCRAFTER

### 049 UBER AGENCY

WWW.UBERAGENCY.COM

ICELAND, HARVEYS, CARGO

### 050 ACTIVE THEORY

WWW.ACTIVETHEORY.NET

FOX TV, GOOGLE, TINY REBELLION

### 051 PHANTOM

WWW.PHANTOM.LAND

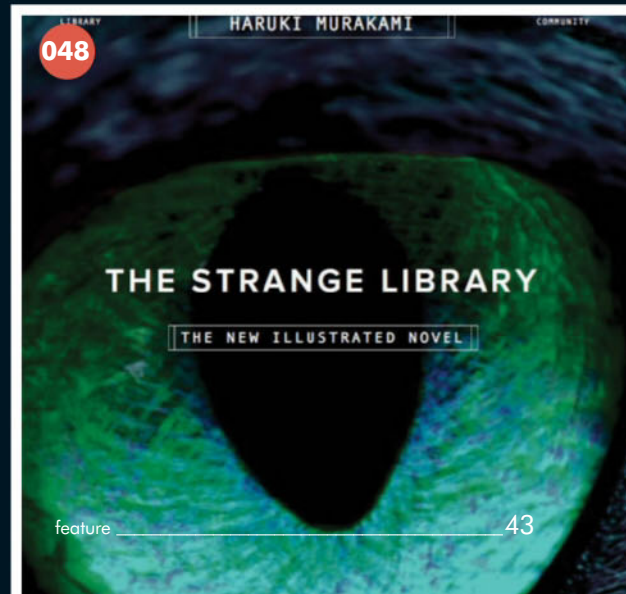
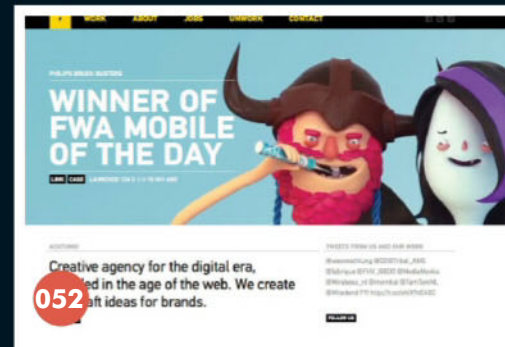
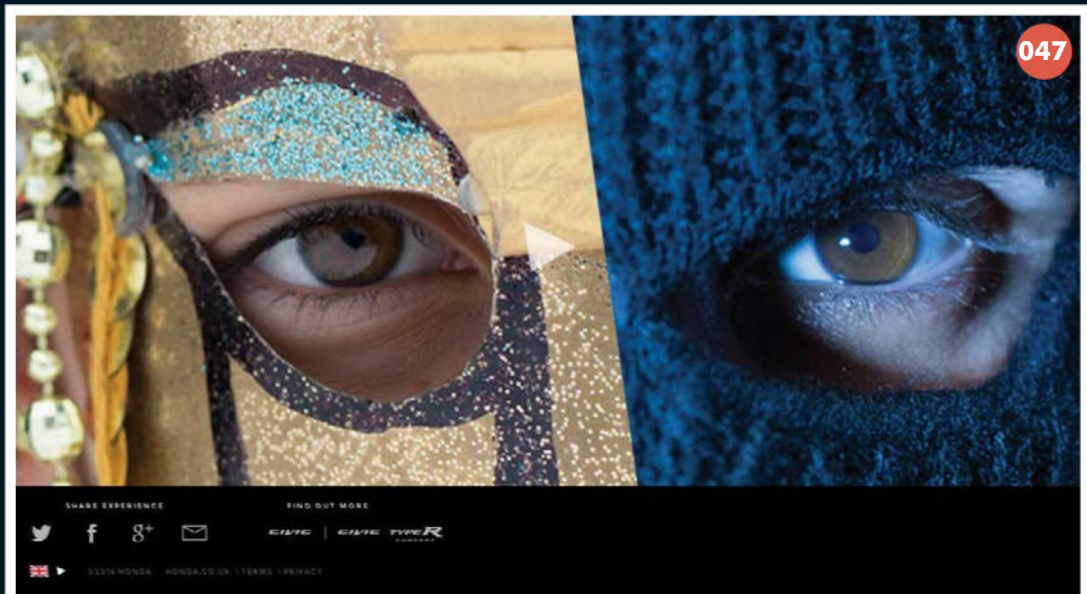
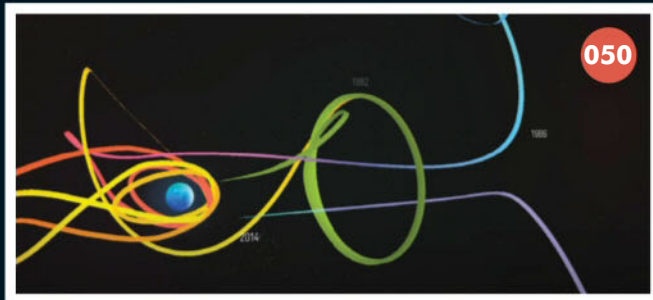
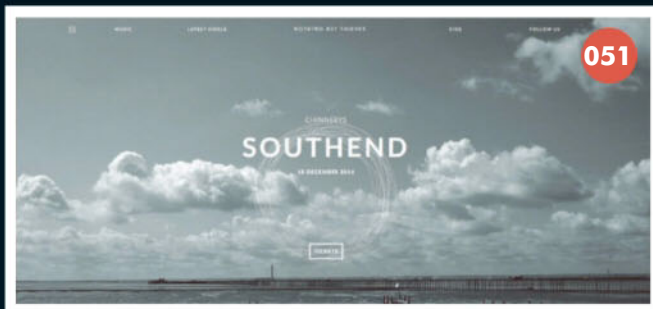
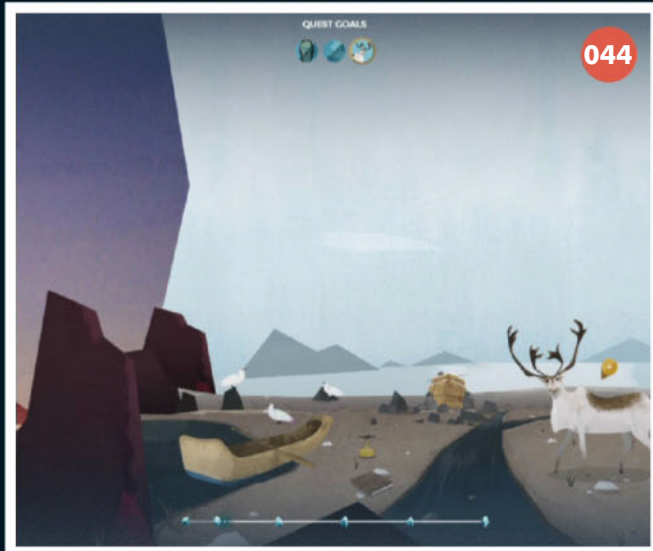
AXA, GOOGLE, NOTHING BUT THIEVES

### 052 ACHTUNG!

WWW.ACHTUNG.NL

PORSCHE, PHILIPS, ORANGINA







# CLASS

WHAT ARE THE HOTTEST FONTS AND COLOURS?



**RICHARD RUTTER**  
FOUNDER OF FONTDECK  
WWW.FONTDECK.COM

We'll see an embracing of type families, particularly combining quality nonderivative text faces and far more expressive display text.

## Abril Display

**053** DESIGNERS:  
VERONIKA BURIAN,  
JOSÉ SCAGLIONE

FIND AT: [bit.ly/13UXVfe](http://bit.ly/13UXVfe)

**DESCRIPTION:** Abril is a display serif font family by TypeTogether. It's formal but is a great choice for websites. The measured tension in the curves are beautiful and the font is very legible.

## Berlingske superfamily

**054** DESIGNER: JONAS HECKSHER  
FIND AT:  
[bit.ly/1CpezSw](http://bit.ly/1CpezSw)

## Maison Neue

**055** FOUNDRY: MILIEU  
GROTESQUE  
FIND AT: [bit.ly/1zoP96p](http://bit.ly/1zoP96p)

## Abril Text

**056** DESIGNERS:  
VERONIKA BURIAN,  
JOSÉ SCAGLIONE  
FIND AT:  
[bit.ly/1weiLfj](http://bit.ly/1weiLfj)

**057 CALM BLUE GREY**  
HEX: B7CFD9  
C:28 M:10 Y:10 K:00  
RGB: 183. 207. 217

**058 WARM PASTELS**  
HEX: E8D7D0  
C:08 M:14 Y:14 K:00  
RGB: 232. 215. 208



### 066 HTML5 INTERACTIVITY

I hope to see more interactivity using HTML5 video to help tell stories and navigate users through a website like Reebok's (<http://bit.ly/1kSpE7w>). This technique of "moving images" really provides a more enjoyable and memorable experience for your brand.

**ANTHONY WIKTOR**  
CREATIVE DIRECTOR AT STARMEN DESIGN GROUP  
WWW.STARMENUSA.COM

### 067 TIME TO GET LEAN

Websites will trim down on the number of elements on the page. We are currently designing with the Less is more approach; pages look cleaner, they load faster which is great for responsive design, and more likely to get the viewer engaging with the content.

**ANTHONY MIXIDES**  
DESIGN DIRECTOR AT BOND MEDIA  
WWW.BONDMEDIA.CO.UK

### 068 CONTENT & PERFORMANCE

The web will continue to be simplified because of the variegated landscape of devices we're browsing the web with. Content, communication and performance across devices is becoming more important than effects, and is now an even more integrated part of business strategies.

**BJARNE CHRISTENSEN**  
PARTNER & CREATIVE DIRECTOR AT STUPID STUDIO  
WWW.STUPID-STUDIO.COM



# TOP OF 2015

RICHARD RUTTER AND ANNEKA GARDNER REVEAL ALL



**Calypso E**  
**059** DESIGNER: JARNO LUKKARILA  
 FIND AT: [bit.ly/1rcSVN6](http://bit.ly/1rcSVN6)

**FS Emeric**  
**060** DESIGNER: PHIL GARNHAM  
 FIND AT: [bit.ly/1CpfL8k](http://bit.ly/1CpfL8k)

**ANNEKA GARDNER**  
 ART DIRECTOR  
 CREATIVECHERRY.COM  
 Everyone's always so busy. Can we all just calm down a little bit? Maybe the right colour palette will help.

**Italian Plate No 1**  
**061** DESIGNER: JONAS HECKSHER  
 FIND AT: [bit.ly/1AQj3gZ](http://bit.ly/1AQj3gZ)

**Antwerp**  
**064** DESIGNER: HENRIK KUBEL  
 FIND AT: [bit.ly/1sQjnHV](http://bit.ly/1sQjnHV)  
 DESCRIPTION: Antwerp is a transitional serif from the A2-Type foundry. It's perfect for print mediums, and its roots are historical as it is inspired by 16th Century museum archives from Belgium. Antwerp has won awards across the design sphere and will be making more of a splash in 2015.

**Castledown**  
**062** DESIGNERS: EDD HARRINGTON, ANTHONY SHERET  
 FIND AT: [bit.ly/1x39AIK](http://bit.ly/1x39AIK)

**063 QUIET NEUTRALS**  
 HEX: F0E9E1  
 C:05 M:06 Y:10 K:00  
 RGB: 240. 233. 225

**Skolar Sans**  
**065** DIRECTOR: DAVID BREZINER  
 FIND AT: [bit.ly/1wWcj1P](http://bit.ly/1wWcj1P)



**069 MATERIAL DESIGN**  
 We're going to start really seeing the widespread implementation of Google Material on Android, web and finally iOS (via Google Apps). It's by far the most consistent cross-platform implementation for functionality and visual interface that we've seen yet.  
**SHAWN LESLIE**  
 PRODUCT DESIGNER AT DIGITAL TELEPATHY  
 WWW.DTELEPATHY.COM

**070 EXPLORING NEW IDEAS**  
 Exploration! That is easy to say since it has to be appropriate to the design task, but there is nothing more interesting than visiting a website that surprises you in the way of navigation and interaction, use of video and images to tell your story or let you write your own.  
**CARL ANGLEO**  
 ART DIRECTOR AT UNCLEGREY  
 WWW.UNCLEGREY.DK

**071 INFORMATION VISUALISATION**  
 Browser design will be bigger since responsive and flat design is nowadays standard. There will also be many improvements on web animation and typography. There will be more WebGL sites too for information visualisation.  
**ROBBY LEONARDI**  
 DIGITAL MEDIA DESIGNER AT FOX NEWS  
 WWW.RLEONARDI.COM

# TECH 10 2015

## INDUSTRY PROS REVEAL

### ISOMORPHIC CODE

Reactive programming will be seen throughout stacks, from database to the DOM. Isomorphic code will run everywhere.

**MATT DEBERGALIS**  
FOUNDER OF METEOR  
WWW.METEOR.COM

072



### QUANTIFIED SELF

This will be the year that we start really making use of all the data we create and collect about ourselves every day. [www.aprilzero.com](http://www.aprilzero.com) is a great example.

**CHRIS ARMSTRONG**  
DESIGNER AT NIICE  
WWW.NIICE.CO

073



### SCALABLE SOLUTIONS

We'll see more SVG. It's fully supported in browsers and the high performance, easy to manage, yet scalable image solution is hard to turn down.

**ZEE DURRANI**  
CREATIVE DESIGNER  
WWW.CREATIVE9.COM

074



### MOBILE PAYMENTS

It's been a long time coming, but 2015 may finally be the year when mobile payment goes mainstream with services.

**ALFREDO APONTE**  
UX DIRECTOR  
WWW.NORTHKINGDOM

075



### PHYSICAL WEB

We'll see more physical things connected to the internet like Google's Physical Web and Bluetooth beacons.

**MARC BELLE**  
SENIOR DESIGNER AT PHANTOM  
WWW.PHANTOM.LAND

076



### PLATFORM AGNOSTIC

We will see a more mature use of wearables technologies. Motion will play an even more important role when working with the web.

**CLAUDIO GUGLIERI**  
DESIGN DIRECTOR  
WWW.F-I.COM

077



### HTMLBARS

Virtual DOM template rendering! This increases performance and simplifies binding syntax for clean markup. Other template engines will follow.

**ANDY MACINTOSH**  
DEVELOPER AND PARTNER  
WWW.LEGWORKSTUDIO.COM

080



### WEBGL

We are very excited about WebGL and all the ways we can use it to create immersive user experiences. Also, iWatch will be a game-changer.

**CORY KEY**  
INTERACTIVE CREATIVE DIRECTOR  
WWW.AGENCY.DISCOVERY.COM

078



### GOOGLE GO

Some web developers are jumping ship to Google's Go language. 2015 could be the year that Go gets going on mainstream web projects.

**RICHARD WENTK**  
DEVELOPER AND WRITER  
WWW.GOLANG.ORG

079



### ECMA SCRIPT6

ECMAScript6's new features will be game changing to front-end development. Keep an eye on the market as IE shifts towards a modern browser model.

**MATEO BELFIORE**  
CREATIVE DESIGNER  
WWW.STINKDIGITAL.COM

081







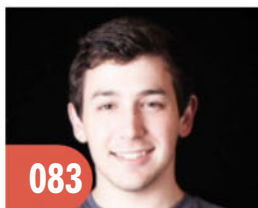
## 082 WEB 3D GRAPHICS

REAL-TIME 3D WILL BE MULTIPLATFORM

With the introduction of WebGL in iOS 8, both major mobile platforms are now capable of rendering relatively complex 3D graphics in real-time. We expect developers to take advantage of this technology and bring the mobile web closer to what desktop browsers offer. I also look forward to

WebVR, an API to create virtual reality content in the context of a web page, with support for Oculus Rift.

**CARLOS ULLOA**  
CREATIVE DIRECTOR  
WWW.HELLOENJOY.COM



083

### SMOOTH ANIMATIONS

Affording naturally responsive elements which boast silky-smooth animations, we're just starting to see what this 15-year old tech can do. It's time SVG claims its long-awaited throne on the modern web.

**ANDY MIKULSKI**  
CREATIVE DEVELOPER  
WWW.F-I.COM

nice piece because it was 'just a website', as if the medium was exhausted of its potential. I think we're finally seeing this sad perspective dry up in favor of a more optimistic, clear-eyed view of the web, more pragmatic than the early days but less cynical than in recent years.

**BRIAN WILLIAMS**  
CREATIVE DIRECTOR AT  
THE MARTIN AGENCY  
MARTINAGENCY.COM



085

### FLASH BACK

Browsers finally have native features that are equivalent to Flash. So, what's next? Organising information in boxes is no longer enough.

We're already seeing websites that look more like a fully produced game [www.theboxtrolls.com](http://www.theboxtrolls.com), movie

[www.fiveminutes.gs](http://www.fiveminutes.gs)) or book

([thevanishinggame.wellstoried.com](http://thevanishinggame.wellstoried.com)) and I think this trend will continue.  
**MATT WIGGINS**  
DEVELOPER AND PARTNER  
LEGWORKSTUDIO.COM



086

### JS: BIGGER AND BETTER

JavaScript has been moving from client side to server side and back again for a while now, ever-growing in ubiquity. JavaScript is also at the core of every HTML5 API out there, and likely to be at the very heart of the future web.

**JOHN O'NOLAN**  
FOUNDER OF GHOST  
WWW.GHOST.ORG



084

### UNFULFILLED POTENTIAL

A few years ago, I overheard someone undercut a very

## 7 UNMISSABLE EVENTS FOR 2015

### 087 AN EVENT APART - ATLANTA

16-18 FEBRUARY 2015

WWW.ANEVENTAPART.COM/EVENT/ATLANTA-2015

### 088 AWWWARDS

24-25 FEBRUARY 2015

CONFERENCE.AWWWARDS.COM

### 089 JQUERY UK 2015

6 MARCH 2015

WWW.JQUERYUK.COM/2015

### 090 SXSW INTERACTIVE

13-17 MARCH 2015

WWW.SXSW.CO.UK/INTERACTIVE

### 091 FOWD LONDON

27 - 29 APRIL 2015

FUTUREOFWEBDESIGN.COM/LONDON-2015/

### 092 UX LONDON 2015

20-22 MAY 2015

WWW.2015.UXLONDON.COM/

### 093 SOLID

JUNE 23-25 2015

WWW.SOLIDCON.COM/INTERNET-OF-THINGS-2015



# HOW WE MADE THE HOT 100 COVER

THERE IS FAR MORE TO THIS ISSUE'S COVER THAN MEETS THE EYE. FIND OUT HOW WE WENT FROM CONCEPT TO COMPLETION

After hours of discussions and sketches the first draft of the logo is now ready to go



01

02



Final design tweaks included the inclusion of a contemporary background and flames

03



To ensure readability the HOT 100 was changed to black, ready to be etched into wood

04 OF  
PAGES  
EXPERT TUTORIALS

FREE 160 minutes of  
pro CSS videos

**web designer**<sup>TM</sup>

HTML5 CSS3 jQuery WordPress

www.webdesignermag.co.uk

WHAT'S SET  
TO BE BIG IN  
**2015**

TOP INDUSTRY EXPERTS  
UNVEIL MUST-KNOW  
TECH & TRENDS

**PSD  
TO CSS**  
GO FROM DESIGN TO  
CODE WITH BRACKETS

**OCULUS RIFT  
AND THE WEB**  
LEARN HOW AMAZE COMBINED VR,  
HTML5 AND 3D FOR A UNIQUE EXPERIENCE

**45** designer  
resources  
worth £26  
Responsive templates,  
mockups, 3D retro text  
creator & Recharge font



**HTML5  
WEB APPS**  
STUNNING BUILDS  
WITH KENDO UI

**CSS HOVER  
EFFECTS**  
CODE CLEVER  
ANIMATED LINKS

**FAST  
FRONTENDS**  
BUILD AMBITIOUS APPS  
FROM THE COMMAND LINE

**ANIMATED  
HAMBURGER ICONS**  
FROM MENU ICON TO CLOSE BUTTON

**YOUTUBE  
MASTEDCLASS**  
The final black and white PDF  
ready to go to the laser  
engravers. The black is what  
will be engraved





The first test of the design was sent back. Tweaks were made



A second design on different wood was given final approval



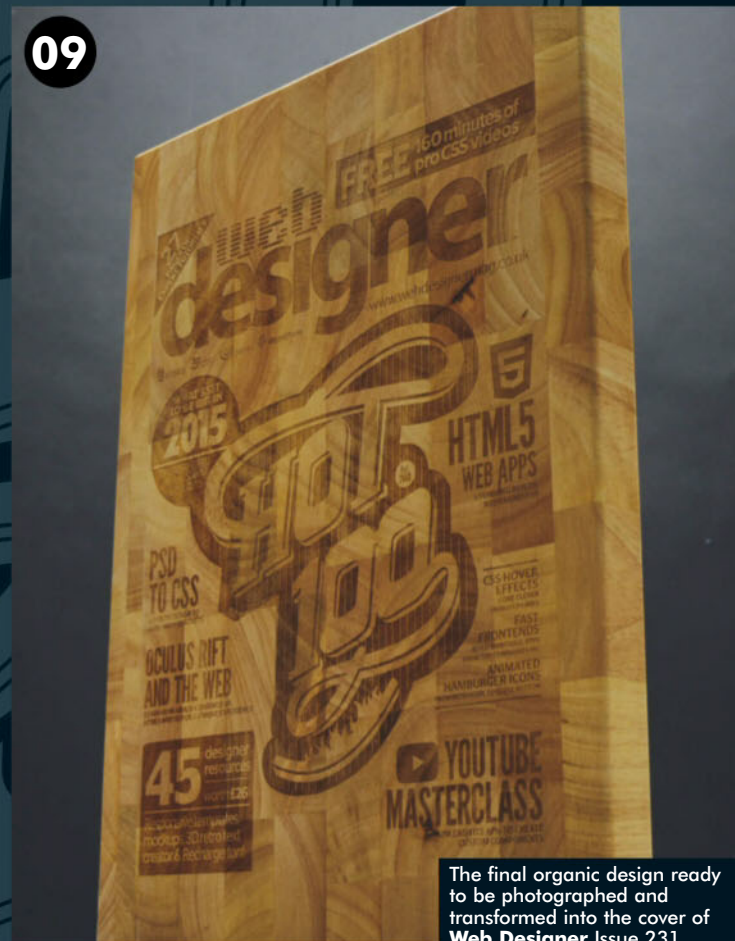
**07**

The wood and design were now both ready. It's over to the brilliant Viking Signs to unleash their laser-engraving magic



**08**

Check out the video of the cover being engraved at <http://bit.ly/1wBMmVp>



The final organic design ready to be photographed and transformed into the cover of Web Designer Issue 231



# web workshop

## Construct an animated off-screen menu

inspiration [www.risotteriamelottinyc.com](http://www.risotteriamelottinyc.com)



superb risotto restaurant in New York has a stunning menu and website that is filled with elements that will inspire you.

One simple yet very effective animation on [risotteriamelottinyc.com](http://risotteriamelottinyc.com) is part of the burger icon for the menu.

The burger icon, as it has become known, consists of three bars in the corner of the screen that

usually indicates to the user that there is an off-screen menu. Clicking on this icon for the Risotteria Melottini site starts an animation that has the menu lines rotate into a cross that becomes the menu's close button. The menu then animates into the screen centre and hides the content for the rest of the site.

### 1 INSPIRATION

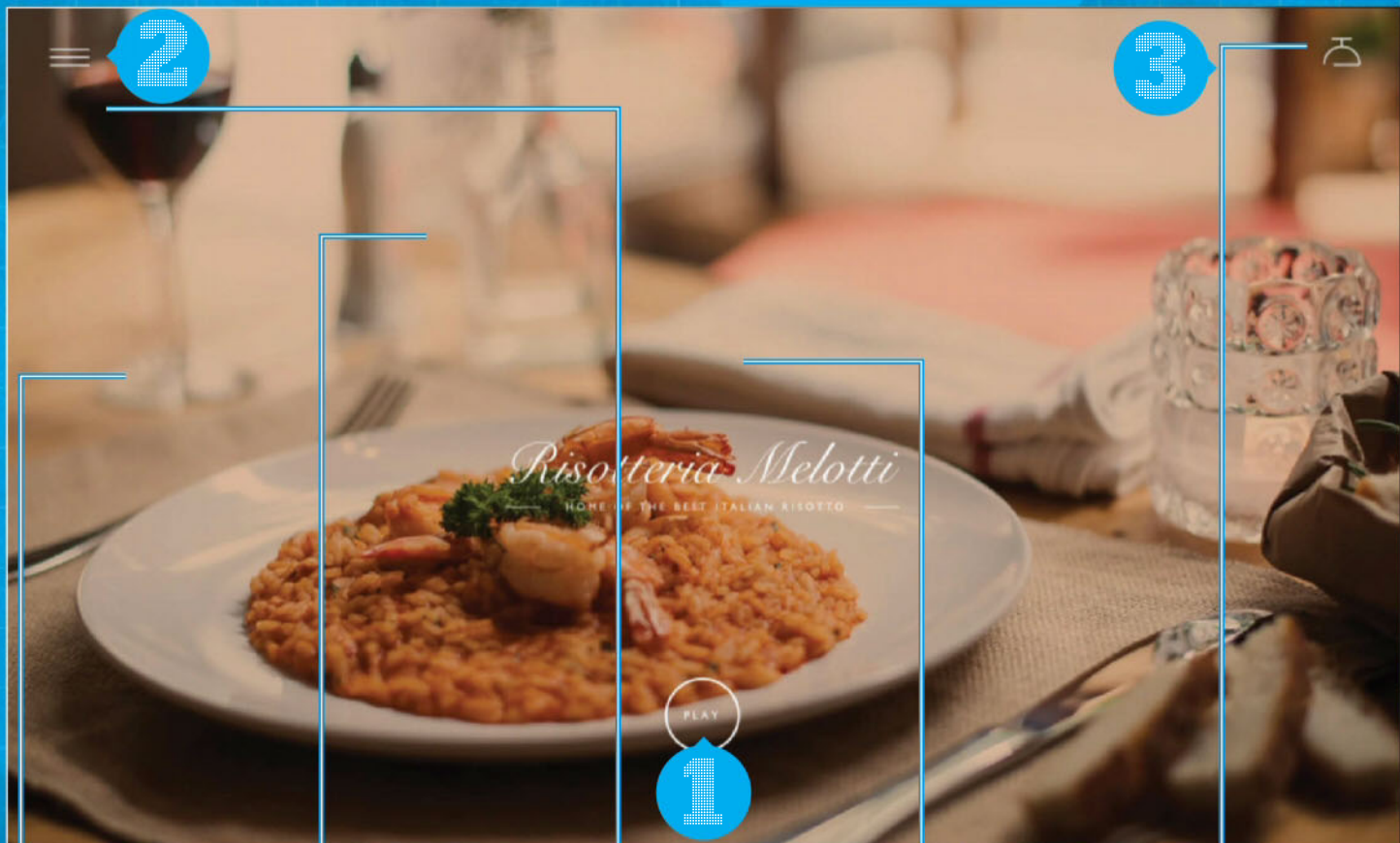
#### Rollover animations

When the user begins to explore the rest of the page and site for Risotteria Melottini they will become aware of a number of buttons on the homepage that are very plain. But when the user rolls over these, the bottom of the button has an animation of a thicker line that moves underneath it by being drawn into place.

Similarly, on the right-hand side of the button, two arrows are also drawn onto the screen. The arrows give the indication of an action to the user. The reserve icon draws itself onto the screen which makes itself prominent - this is an important feature for the restaurant that they want to highlight to the user for them to actively utilise.

#### Interaction hints

Animation is important in interaction as rollover animations hint to the user that clicking the button brings an action. Images scale up as the user rolls over them and these are used as navigational devices to get the user deeper into the content.



#### Simple loader

As the page loads a simple circular preloader image rotates to show how much of the site has loaded. The background is plain until the site has finished loading.

#### Emerging background

Once the site is loaded, the foreground colour fades out to reveal the site in the background and the logo moves slightly on the screen to fit its new home.

#### Sticky menu

The menu is a sticky element on the page and sits on a white background as the initial page image is scrolled through. Its clean design contrasts from the captivating food photos.

#### On-click video

The main content on the screen is a large image, which is an interface element to put a video in front of the user. The video only loads once the user has selected this to keep the file size lower on launch.

#### Attention grabber

A number of links on the site contain a number of animated rollover effects that aid the user in moving to the new content and deeper into the site.





**<comment>**  
What our experts think of the site

## When eating is motivated by pleasure, not hunger

"To strengthen the Italian experience, we chose only the top quality ingredients, such as fresh photography, tasteful videos and crunchy design. We cooked it with attention and focus on detail. At the end, we glaze it with an authentic Italian atmosphere and served it on an easy-to-navigate plate. Buon Appetito!"

**Tomas Baruffaldi, art director and UX/UI digital designer**

2

## TECHNIQUE

### Build the menu

#### 01 Create the animated menu

In the body section of our page we place the container on the page that will hold all of our content. Inside of this we will create the menu section and our menu trigger which will bring the menu onto the screen when we need it.

```
001 <div class="container">
002 <nav id="menu" class="menu">
003 <a href="#" class="menu-
004 trigger"><span>Menu</span></a>
005 </nav>
006 </div>
```

#### 02 Body end

At the end of the body section, let's link to jQuery and then detect that all of our content has loaded. Once that happens we keep a reference to the div tag with the id of menu and we set a clicked variable to false.

```
001 <script src="//ajax.googleapis.
002 com/ajax/libs/jquery/2.1.1/jquery.min.
003 js"></script>
004 <script>
005 $(function() {
006   var menu = $("#menu");
007   var clicked = false;
```

#### 03 Expand and recede the menu

Once the user has clicked on the menu then it is a case of animating the right content onto the screen and then taking it away again. This is done by adding and removing the correct CSS classes.

```
001 $("a.menu-trigger"
002 ).click(function() {
003   if(clicked){
004     menu.removeClass("menu-open");
005     menu.addClass("menu-closed");
006     clicked=false;
007   }else{
008     menu.removeClass("menu-closed");
009     menu.addClass("menu-open");
```

```
009   clicked=true;
010   }
011   });
012 });
013 </script>
014
```

#### 04 Set the burger

The burger is constructed from the trigger element on the page but we use the before and after selector to duplicate the style and rotate it to the appropriate value. There is more CSS code for the rest of the trigger but this is the main section that will refer to the burger.

```
001 .menu-trigger span:before {
002   -webkit-transform:
003   translateY(-250%);
004   transform: translateY(-250%);
005 }
006 .menu-trigger span:after {
007   -webkit-transform:
008   translateY(250%);
009   transform: translateY(250%);
```

#### 05 Animate the spin

To make the lines rotate into the x that will close the menu, the menu-open class rotates the elements into place and therefore with a 0.3 second transition, we have a burger that transforms into the closing x.

```
001 .menu-open .menu-trigger
002 span:before {
003   -webkit-transform: translateY(0)
004   rotate(45deg);
005   transform: translateY(0)
006   rotate(45deg);
007 }
008 .menu-open .menu-trigger span:after
009 {
010   -webkit-transform: translateY(0)
011   rotate(-45deg);
012   transform: translateY(0) rotate(-
013   45deg);
014 }
015 </script>
```

3

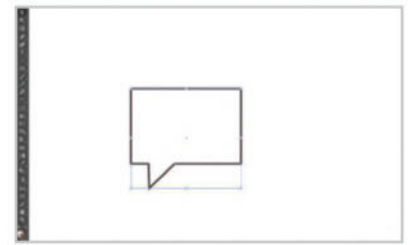
## TECHNIQUE

### Create the line art

Risotteria Melotti uses a unique line-art style that has all of the icons with a path that doesn't quite join up all the way around it. These are easy to create by cutting a hole in the icons with the Scissor tool in Illustrator.

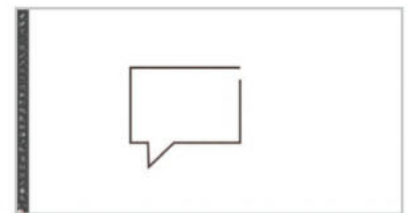
#### 01 Create the basic shape

Set the fill colour to none and draw a rectangle with the Rectangle tool. Select the pen tool and add three points on the bottom of the rectangle. Pull the middle one down with the direct selection tool to create a speech bubble.



#### 02 Cut out a section

Switch to the Scissor tool, this might be hidden under the Eraser tool. Click on the right-hand side of the speech bubble and click again in the top-right corner. This separates a section which can now be deleted, showing the unjoined path.



#### 03 Trim the artboard


Switch to the Artboard tool and crop around the speech bubble. Now go to File>Save, name the file and hit Save. In the second pop-up window change the format to SVG and click Save to export as an SVG for the web.




# Create an animated hover effect with CSS

Save space and show information on-hover stylishly with hover effects

tools | tech | trends HTML, CSS expert Neil Pearce



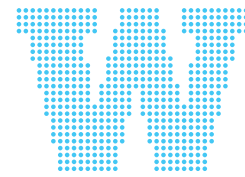
**DOWNLOAD TUTORIAL FILES**  
www.filesilo.co.uk/webdesigner



**Less pixels, more Vector**

Image scalability is now a major issue due to the rise of mobile devices, and large bitmaps looking less attractive. In 2015 we will see more vector graphics used as SVG, it's perfect for scalability and file size.

Web and graphic designer  
**Neil Pearce**



e're going to create a stylish-looking hover effect using CSS3 that will have a couple of images holding hidden information. When the user hovers over an

image, this will scale down and move over to the right or the left, revealing content behind it. The image will be clickable, but the user can choose to click through.

## 01 Get started

Open up a new HTML file in your favourite text editor and once all the meta information and link to an empty CSS file is added, we're going to add in a couple of wrappers. The wrappers are used for positioning our content, with block being the most useful as we'll use that to centre our hover effects.

```
001 <div id="page-wrapper">
002 <div class="block">
003 </div><!-- END block -->
004 </div><!-- END wrapper -->
```

## 02 Left-to-right HTML

Inside our block wrapper, we can firstly add in our page title. Then we will start adding some HTML for the left-to-right hover effect. We create a div with four classes called 'item-hover', 'square', and create an empty anchor tag at the end so we can make this clickable.

```
001 <h3 id="square" class="section-heading">Hover effect</h3>
002 <!-- Left to right-->
003 <div class="item-hover square effect left_to_right"><a href="#">
004 <!-- content goes here -->
005 </a>
006 </div><!-- END item-hover -->
```

## 03 Left-to-right content

Now add in some content for our left-to-right hover effect. We're going to add an image, this can be anything you want of course, and then add some

content underneath that relates to this image, which includes a heading and a short sentence.

```
001 <div class="img"></div>
002 <div class="info">
003 <h3>About us</h3>
004 <p>Check out all about us and how we got started?</p>
005 </div>
```

## 04 Right-to-left content

This is going to be the same as the previous steps but we will add a class name right to left instead of left to right. Again think about the image and what text to add that relates to that image. The image is going to animate over to the left and it will then reveal the text.

```
001 <!-- Right to left-->
002 <div class="item-hover square effect right_to_left"><a href="#">
003 <div class="img"></div>
004 <div class="info">
005 <h3>Our Music</h3>
006 <p>Check out our music and see if you like it?</p>
007 </div></a>
008 </div><!-- END row -->
```

## 05 CSS Reset

Now create a new CSS file, call it 'styles.css' and place it in its own folder called 'CSS'. As with most

projects you start, the first piece of CSS will be a reset. We're not going to go over the top with this one as it's not needed, but you get the idea by looking at the CSS:

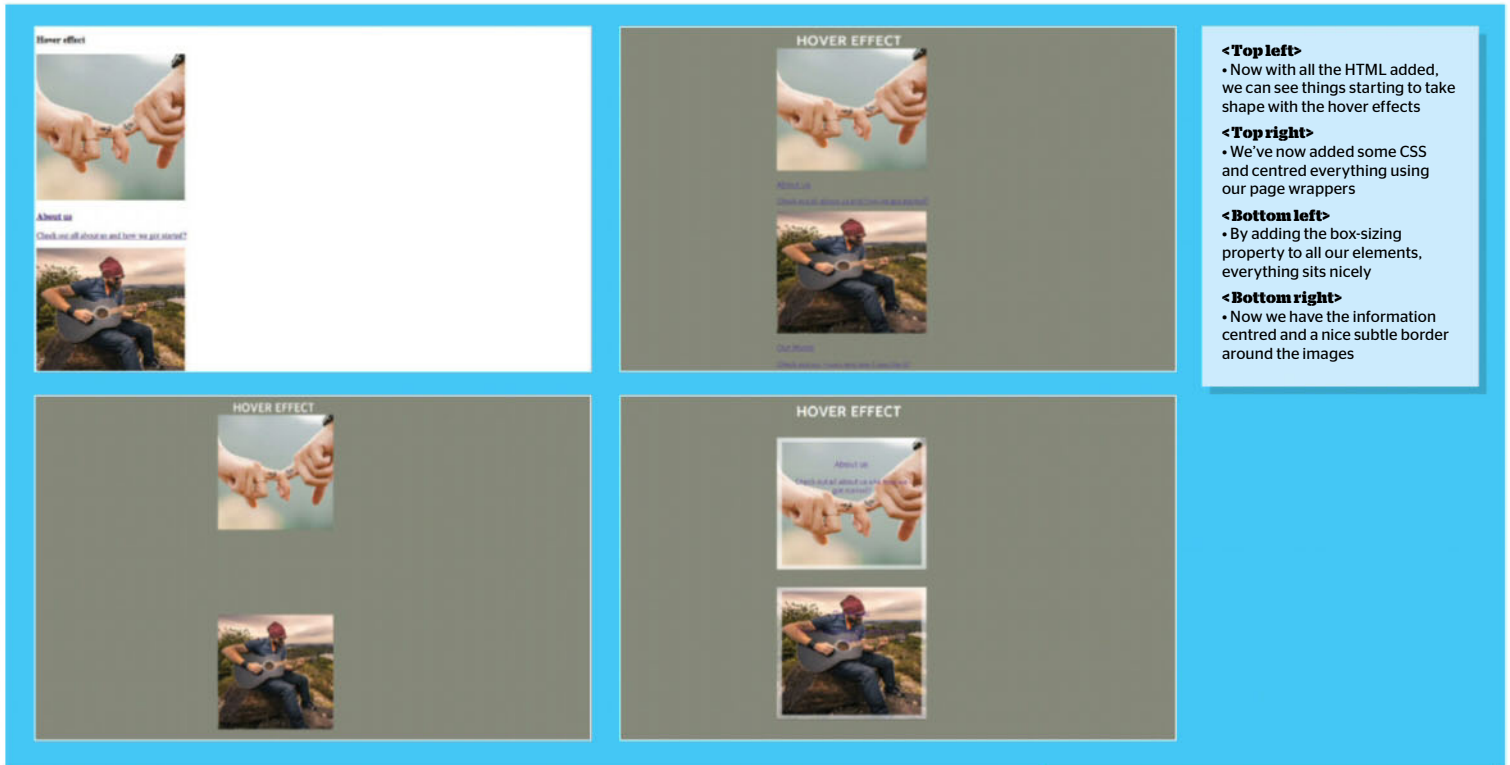
```
001 h1,h2,h3, body {
002   font-family: 'Source Sans Pro';
003   font-weight:300;
004 }
005 h1 { font-size: 3em; }
006 h2 { color:#2c2f36; font-size:2em; margin-bottom: 15px; }
007 html, body {
008   width: 100%;
009   padding: 0;
010   margin: 0;
011   height: 100%;
012   min-width: 100%;
013   max-width: 100%;
014   overflow: hidden;
015   background: #868a7b;
016 }
```

## 06 Add wrappers

It's common practice to add in some sort of page wrapping, and even though it's not vital to our project, we do want to position our hover effects so that they are more central. We can achieve this by giving our main page wrapper a fixed width of 1000px and then for our block we will half that and use 'margin: 0 auto' to centre our content.

```
001 #page-wrapper {
002   width: 1000px;
```





- <Top left>**
  - Now with all the HTML added, we can see things starting to take shape with the hover effects
- <Top right>**
  - We've now added some CSS and centred everything using our page wrappers
- <Bottom left>**
  - By adding the box-sizing property to all our elements, everything sits nicely
- <Bottom right>**
  - Now we have the information centred and a nice subtle border around the images

```
003 margin: 0 auto;
004 }
005 .block {
006 width: 500px;
007 margin: 0 auto;
008 }
```

**07 Page title**  
Then we will give our page title some styling just to give it some presentation and make it less boring. We're going to use a Google Font here called Cabin - give it a font size of 2em and we will use the value white for the colour and make it all upper-case. By using letter spacing, we can make this a little more readable. Finish it off by positioning it using margins.

```
001 .section-heading {
002 font-family: 'Cabin Condensed', sans-serif;
003 font-size: 2em;
004 color: white;
005 text-transform: uppercase;
006 letter-spacing: 2px;
007 margin: 20px 0 0 40px;
008 }
```

**08 Render the box model**  
The box-sizing property in CSS controls how the box model is handled in regards to page layout and tells the browser what the sizing properties (width and height) should include. This can be achieved through setting box-sizing to border-box. This forces the browser to render the box with the specified width and height. More details on this can be found on page 55.

```
001 .item-hover,
002 .item-hover * {
003 -webkit-box-sizing: border-box;
004 -moz-box-sizing: border-box;
005 box-sizing: border-box;
006 }
```

**09 Create hover effects**  
In this step we're just going to make sure the anchor tag doesn't display any text decoration (underline) once hovered over. Then we will set the images to 100% of its parent element. This is just to make sure we don't cause any issues when we need to change the image sizes.

```
001 .item-hover a:hover {
002 text-decoration: none;
003 }
004 .item-hover img {
005 width: 100%;
006 height: 100%;
007 }
```

**10 Set the image size**  
The images themselves are going to be 300px square. It would be a good idea to use Photoshop to resize your images to 300 pixels first, but using CSS we can make sure that they are the right size. Then we can give them some space by setting the margin bottom and top to 40px.

```
001 .item-hover.square {
002 position: relative;
```

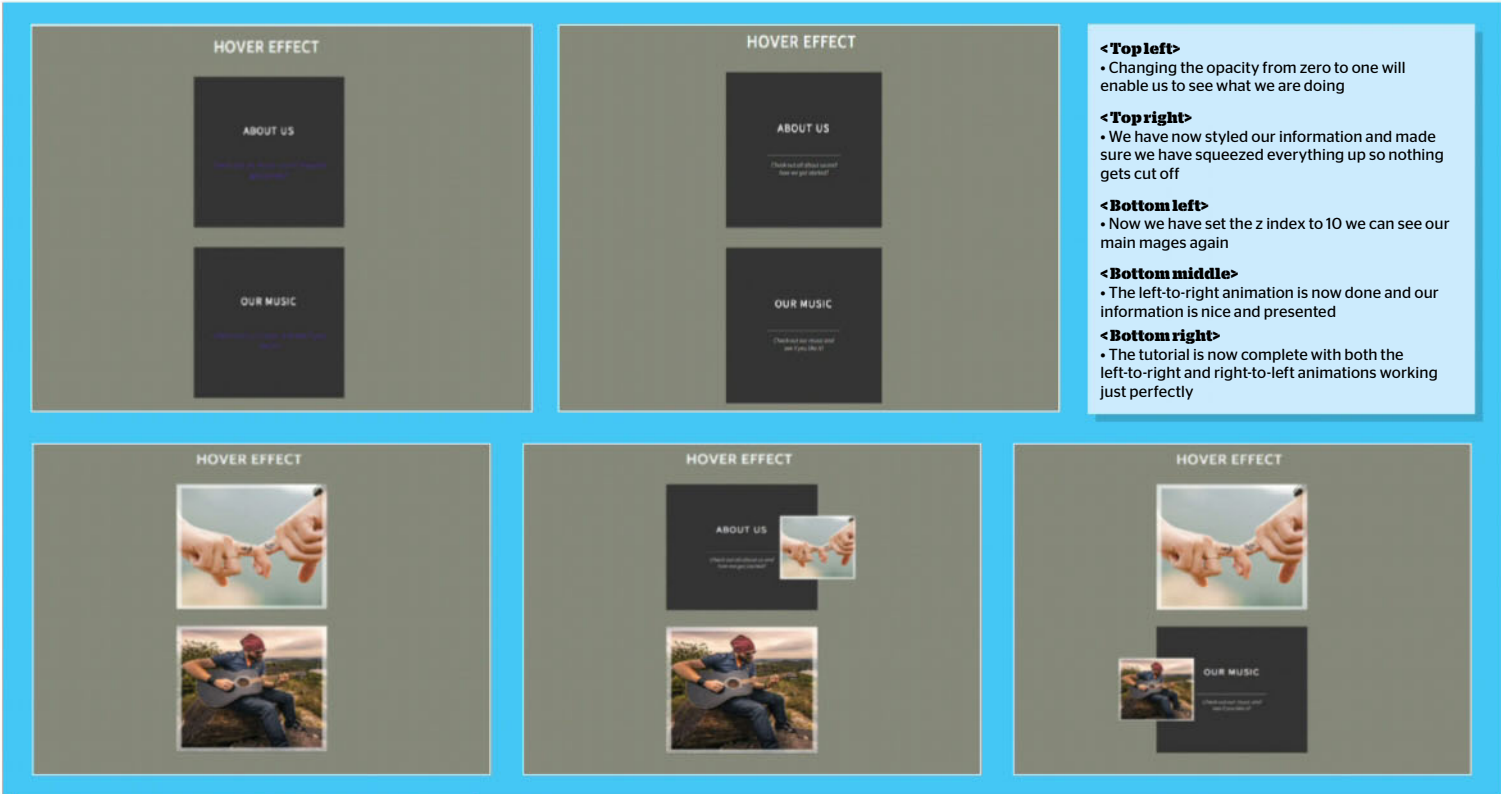
## Positioning

Specifying an elements position as relative will enable you to position anything else within it using absolute positioning. Relative positioning lets you move and overlap elements, but absolute positioned elements are removed from the normal flow.

```
003 height: 300px;
004 margin: 40px 0;
005 }
006 .item-hover.square .img {
007 position: relative;
008 width: 300px;
009 height: 300px;
010 }
```

**11 Image borders**  
In this step we are going to add on some borders to our images. We're going to use the 'box-shadow: inset' property and set its width to 10px. Then using the rgba value, we can set its colour to white and its opacity to 60 per cent (0.6).

```
001 .item-hover.square .img:before {
002 position: absolute;
003 display: block;
004 content: '';
005 width: 100%;
006 height: 100%;
007 box-shadow: inset 0 0 0 10px rgba(255, 255,
```



**<Top left>**  
 • Changing the opacity from zero to one will enable us to see what we are doing

**<Top right>**  
 • We have now styled our information and made sure we have squeezed everything up so nothing gets cut off

**<Bottom left>**  
 • Now we have set the z index to 10 we can see our main images again

**<Bottom middle>**  
 • The left-to-right animation is now done and our information is nice and presented

**<Bottom right>**  
 • The tutorial is now complete with both the left-to-right and right-to-left animations working just perfectly

## The transform: scale() Property

The scale factor is where one stands for the original size, two for twice the size, and so on. The element is both scaled horizontally (x axis) and vertically (y axis) by the same factor.

```
255, 0.6), 0 1px 2px rgba(0, 0, 0, 0.3);
008 }
```

### 12 Position the information

The information within our square images are going to be centred using absolute positioning. As we set the positioning of our images to relative in Step 10, we can achieve this easily. Then we add the property 'backface-visibility: hidden' which defines whether or not an element should be visible when not facing the screen.

```
001 .item-hover.square .info {
002   position: absolute;
003   top: 0;
004   bottom: 0;
005   left: 0;
006   right: 0;
007   padding: 30px;
008   text-align: center;
009   -webkit-backface-visibility: hidden;
010   backface-visibility: hidden;
011 }
```

### 13 Style the information

Now we are going to give our information some styles. Firstly we will give it a dark background using the hex value #333. Then we will prevent all click, state and cursor options on the specified HTML element by using 'pointer-events: none'. Then for the time being, we will set our opacity to zero so that it is hidden completely and adds a transition.

```
001 .item-hover.square.effect .info {
002   background: #333;
003   pointer-events: none;
004   opacity: 0;
005   -webkit-transition: all 0.35s ease-in-out;
006   -moz-transition: all 0.35s ease-in-out;
007   transition: all 0.35s ease-in-out;
008 }
```

### 14 Style the content title

With our information content added and positioned where we want it, let's now add some styles to the content's title. Firstly though, go back to the last step and change the opacity from zero to one. That way we can see what we are doing. Then we need to think about the size of the title, as we don't want any part of it hidden for when we animate the image down.

```
001 .item-hover.square.effect .info h3 {
002   color: #fff;
003   text-transform: uppercase;
004   position: relative;
```

```
005   letter-spacing: 2px;
006   font-size: 20px;
007   margin: 10px 25px;
008   padding: 55px 0 0 0;
009   height: 110px;
010   text-shadow: 0 0 1px white, 0 1px 2px
011   rgba(0, 0, 0, 0.3);
012 }
```

### 15 Style the content text

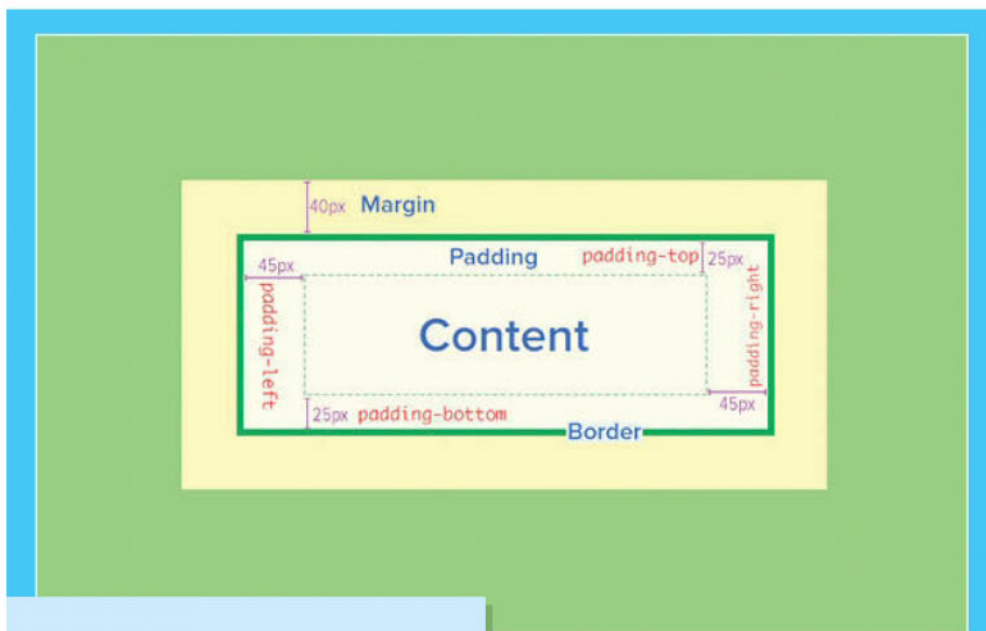
Before we can start adding any animation, we need to add some final styling to our text. Like the title, we need to squeeze this all in so when the main image gets scaled down, it doesn't hide any of the text. Then we can separate it off by adding a white line just above it. Lastly go and change the opacity back to zero.

```
001 .item-hover.square.effect .info p {
002   color: #bbb;
003   padding: 10px 5px;
004   font-style: italic;
005   margin: 0px 50px;
006   font-size: 12px;
007   border-top: 1px solid rgba(255, 255, 255,
008   0.5);
009 }
```

### 16 Add a transition

With all of our initial styling now complete, we can move on to the best part, which is the animation. Firstly





### The box-sizing property

Throughout this tutorial we used the box-sizing property, and to get a better understanding of this property, we will take a closer look at what it does. The box-sizing property is used to tell the browser what the sizing properties (width and height) should include. The CSS Box Model used to calculate widths and heights of all elements isn't ideal - it's not broken, but it doesn't always play nicely within some browsers. So we use the box-sizing property to emulate the behaviour of browsers that do not correctly support the CSS Box Model specification.

The default to this property is 'box-sizing: content-box;', but in this tutorial we used the value "border-box". This makes the final rendered box the declared width and height, and any border and padding will cut inside the box.

Now we can safely declare our content boxes to be of 100 per cent width, including pixel-based padding and border, and accomplish what we set out to do without any worries.

though we will add a transition to our image with some easing applied. Also to make sure our image can now be seen, we will set its z index to 10.

```
001 .item-hover.square.effect .img {
002   z-index: 10;
003   -webkit-transition: all 0.35s ease-in-out;
004   -moz-transition: all 0.35s ease-in-out;
005   transition: all 0.35s ease-in-out;
006 }
007
```

### 17 Left-to-right transforms

The first hover effect we will tackle is the about image. We will target the .left-to-right class and specify that the main image will start off in its original size

"scale(1)". We will then set its horizontal position to zero. Note that in this instance, we're only using one of the browser prefixes.

```
001 /* Left to right effect */
002 .item-hover.square.effect.left_to_right
003 .img {
004   -webkit-transform: scale(1) translateX(0);
005   transform: scale(1) translateX(0);
006 }
```

### 18 Position the content

The first thing we are going to do is move the background information over to the left using translateX(-100%). If you set its opacity back to one again, you will see where it will be. The idea is to animate this back in once the main image has scaled down and moved over to the right.

```
001 ..item-hover.square.effect.left_to_right
002 .info {
003   -webkit-transform: translateX(-100%);
004   transform: translateX(-100%);
005 }
```

### 19 Scale the main image

Now that the main content (info) has been positioned over to the left, we can now scale the main image down to 50 per cent of its size and move it along the x axis. This will give us this nice sweeping effect when hovered over.

```
001 .item-hover.square.effect.left_to_right
002 a:hover .img {
003   -webkit-transform: scale(0.5) translateX(100%);
004   transform: scale(0.5) translateX(100%);
005 }
```

```
001 translateX(100%);
002 }
003 transform: scale(0.5) translateX(100%);
004 }
005
```

### 20 Animate the content

Now we need to bring in our content. We are going to set its opacity back to 1 so it's fully visible and then using the translateX value, we can set its position to zero which will animate it back over to the right and position itself to where we want it.

```
001 .item-hover.square.effect.left_to_right
002 a:hover .info {
003   opacity: 1;
004   -webkit-transform: translateX(0);
005   transform: translateX(0);
006 }
```

### 21 Right to left

Now we need to think about animating the Our Music image and content. It really is a case of reversing what we did in the last step with only the first rule being the same. So where there's a negative value (-100%) we make sure it's now a positive value. With all this added, now we can test both our hover effects.

```
001 .item-hover.square.effect.right_to_left
002 .img {
003   -webkit-transform: scale(1) translateX(0);
004   transform: scale(1) translateX(0);
005 }
006 .item-hover.square.effect.right_to_left
007 .info {
008   -webkit-transform: translateX(100%);
009   transform: translateX(100%);
010 }
011 .item-hover.square.effect.right_to_left
012 a:hover .img {
013   -webkit-transform: scale(0.5) translateX(-100%);
014   transform: scale(0.5) translateX(-100%);
015 }
016 .item-hover.square.effect.right_to_left
017 a:hover .info {
018   opacity: 1;
019   -webkit-transform: translateX(0);
020   transform: translateX(0);
021 }
```

### 22 Final thoughts

The power of CSS3 is enormous and throughout this tutorial we saw how to exploit it in a very creative way. But there is so much more we can do with CSS3 when creating hover effects that we haven't talked about yet and we encourage you to experiment and see what new hover effects you can create.

# web workshop

## Build scroll-activated pages with transparency inspiration [www.lexus-int.com/magazine](http://www.lexus-int.com/magazine)

### 1 INSPIRATION JavaScript joy

The Lexus International website, having recently been refurbished, is like a directory of JavaScript functions, CSS3 transitions and HTML5 delights. Every corner of the site is animated or alive in some way, from the inspired navigation bar to the small, footer-link and hover effects. It really is a joy to navigate for web designers and developers alike. Our focus here is on the magazine section of the site. This opens with a fullscreen slideshow but scroll downwards and immediately a transparent, black, content menu will scroll up. This contains links to the latest articles, while the slideshow moves behind it, visible through the content page. Let's build something similar.

**T**he rush to embrace best SEO practices can sometimes have us focusing more on our content than on how that content is delivered. That's not to say that content isn't important, only that efforts to bring that content to the user with some panache shouldn't be overlooked. The most successful websites are always those that

strike the right balance between content quality and content delivery. So with that in mind, let's look at some examples of using JavaScript and CSS to present your content to the user in a distinctive and engaging way, with the help of the fullPage.js plugin and some inspiration from the Lexus magazine site.

**Content delivery**  
Lexus' site exemplifies the point about balance made in the introduction. There's a lot of information on the site, but entertaining delivery techniques and use of constant movement between manageable chunks makes the experience an enjoyable one.

The screenshot shows the Lexus magazine website interface. At the top, there's a navigation bar with 'MENU', a star icon, a search icon, and 'EN'. The main content area features a large background image of a car. Overlaid on this is a grid of article thumbnails. A blue circle with the number '1' points to the 'SPECIAL CONTENTS' section, which includes 'MEET THE DESIGNERS'. Another blue circle with the number '2' points to a 'BEYOND' issue counter at the top right. A third blue circle with the number '3' points to a 'COMING IN NOVEMBER' section. A fourth blue circle with the number '4' points to a 'THE FIVE' section. A fifth blue circle with the number '5' points to a 'THE REVEAL' section. Below the screenshot, five text boxes provide detailed annotations for each numbered point.

**Accessible contents**  
The content section which scrolls over the slideshow has links to all of the magazine's contents. There are also links to the individual magazine editions in the top right.

**Clear exits**  
The content section can also be accessed by the content button and can be exited by making use of the custom cursor which appear outside of the content menu.

**Swinging navigation**  
Hover over the menu to see the impressive swing-down navigation bar appear. The bar is multilevel, so hovering on some of the navigation links will swing down further extensions.

**Scrolling feature**  
Navigate your way to issue four's contents to see a really impressive scroll-based, animated presentation on golfer Hideki Matsuyama. The number-based facts that count down are great.

**Hi-res images**  
Let's not forget this is all about cars, so make your way over to Models>Concept Cars Gallery via the menu to see some fullscreen imagery of Lexus' cars.





## Fullscreen magic 095

"With the domination of responsive design, the finite width container style will soon be a thing of the past as more sites adapt to fill whatever space they currently reside in. This will be coupled with more innovative fullscreen background images and videos across our devices and screens."

**Richard Lamb**  
Founder of Inspired  
Lamb Design

### 3

## TECHNIQUE fullPage options

We are currently only using the basic settings of fullPage.js, but the plugin does come with a wealth of configurable options to enhance the functionality. Let's look over a few of these options.

### 01 Scrolling

Within the initialisation script, we can begin declaring our plugin options. The scrollOverflow enables scrollable content within each loaded section (using slimscroll.js), while the speed that each section scrolls into frame is declared with scrollingSpeed. Find the full code on FileSilo: <http://www.filesilo.co.uk/webdesigner>.

```
001 <script>
002 $(document).
ready(function() {
003 $('#fullpage').fullpage({
004 afterLoad:
function(anchorLink, index){
005 if(index == 2){
```

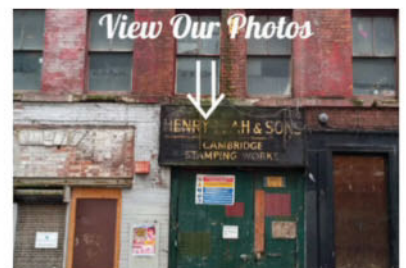
### 02 CSS3 transitions

By adding the css3:true property you can assign an easing transition effect (with easings.js) to the scroll. This can be a default setting or a custom 'cubic-bezier' method. Use easingcss3 to declare your effect.



### 03 Anchors

By adding anchors: ['firstPage', 'secondPage'] to our initialisation script we can set anchor points to our various sections. For example, we can turn the down arrow into a clickable link to the second section by adding an href to #secondPage.



### 2

## TECHNIQUE

### Build with FullPage

#### 01 Plugin installation

Go to [alvarotrigro.com/fullPage](http://alvarotrigro.com/fullPage) and download the fullPage.js plugin. Call your files in the head of your index.html. We will be using all three available scripts.

```
001 <script src="jquery.min.js"></script>
002 <script src="jquery.fullPage.min.js"></script>
003 <script src="jquery.slimscroll.min.js"></script>
004 <script src="jquery.easing.min.js"></script>
```

#### 02 Base HTML

Give the body an ID to set the background image. Add two sections within a div with the 'fullpage' ID, the second containing a 'grid-box' div.

```
001 <body id="background">
002 <div id="fullpage">
003 <section class="section wrap0"
id="section0"></section>
004 <section class="section wrap1"
id="section1">
005 <div class="grid-box"></div>
006 </section>
007 </div>
008 </body>
```

#### 03 Body background

Let's implement a fullscreen background using the background-size: cover property. Don't forget to include vendor prefixes for the declaration.

#### 04 Section content

Place 12 divs (the content you're using) within the 'grid-box' div, each pulling its own image. In this tutorial we are using bootstrap.css to assign column properties.

```
001 <section class="section"
id="section0">
002 <h1>View Our Photos</h1>
003 <h2>&dArr;</h2>
004 </section>
```

```
005 <section class="section wrap1"
id="section1">
006 <div class="grid-box">
007 <div class="col-md-4"></div>
008 (repeat x 11)
009 </div>
010 </section>
```

#### 05 Base CSS

Our second section needs to have some transparency to the background and the 'grid-box' div should have its width, margin and other properties declared before setting the content animation.

#### 06 Style elements

Add some styling to the content of our first section, which serves as an intro to our main (second) section, in tandem with our fullpage background image. You can add more content if you wish.

#### 07 Initialise the plugin

Now we can place the basic initialisation script for fullPage.js into our header, below the declaration of the other script files. This will have fullPage working with only the default settings.

```
001 <script type="text/javascript">
002 $(document).ready(function() {
003   $('#fullpage').fullpage();
004 });
005 </script>
```

#### 08 AfterLoad function

Add an afterLoad function to the initialisation script to begin the animation which will fade in the 'grid-box' content on section load. This adds an active class to the div which we can style individually.

```
001 afterLoad: function(anchorLink,
index){
002   if(index == 2){
003     $('.grid-box').addClass('active');
004   }
005 },
006 });
```


#### 09 CSS transition

Now to complete the CSS transition, give the 'grid-box' div a starting opacity of 0.

# Write CSS in Brackets with PSD code hints

Brackets, the open source code editor, has a new feature for turning design into CSS

**tools | tech | trends** Brackets, Creative Cloud, Chrome  
**expert** Mark Shufflebottom



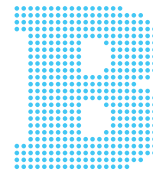
**DOWNLOAD TUTORIAL FILES**  
www.filesilo.co.uk/webdesigner



**Brackets & Photoshop 096**

“The ability to open Photoshop web designs in Brackets and get CSS code hints is set to give front-end developers a speed boost. No more looking for hex numbers, and no more cropping and exporting images.”

**Mark Shufflebottom**  
Prof. of interaction design at Sheridan College

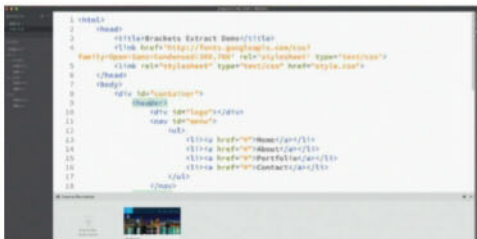


Brackets is very lightweight and has an inline code editor which means that you can edit the CSS in a HTML document from a separate document without leaving HTML. It supports CSS preprocessors and a live preview

for viewing changes in Chrome. Brackets lets you open a PSD inside, gives you autocomplete hints and lets you extract images without going to Photoshop!

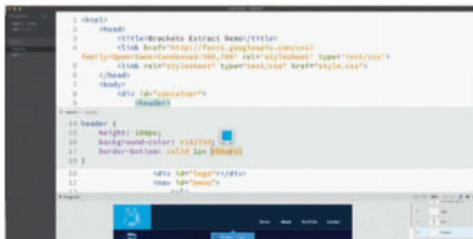
## 01 Get started

Open Brackets v1 available from <http://brackets.io> and go to File>Open Folder, choosing the start folder from the project folder. Now go to View>Show Extract for Brackets Preview. A window will open in the bottom of the interface, drag and drop the PSD from the project folder onto it.



## 03 Extract the CSS

Click on the header in the PSD and as you type the word 'height' in the CSS, you'll get an autocomplete from the height of the graphic of 100 pixels. Do the same for the background colour and use autocomplete again. Click on Shape 1 in the layers and type 'border-bottom'; the autocomplete will give the colour.



## 02 Create the first rule

You will need to sign into your Creative Cloud account to add the PSD, once this is done, click on design.psd in Brackets and you will have access to the PSD and layers. Now put your cursor on the opening header tag and press Cmd or Ctrl+E to open the quick edit and click the new rule button.



## 04 Finish the header CSS

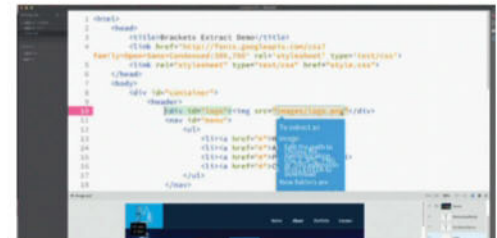
Now add the remaining CSS code shown, the width will autocomplete but the position and z index are our own properties. Close the quick edit and click on the city text in the PSD and Shift-click the city image. Place your cursor between the div tags with the id of 'logo'.

```
001 position: absolute;
002 width: 960px;
003 z-index: 100;
```

## 05 Extract the image

Start typing an image tag, when you come to the source you will see a popup with three options. The first is for a merged image from the two layers, click on this and rename it 'logo.png' then press Enter (this extracts

the image) and close the tag. You will now have an images folder with the image, logo.png, inside which has been created automatically.



## 06 Logo CSS

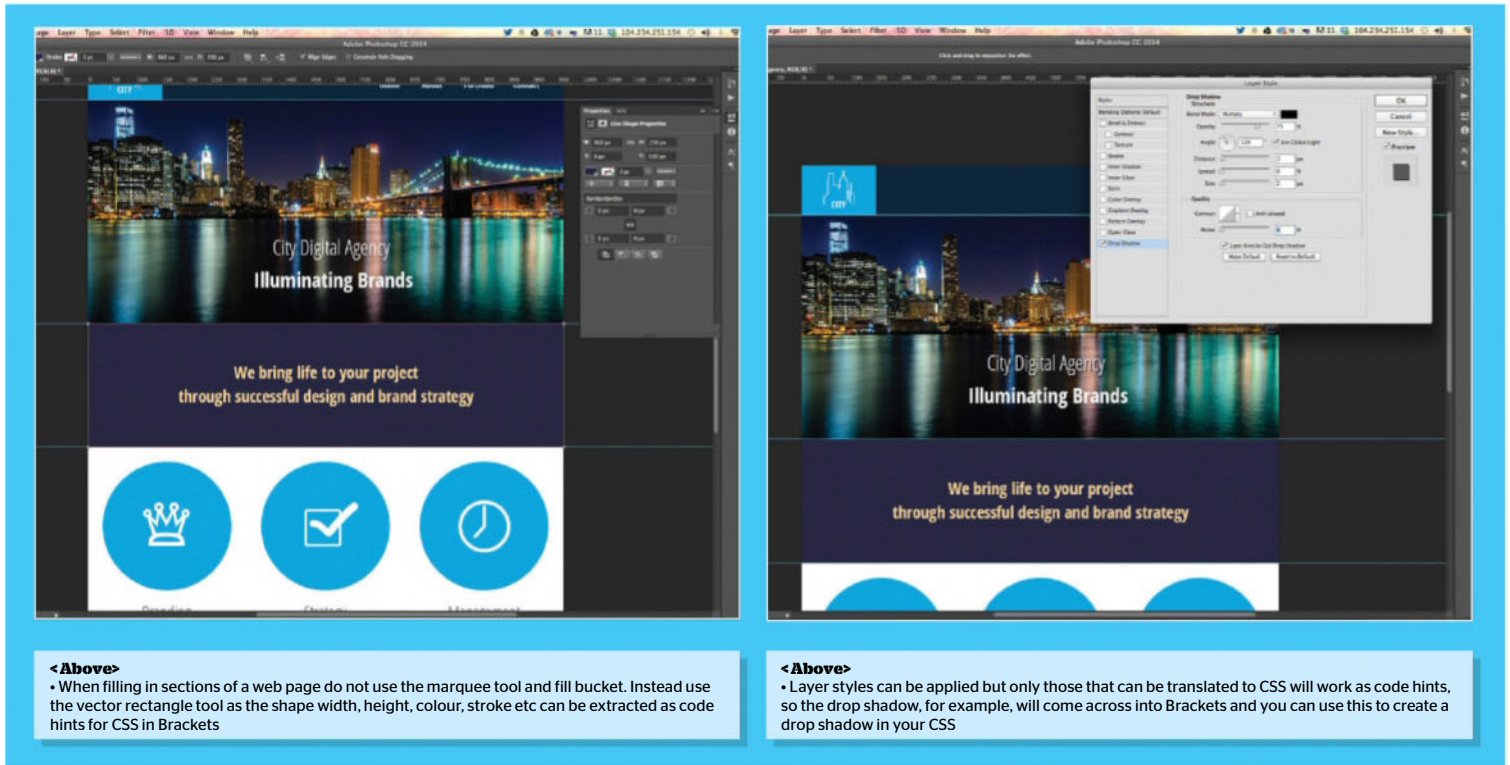
Put your cursor on the id 'logo' and press Cmd or Ctrl+E. Click the new rule button and click on the light blue logo in the PSD image. The background colour will be available via the code hint from the PSD file. The other CSS values are shown in the code below, we are going to add a little padding to the div tag in order to hold the image in the right place.

```
001 #logo {
002   float: left;
003   width: 105px;
004   height: 90px;
005   padding: 10px 0 0 45px;
006   background-color: #06a7e1;
007 }
```

## 07 Position the menu

Put your cursor on the id for the 'menu' and press Cmd or Ctrl+E, then click the new rule button and add





<Above>

When filling in sections of a web page do not use the marquee tool and fill bucket. Instead use the vector rectangle tool as the shape width, height, colour, stroke etc can be extracted as code hints for CSS in Brackets

<Above>

Layer styles can be applied but only those that can be translated to CSS will work as code hints, so the drop shadow, for example, will come across into Brackets and you can use this to create a drop shadow in your CSS

the code as shown. This positions the menu to the right of the header ready for formatting up in the PSD document. Hopefully you are seeing that the PSD helps the front-end developer to write CSS without trying to take over their work.

```
001 #menu {
002 float: right;
003 margin: 40px 50px 0 0;
004 }
005
```

autocomplete the font size and colour from the PSD. Finish this by turning off the text decoration and we will add a transition effect ready for the hover of the link.

```
001 ul li a {
002 color: #d3f4ff;
003 font-size: 18px;
004 text-decoration: none;
006 transition: background-color 0.5s ease;
007 }
008
```

08 Arrange the unordered list

In the panel on the left-hand side of Brackets click on the style.css file to edit it directly. Add the code as shown, which will help us to get the unordered list into an inline row like a menu, ready for the actual formatting of the link and hover effects that are commonly found in the menus.

```
001 ul {
002 list-style-type: none;
003 margin: 0;
004 padding: 0;
005 text-align: center;
006 }
007 ul li{
008 display: inline;
009 }
```

10 Hover state

Now switch over to the style.css file and add the code at the bottom as the hover state for the button. This will simply put the light blue background in there when we roll over. We've got a half second transition and this transition will simply fade in and out as the user rolls over and out again.

```
001 ul li a:hover{
002 background-color: #06a7e1;
003 }
004
```

09 Link styling

In the CSS create the link CSS as shown. By clicking on the text in the menu you can get the CSS to

11 Calling the hero

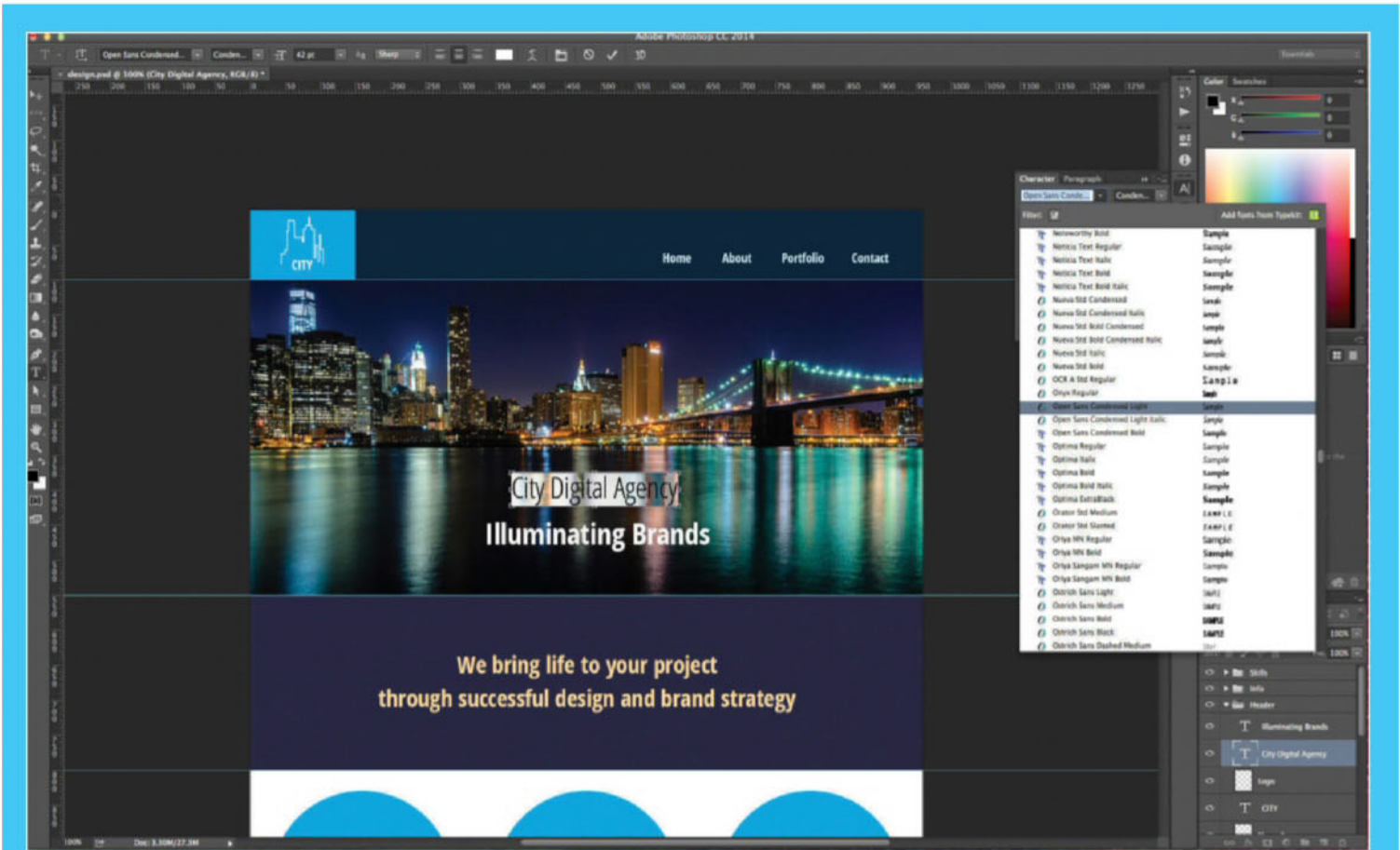
Move back to the index.html page and place your cursor inside the 'hero' id. Press Cmd or Ctrl+E, then click the new rule button. Now click on the large image of the city in the PSD file. The autocomplete will help you fill in the width and height properties. Start typing background and you will be able to extract the image, name it 'hero.jpg' and press Enter.



12 Text strap

Now place your cursor inside the id for 'strap' and create a new rule as previously. Fill out the details as shown. If you click on the text in the PSD that is over the image you will see that this is at 375px down from the top, but we've adjusted this back slightly to 350px.

```
001 #strap {
002 position: absolute;
003 top: 350px;
004 width: 960px;
005 text-align: center;
006 color: #fff;
007 }
```



**<Above>**  
 • When choosing typography for your project in Photoshop, make sure the typeface is available as a web font. Sites such as Font Squirrel will allow you to download many of the web typefaces to install for applications on your computer

## 13 Heading 2 CSS

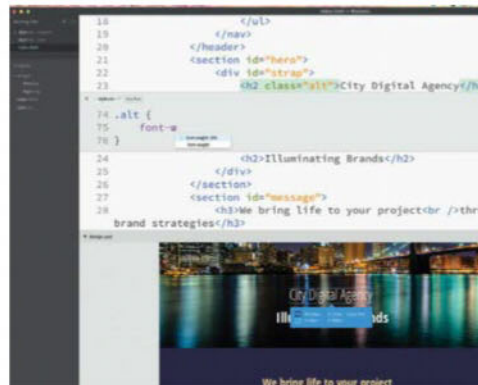
Click on the h2 tag and we will create a new rule as previous. Click on the text in the PSD within Brackets. You will get help autocompleting as you type in the font size. Also add 'line-height: 24px' to get the line height similar to that of the PSD design comp.



## 14 The alternative heading

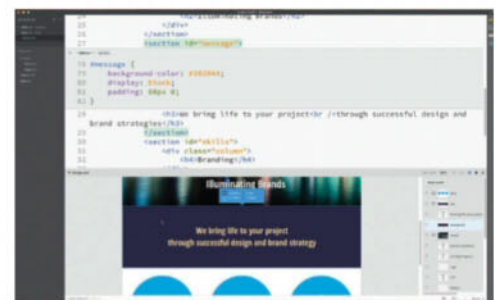
Close the quick edit part of the window and put your cursor in the class of 'all' on the first h2 tag. In the PSD, click on the first heading over the image. Create a new rule for this in the quick edit window and start typing the font weight. The autocomplete should

help you get the right font weight of 300 for this. Save your documents and test in the browser.



## 15 The medium is the message

Close the quick edit here and move your cursor onto the id of 'message' and create a new rule for this. You will be able to autocomplete the background colour if you click on the background of the message in the PSD. Change the display to block and add 'padding: 60px 0;' here as well.

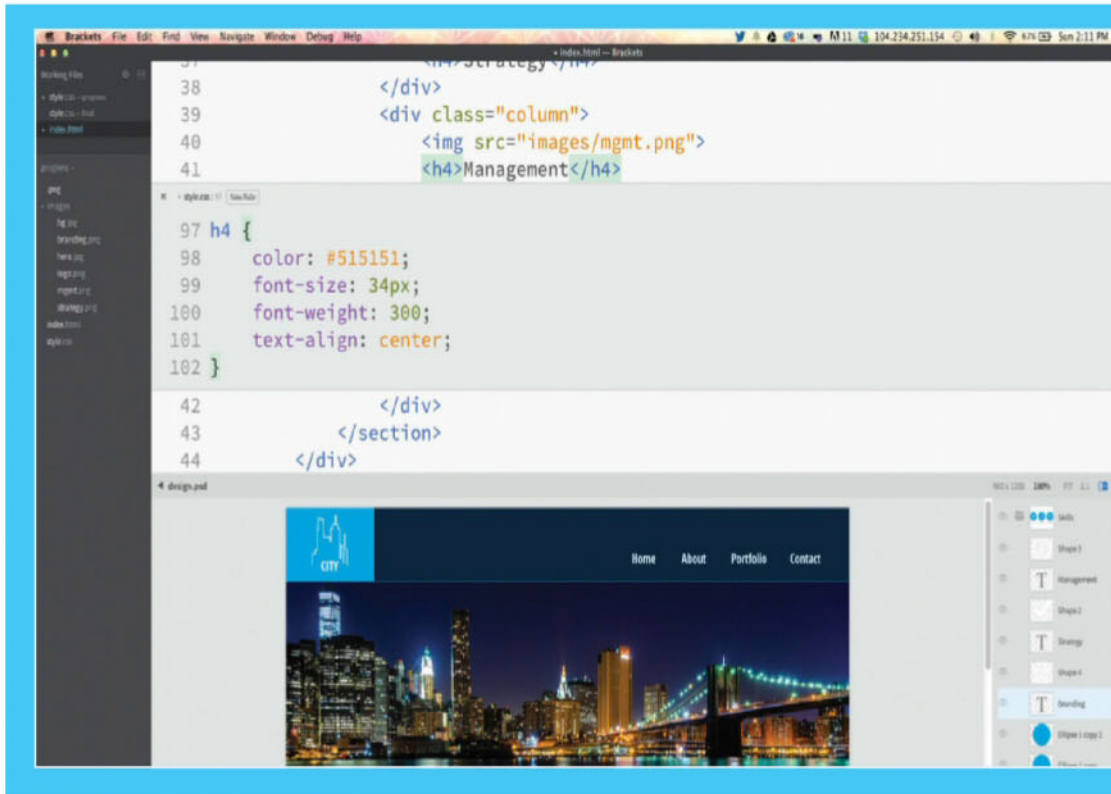


## 16 H3 message text

Move your cursor to the h3 tag inside the message section of the page. Create a new rule for the h3 tag and then click on the text in this section of the PSD. You will be able to get autocomplete help with the colour and font size, so add the rest of the details as shown in the code. Save your file now and then proceed to viewing it in the browser.

```
001 h3 {
002 color: #fed99e;
003 font-size: 34px;
004 text-align: center;
```





**The creativity all happens in the cloud**  
 The reason you need a Creative Cloud account to use the Extract feature of Brackets is because of the new Creative Cloud API. Adobe has enabled anyone to have access to their tools - the whole of Photoshop exists on a server in the cloud meaning, that if you become a Creative Cloud developer then you can access that API to run a Photoshop command on an image. Because Brackets is actually a custom build of the Chrome Browser using HTML, CSS and JavaScript to create HTML, CSS and JavaScript, it needs the power of the Creative Cloud version of Photoshop to power the features of Extract. This enables you, the designer, to take full advantage of CSS code hinting based on your PSD designs.

**Image extract format**  
 When extracting an image from the PSD using Brackets, whatever file extension you put on the end is the format that will be extracted. So you can move between PNG for transparency and JPG for regular images.

```

005 margin:0; padding: 0;
006 }
    
```

**17 Branding image**  
 In the PSD preview mode, click on the blue circle and Shift-click on the crown image so that both layers are now selected. Place your cursor before the h4 tag for the word 'branding' and then hit the Return key. On the new line start typing an image tag and when you get to the source, select the first image that Brackets gives you the option for.



**18 Generate the image**  
 Name the new image 'branding.png' and then press Enter to generate the image. Finish off the image tag and then create a new line above the h4 tag for the word 'strategy'. In the PSD preview click on the second blue circle and Shift-click on the tick image so both will now be selected.



**19 Strategy image**  
 Start adding the image tag and name this new extracted image 'strategy.png' as you get to the source and Brackets extracts the image. Then do the same for the Management section, naming this 'mgmt.png'. This image extraction makes it easy for the developer to decide what will be an image and what will be CSS.



**20 Column style**  
 Click on the column class and create a new CSS rule. You will be able to get the width of the column from the image still selected in the PSD. Float this to the left and add 'padding: 60px 30px;' so that there is a larger space at the top and bottom to the left and right.



**21 Final h4 style**  
 Click on the word 'Branding' in the PSD and then place your cursor on the h4 tag and add a new rule for this. You can extract the colour, font size and font weight with Brackets auto-completing this for you. Also add 'text-align: center;' and save all your documents, testing the final design in the browser.



web designer SPECIAL SUBSCRIPTION OFFER

SUBSCRIBE TO

web designer

AND SAVE 30%



PAY ONLY £12.50 EVERY 3 ISSUES



CONTEMPORARY FEATURES WRITTEN BY EXPERTS



BEHIND THE SCENES WITH THE WORLD'S BIGGEST AGENCIES

Order hotline 0844 848 8413

Online at [www.imaginesubs.co.uk/wed](http://www.imaginesubs.co.uk/wed)



# Every issue packed with...

- Expert tutorials on HTML, CSS, jQuery and leading libraries and frameworks
- In-depth interviews with the world's leading creative agencies
- A close-up look at the latest web development technologies
- Designer resources and pro video guides

# Why you should subscribe...

- Save 30% off the cover price - just £12.50 every 3 issues on Direct Debit
- FREE delivery direct to your door
- Never miss an issue

## Order by

28TH FEBRUARY

Use code **PQ15** for this offer.

## BY POST

Send your completed form to:  
Web Designer Subscriptions, 800 Guillat Avenue,  
Kent Science Park, Sittingbourne, Kent ME9 8GU

## YOUR DETAILS

Title \_\_\_\_\_ First name \_\_\_\_\_  
Surname \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Postcode \_\_\_\_\_ Country \_\_\_\_\_  
Telephone number \_\_\_\_\_  
Mobile number \_\_\_\_\_  
Email address \_\_\_\_\_

## DIRECT DEBIT PAYMENT

**UK Direct Debit Payment**

I will pay just £12.50 every 3 issues

ip IMAGINE PUBLISHING		Instruction to your Bank or Building Society to pay by Direct Debit		DIRECT Debit	
<small>Please fill in the form and send it to: Imagine Publishing Limited, 800 Guillat Avenue, Kent Science Park, Sittingbourne, Kent, ME9 8GU</small>					
Name and full postal address of your Bank or Building Society			Originator's Identification Number		
To: The Manager Bank/Building Society			5   0   1   8   8   4		
Address			Reference Number		
Postcode			Instructions to your Bank or Building Society		
Name(s) of account holder(s)			<small>Please pay Imagine Publishing Limited Direct Debits from the account detailed in this instruction subject to the safeguards assured by the Direct Debit guarantee. I understand that this instruction may remain with Imagine Publishing Limited and, if so, details will be passed on electronically to my Bank/Building Society</small>		
Branch sort code			Signature(s)		
Bank/Building Society account number			Date		
<small>Banks and Building Societies may not accept Direct Debit instructions for some types of account</small>					
<small>AG instruction form</small>					

## PAYMENT DETAILS

**YOUR EXCLUSIVE READER PRICE, 1 YEAR (13 ISSUES)**

UK £62.30 (Save 20%)  Europe – £70  World – £80  USA – £80

### Cheque

I enclose a cheque for £ \_\_\_\_\_  
(made payable to Imagine Publishing Ltd)

### Credit/Debit Card

Visa  Mastercard  Amex  Maestro

Card number \_\_\_\_\_ Expiry date \_\_\_\_\_

Issue number  (if Maestro)

Signed \_\_\_\_\_

Date \_\_\_\_\_

Please tick if you do not wish to receive any promotional material from Imagine Publishing Ltd by post   
by telephone  via email

Please tick if you do not wish to receive any promotional material from other companies by post   
by telephone  Please tick if you DO wish to receive such information via email

### TERMS & CONDITIONS

Terms and Conditions: This offer entitles new UK direct debit subscribers to pay only £12.50 every 3 issues. New subscriptions will start from the next available issue. Offer code PQ15 must be quoted to receive this special subscription price. Details of the Direct Debit guarantee are available on request. This offer expires 28 February 2015. Imagine Publishing reserves the right to limit this type of offer to one per household. Subscribers can cancel this subscription at any time.



# YOUTUBE MASTERCLASS

Discover how to unlock the power of its APIs to go beyond simple embedding and sharing. Customise the video streaming service to create bespoke experiences





## PLAY THAT MOVIE!

IN MANY CASES, STREAMING VIDEO IS ALL YOU NEED. YOUTUBE SOLVES STREAMING PROBLEMS THE EASY WAY WITH THESE CONTROLS

Google addresses the simple streaming use case via its player API, which permits you to add a video window to your website or web application. Developers seeking to deploy it simply have to add an IFrame to the markup of their website.

Our snippet shows the fastest way to play a clip back with just one line of code:

```
001 <iframe id="ytplayer" type="text/html"
width="720" height="405"
002 src="https://www.youtube.com/embed/
M71c1UVf-VE"
003 frameborder="0" allowfullscreen>
```

YouTube IFrames take a variety of parameters that modify the behaviour of the content shown. Google provides a small tech demo demonstrating some of the attributes - visit it by opening the URL <http://bit.ly/16otAqN> in a browser of your choice.

### 1. AUTOPLAY

By default, a YouTube player does not start to blast its user with sound until they physically start the video by clicking the Play button. This behaviour can be changed by appending the autoplay parameter to the src URL as shown in the following snippet:

```
001 src=" HYPERLINK "https://www.youtube.com/
embed/M71c1UVf-VE?
002 autoplay=1"https://www.youtube.com/embed/
M71c1UVf-VE?autoplay=1"
003
```

Keep in mind that users will consider web applications 'noxious' if they are bugged with unwanted content in the background while they are browsing.

### 2. NO HANDS!

YouTube provides users with a well-known set of controls for interacting with the player widget and these can be disabled by setting the controls property to zero:

```
001 src="https://www.youtube.com/embed/
M71c1UVf-VE?controls=0"
```

A player loaded with zero controls does not display any interaction widgets, ie the commonly used play and pause buttons are not shown. However, your user can still stop playback by double-clicking the movie.

### 3. LOOPING VIDEOS

YouTube videos can be used to provide background music for websites. Set the loop property in order to force your widget into 'Groundhog Day mode':

```
001 src="https://www.youtube.com/embed/
M71c1UVf-VE?loop=1"
```

However, looping YouTube videos is not particularly

efficient. Slower machines like netbooks tend to run out of steam when dealing with multiple video streams, so in most cases, background sound effects should be generated in a more efficient way.

### 4. COLOUR THEMES

YouTube's controls usually show up in dark grey. Low-key content can benefit from a different palette, which changes the background colours to a friendly and bright, light grey. Enabling this option is as easy as embedding the theme parameter to the URL of the video:

```
001 src="https://www.youtube.com/embed/
M71c1UVf-VE?theme=light"
002
```

### 5. KEY POINTERS

Keynotes and similarly long videos are not always interesting in their entirety. Bloggers can highlight relevant parts of a movie by informing the player widget of the points where playback should start and stop:

```
001 src="https://www.youtube.com/embed/
M71c1UVf-VE?end=40&start=20"
002
```

Start() and end() expect a value in seconds. Our example sets both start and stop points. This would start at 20 seconds and end at 40 seconds. You can, of course, also use just one of the two parameters.

## WORK WITH THE PLAYER API

YOUTUBE PROVIDES DEVELOPERS WITH A VARIETY OF POSSIBILITIES FOR ADDING INTERACTION

Even though the IFrame takes a respectable amount of parameters, more advanced features require you to access the player object directly. We will create a simple website with a <div> tag which will host the player:

```
001 <html>
002 <body>
003 <div id="player"></div>
004 </body>
005 </html>
```

## ADD THE API

Even though YouTube has become ubiquitous, its API is not included in web browsers out of the box. Instead, the relevant modules must be downloaded at run time. This can be accomplished via the following bit of code:

```
001 var tag = document.createElement('script');
002 tag.src = "https://www.youtube.com/
iframe_api";
003 var firstScriptTag = document.
getElementsByName('script')[0];
004 firstScriptTag.parentNode.insertBefore(tag,
firstScriptTag);
```

## LOAD THE PLAYER

Your client's browser will then download the necessary headers after the website loads. Once this is done, the onYouTubeIframeAPIReady() method is fired. Google expects it to be created in the script tag responsible for the download - this code creates a basic version:

```
001 var player;
002 function onYouTubeIframeAPIReady() {
```

```
003 player = new YT.Player('player', {
004 height: '390',
005 width: '640',
006 videoId: 'M71c1UVF-VE',
007 events: {
008 'onReady': onPlayerReady,
009 'onStateChange': onPlayerStateChange
010 }
011 });
012 }
013
```

Our example replaces the <div> tag with a YouTube player instance, which then proceeds to preloading the video identified by the id property in the JSON object. Height and width must be set as they configure the physical appearance of the element.

## HANDLE EVENTS

As mentioned previously, YouTube player objects don't start playback until the user clicks them. Fix this by listening for the onPlayerReady event. Its target property provides a pointer to the player object, which is then put into playback mode by invoking its playVideo() method:

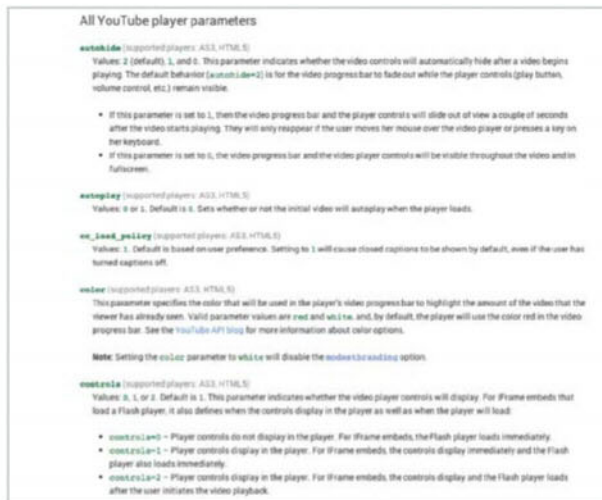
```
001 function onPlayerReady(event) {
002 event.target.playVideo();
003 }
004 var done = false;
005 function onPlayerStateChange(event) {
006 if (event.data == YT.PlayerState.PLAYING &&
!done) {
007 done = true;
008 }
```

## WHAT ABOUT JAVASCRIPT?

Google provides a second API for developers. It goes by the slightly confusing moniker of JavaScript API and is documented at [https://developers.google.com/youtube/js\\_api\\_reference](https://developers.google.com/youtube/js_api_reference). It is limited to devices with Flash support, which thereby limits its usability in mobile-first scenarios.

## POWER TO THE PLAYERS!

Your player instance exposes a large amount of methods which permit you to modify the behaviour of the widget in question. The tips in the column on the right show a few of the coolest features and parameters. Google publishes the full list on its developer documentation - harness the power of things like event listeners and video playback by reading them all at [https://developers.google.com/youtube/iframe\\_api\\_reference](https://developers.google.com/youtube/iframe_api_reference) in a browser of your choice.



The parameters are optional but will all work with the embedded player

## PARAMETERS EXPLAINED

### TURN UP THE VOLUME

Volume is important to human beings: loud sounds are perceived as urgent but also as annoying. Evil programmers can harness this by modifying playback volume via the setVolume function:

```
001 player.setVolume(volume:Number):Void
```

setVolume takes one parameter which describes the volume in a range from zero to 100. But many users leave videos playing in the background so automuting can do more harm than good.

### HD BY FORCE

By default, the YouTube player determines the quality of the video to be played back by analysing its dimensions. This system can be overridden via the setPlaybackQuality method:

```
001 player.setPlaybackQuality(suggestedQuality:String):Void
```

It takes one of the following strings and they specify the quality to be used: small, medium, large, hd720, hd1080, highres and default. Please keep in mind that not every video is available in every high resolution.

### CHANGE THE SPEED

Some videos let you modify the playback speed. This can be accomplished by invoking setPlaybackRate with the speed: passing in two makes the video play at twice the normal rate.

```
001 player.setPlaybackRate(suggestedRate:Number):Void
```

Sadly, not every video is permitted to be played back at every speed. A method is provided which returns an array of possible playback velocities: more harm than good.

```
001 player.getAvailablePlaybackRates():Array
```

### SET A PLAYLIST

Content creators tend to have more than one video in their channel. Providing users with a playlist of multiple interesting pieces of content is an attractive way to make them stick around longer:

```
001 player.loadPlaylist(playlist:String|Array, index:Number, startSeconds:Number, suggestedQuality:String):Void
```

Playlists with musical content are likely to be used as media players. This can help in increasing the session length measured by advertising systems.



# ADDING INTERACTIVITY

STREAMING VIDEO HARNESSSES A SMALL PART OF THE POWER OF YOUTUBE'S API. ADDING SOCIAL FEATURES MAKES YOUR WEBSITES MORE APPEALING

## SUBSCRIBE

**Subscribers are the hard currency of YouTube**

**marketing.** The more of them a channel has, the more valuable it becomes. In Germany, large media companies have bought YouTube channels, paying significant money to the initial creators.

The easiest way to recruit new subscribers involves catching them in the act. A person who is enjoying your content as you make the offer is much more likely to follow you back by subscribing.

Ergonomics dictate that putting a button right next to the video player is the most efficient way to gain your user's attention. Adding a YouTube button can be accomplished with just two lines of markup. In our snippet, the first line loads Google's API platform file while the second one specifies a <div> tag.

After instantiation, Google's code will automatically scan the page, thereby replacing all div tags with a class ID of g-ytsubscribe with a subscribe button aimed at the specified channel:

```
001 <html>
002 <body>
003 <script src="https://apis.google.com/js/platform.js"></script>
004 <div class="g-ytsubscribe" data-channel="GoogleDevelopers" data-layout="default" data-count="default"></div>
005 </body>
006 </html>
007
```

Running a file containing the YouTube API via a file URL does not work due to security regulations found in most browsers. Fortunately, Linux systems contain a simple web server which can be run via the following command:

```
001 tamhan@TAMHAN14:~/Desktop/Youtube$ python -m SimpleHTTPServer
002 Serving HTTP on 0.0.0.0 port 8000 ...
003
```

Open the example via a URL like `http://127.0.0.1:8000/YouTubeButton.htm` after the server has started.

Google provides a few options which modify the behaviour of your subscribe button. For example, the button can be instructed to show the amount of current subscribers. This permits you to exploit the flocking effect because we as humans tend to enjoy doing things which our peers do.

Google simplifies the creation of custom embed buttons via its Configure a button tool. Visit <http://bit.ly/13tlknS>, set the relevant options and place the generated code where you want it to be.

## UPLOAD WIDGET

**WEBCAMS HAVE BECOME UBIQUITOUS. GOOGLE LETS YOU TAP INTO THAT POTENTIAL BY LETTING VISITORS UPLOAD VIDEO CLIPS FROM YOUR WEBSITE**

**Getting started with a simple upload widget is as easy as embedding an IFrame into the website.** This can be accomplished via the following snippet of code:

```
001 <iframe id="widget" type="text/html" width="640" height="390"
002 src="https://www.youtube.com/upload_embed" frameborder="0"></iframe>
003
```

Users can use their webcams for uploading content to their personal channel. Sadly, your application is not notified about this; thereby robbing you of the

opportunity to respond or interact with the generated content. A more advanced version would use the library loading code shown in the subsection on normal players. Its `onYouTubeIframeAPIReady` method must then generate an upload window:

```
001 var widget;
002 var player;
003 function onYouTubeIframeAPIReady() {
004 widget = new YT.UploadWidget('widget', {
005 data-count="default"></div>
006 width: 500,
007 events: {
008 'onUploadSuccess': onUploadSuccess,
009 'onProcessingComplete':
onProcessingComplete
010 }
011 });
012
```

Processing videos can take quite a bit of time: depending on the current server load, you can expect encoding times of up to two seconds per second of video footage. Google addresses this by breaking the process down into two pieces.

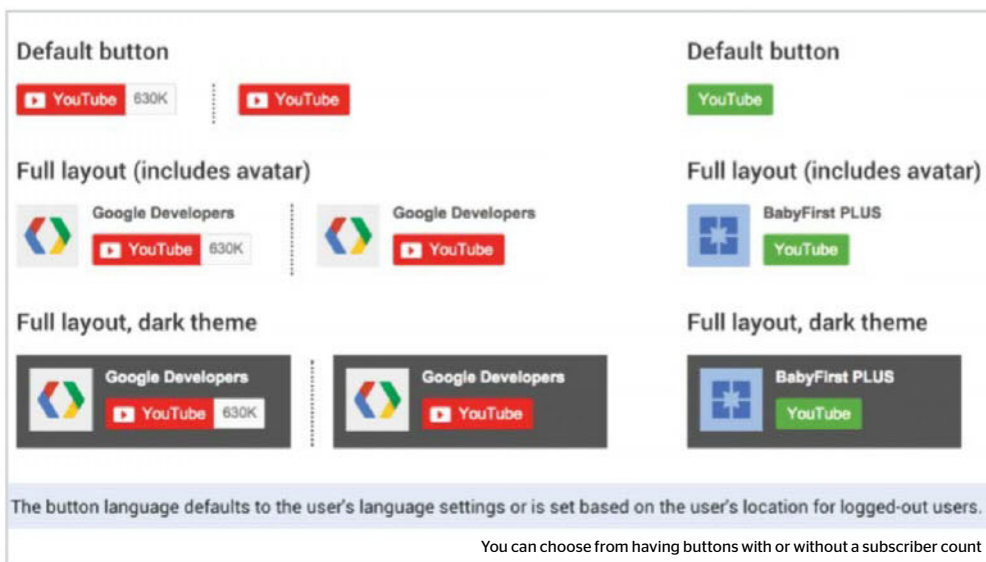
First of all, `onUploadSuccess` will be invoked once the actual upload process has completed:

```
001 function onUploadSuccess(event) {
002 alert('Video ID ' + event.data.videoId + '
003 was uploaded and is currently being
004 processed.');
```

Google will notify you about the success of the encoding process by sending an `onProcessingComplete` event with the video ID. This can then be used to create a player window containing the uploaded movie:

```
001 function onProcessingComplete(event) {
002 var player;
003 player = new YT.Player('player', {
004 height: 390,
005 width: 640,
006 videoId: event.data.videoId,
007 events: {}
008 });
009 }
```

Since users might close your website before the conversion has been completed, it is highly advisable to store the returned ID on your server the moment `onUploadSuccess` has been invoked. Furthermore, it is recommendable to have some kind of vetting process in place to prevent users from filling your website with inappropriate, gross or outright illegal content.



## USING LIVE STREAMING

YouTube has APIs which can solve common live streaming problems

The most important part of working with live streaming involves the preparation of the data which is to be fed into the system. YouTube live broadcasts must be shipped via RTMP, the ingestion system can accept resolutions ranging from 240p to 1080p.

A live broadcast differs from more static video uploads in that the movie will be converted into various formats on the fly. Using YouTube's live streaming service reduces the bandwidth requirements on your system - as long as your system can deliver the movie on the fly, the remaining issues get handled by YouTube.

Setting up broadcasts is easy API-wise. You start out by inserting a new liveBroadcast object into the endpoint via the data API. It exposes a group of methods which permit you to modify the start and end time of the event. Furthermore, ads can be embedded in order to generate some revenue for the publisher. Providing the RTMP stream tends to require the use of a dedicated server which handles the actual streaming and encoding processes. Because of that, it is recommended to handle actual communication via a Java client. Google provides a convenient library for this run time environment - more on it can be found by visiting [https://developers.google.com/youtube/v3/live/code\\_samples/java](https://developers.google.com/youtube/v3/live/code_samples/java).

Developers working on a live stream should consult the documentation provided in Resources on the next page; live streams cannot be paused without severe image problems for your clients.

## DATA API: ALL YOU NEED TO KNOW

PLAYING BACK VIDEOS IS A SMALL PART OF THE YOUTUBE EXPERIENCE. THE DATA API ADDS SEARCHING AND PLAYLIST MANAGEMENT

Using the Data API requires you to sign up with Google's developer services but accessing it is not possible without a set of credentials. Fortunately for us, getting them is relatively easy.

### SIGN IN

Most Google services can be enabled via the **Developers Console**. Open <https://console.developers.google.com/project> in a browser of choice, and get started by proceeding to click on the big blue Create Project button to make a new project. Type in your Project Name and Project ID and click Create.

Next, open its API subsite and enable the YouTube Data API v3. Finally, proceed to generating credentials by going to APIs and then the Credentials window.

By default, Google provides your application with 50 million requests a day. Developers can ask for more transactions if they need them and Google will then decide whether to accept or deny your request.

### DATA PUSHING

**YouTube's data API is made up of a group of endpoints.** Your application must send a request to the endpoint, which will then proceed to answering with one or more resource objects. In some cases, you are not limited to getting data: some endpoints support up to four operations - list, insert, update and delete.

Google provides a table of supported endpoint-operation combinations, which can be viewed by going to the URL <https://developers.google.com/youtube/v3/getting-started#supported-operations>.

### JSON TRANSACTIONS

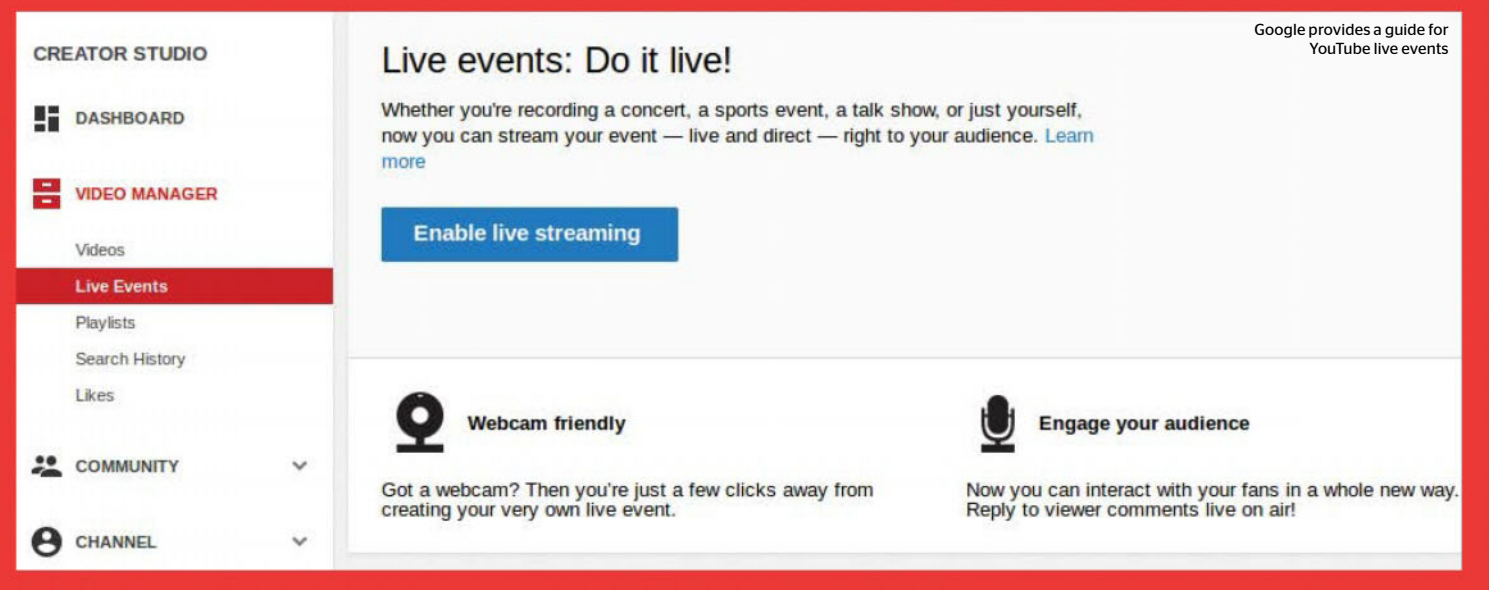
The space provided for this section would be insufficient to describe a simple JSON transaction.

Fortunately, Google provides a group of libraries at <https://developers.google.com/youtube/v3/libraries>. If you are using one of these libraries, you can save yourself a lot of time and effort.

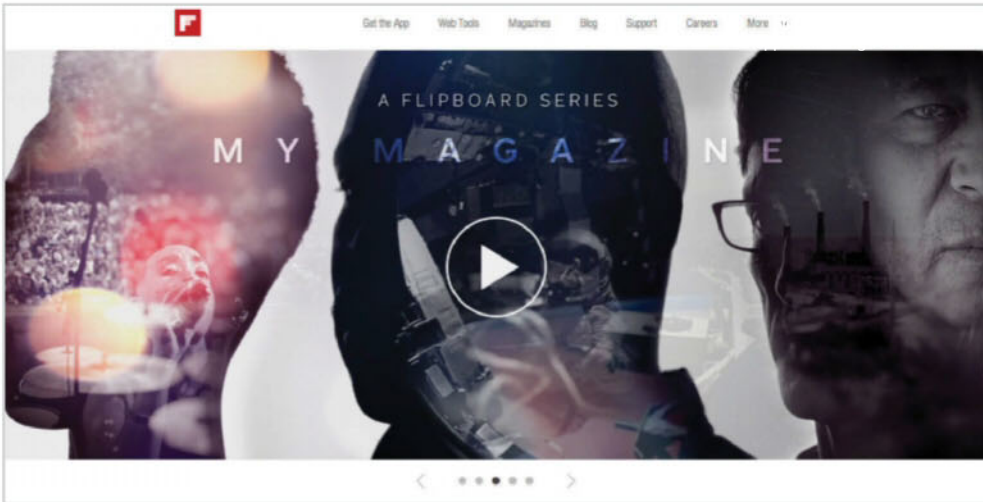
As an example, let us look at the following bit of code. This code is invoked in response to a button being clicked and what it does is it sends a search query to the YouTube server:

```
001 // Search for a specified string.
002 function search() {
003   var q = $('#query').val();
004   var request = gapi.client.youtube.search.
    list({
005     q: q,
006     part: 'snippet'
007   });
008   request.execute(function(response) {
009     var str = JSON.stringify(response.result);
010     $('#search-container').html('<pre>' + str +
    '</pre>');
011   });
012 }
013
```

Please keep in mind that its use requires you to embed the above-mentioned library into your project. It must, furthermore, be set up correctly with your API key.







## MONETISING RULES AND REGULATIONS

Running a social media campaign can become very expensive. Professionally made video clips can cost hundreds of pounds per minute; their promotion can cause almost unlimited expense. But fear not, your channel can be transformed into a source of income. The most effective and most direct way involves all kinds of sponsorships. Most furniture brands are willing to provide free or cheap studio furniture, so you might be able to get that Wittmann table on the cheap! Of course, classic sponsorship deals can also be accomplished too.

### RUN THE ADS

YouTube does not permit you to place sponsored content in the audiovisual content provided by the YouTube player. This means that you are not allowed to put an overlay ad on top of any third-party content in the videos you plan to broadcast. Fortunately, this limitation

does not apply to movies and clips produced by your company. The YouTube backend permits you to enable the display of advertising before or after each clip. Google negotiates with advertisers for you - your channel simply becomes one of many advertising venues which Google uses to display its sponsor's clips.

### DON'T GET KICKED

Boosting follower numbers via botnets and raffles sounds like an attractive option to some. Please keep in mind that buying traffic is not recommended: if Google manages to reverse-engineer a botnet, all of its clients will tend to get penalised. Running a traffic source of your own tends to be financially unattractive as servers and proxies cost a lot of money. Furthermore, Google does not permit the offering of any kind of prize or reward in exchange for subscribing. Google explicitly states "any kind", which makes offering virtual goods illegal as well. The full statement says "You may not offer or promote prizes or rewards of any kind in exchange for clicking on a YouTube Subscribe Button".

## MONITOR WITH ANALYTICS API

Social media's effectiveness can be raised with permanent analysis

Even though YouTube provides a backend with a variety of metrics, real professionals tend to run custom analysis processes on the raw data generated by user interactions. The Analytics API is a close mirror of the data API. Your application must provide queries to the endpoints, which are then fulfilled. For example, try sending the following:

```
001 "https://developers.google.com/apis-
explorer/" \l "p/youtubeAnalytics/ v1/
002 youtubeAnalytics.reports.query?metrics=v
iews%252CestimatedMinutesWatched
```

```
003 %252CcoverageViewDuration%252CcoverageView
Percentage
004 %252CsubscribersGained&dimensions=countr
y&sort=-estimatedMinutesWatched&start-
005 date=2014-05-01&end-date=2014-06-30&&ids
=channel%253D%253DMINE"dimensions=country
006 "https://developers.google.com apis-
explorer/" \l "p/youtubeAnalytics/ v1/
007 youtubeAnalytics.reports.query?metrics=v
iews%252CestimatedMinutesWatched
008 %252CcoverageViewDuration%252CcoverageView
Percentage
009 %252CsubscribersGained&dimensions=countr
y&sort=-estimatedMinutesWatched&start-
010 $('#search-container').html('<pre>' +
str + '</pre>');
011 date=2014-05-01&end-date=2014-06-
30&&ids=channel%253D
```

## RESOURCES

A selection of docs for more info on YouTube's most interesting APIs

### PLAYER PARAMETER LIST

<iframe> widgets take about two dozen parameters. Space constraints force us to limit ourselves to showing you the most interesting ones. Sadly, your application could actually need the ones which didn't make the cut. Get the full list by visiting Google's official documentation at <http://bit.ly/1wxV3QO> and watch a demo at <http://bit.ly/1cOEbT6>.

### THE JSON FORMAT

Many YouTube APIs require developers to provide input data in a format called JSON. Its creators claim that the so-called JavaScript Object Notation is, by and large, human-readable. This is true to a large extent so novices should visit the official standard documentation at <http://json.org> to find out more about JSON.

### WHAT IS RTMP?

Developers working on YouTube live streams might wonder about the meaning of the abbreviation RTMP. The Real Time Messaging Protocol was developed by Macromedia as a streaming protocol for all kinds of media, and was since made semiopen. Further information can be found via <http://www.adobe.com/products/adobe-media-server-extended/rtmp-faq.html>.

### ADVICE FOR LIVE BROADCASTERS

For a live broadcast, developers must set up the behaviour of their stream in the YouTube backend. Its handling is described in Google's user-facing documentation, which can be accessed at <https://support.google.com/youtube/answer/2474026>. The documents are not strictly limited to technical stuff as they also cover practical hints and tips.



### Mobile bandwidth

Increasing mobile bandwidth will increase the appeal of mobile video applications. Services such as YouTube will profit greatly by being able to provide clients with full HD movies on the fly; social networks could transmit resources in high resolution directly."

Tam Hanna  
CEO and founder  
of Tamogemmon Holding k.s


# Build HTML5 web apps with the Kendo UI framework

Use configurable widgets and AngularJS to build attractive frontends quickly

**tools | tech | trends** HTML, JavaScript, CSS, AngularJS, Kendo UI  
**expert** Tim Stone



**DOWNLOAD TUTORIAL FILES**  
www.filesilo.co.uk/webdesigner



**A new Angular**  
"This year AngularJS 2.0 will radically change the framework from what we're accustomed to. This will then bring it in line with emerging browser features to ensure web apps are performing and align with web standards."  
**Tim Stone**  
Front-end developer at Redweb

**W**e're going to show you how to create a basic app. We're going to do this by using the architectural benefits of AngularJS as well as the widget-focused interface that Kendo UI lets you build. The latest release added client-generated PDF and Excel generation alongside a Lollipop-inspired Material theme. Let's start building!

## 01 List dependencies

Create a new project, we're going to use Bower to manage our front-end dependencies. Make sure the following files are accessible. If you have Bower installed then type '\$ bower init' in the folder that your project lives in to generate a bower.json configuration file.

```
001 "dependencies": {
002   "angular-aria": "~1.3.5",
003   "kendo-ui-core": "telerik/kendo-ui-core#~2014.3.1119",
004   "angular": "~1.3.5",
005   "jquery": "~2.1.1",
006   "normalize.css": "~3.0.2"
007 }
```

## 02 Install dependencies

Once the dependencies are listed we can simply call bower install which will fetch everything we need and put them in a folder called 'bower\_components'. The tilde means that only new minor versions will be installed so you can be reasonably certain that no breaking changes will be introduced while keeping performance improvements and bug fixes.

```
001 $ bower install
```

## 03 Include files

We're going to include only the parts of Kendo UI that we need. In development environments this can lead to many referenced JavaScript files, but as long as we concatenate them for production it won't lead to problems. We're including CSS files and the core JS dependencies. We're using a CDN as otherwise you have to compile LESS files yourself.

## 04 Autocomplete widget

We'll bootstrap our application and use a controller called ListCtrl. Kendo UI exposes itself to Angular through directives. Widgets can optionally be named

(if you want to interact with them in your controller), so our autocomplete widget is called 'search' which we can reference with \$scope.search. All widgets can be configured through HTML attributes and \$scope.

```
001 <body data-ng-app="address-book" data-ng-
002   controller="ListCtrl">
003   <h1>Address book</h1>
004   <p>Search contacts
005     <input kendo-auto-complete="search" data-k-
006       options="autocompleteOptions">
007   </p>
008 </body>
009 </html>
```

## 05 Book module

Create a file called 'app.js'; this'll contain all of our Angular controllers, filters and the like. Listing kendo.directives as a dependency of the module triggers the magic that converts all of those custom HTML elements to be initiated by Kendo UI. We also specify some options for the autocomplete element (which we referenced in k-options previously).

```
001 var app = angular.module('address-book', ['kendo.directives']);
002 app.controller('ListCtrl', ['$scope', '$http', function
003   ($scope, $http) {
004     $scope.autocompleteOptions = {
005       dataTextField: 'name',
006       change: function () {
007         $scope.filter = $scope.search.value();
008         $scope.$apply();
009       }
010     };
011   }]);
```




```

bower resolved    git://github.com/jquery/jquery.git#2.1.1
bower extract     kendo-ui-core#2014.3.1119.archive.tar.gz
bower invalid-meta kendo-ui-core is missing "main" entry in bower.json
bower invalid-meta kendo-ui-core is missing "ignore" entry in bower.json
bower resolved    git://github.com/telerik/kendo-ui-core.git#2014.3.1119
bower install     normalize.css#3.0.2
bower install     angular-aria#1.3.6
bower install     angular#1.3.6
bower install     less#2.1.1
bower install     jquery#2.1.1
bower install     kendo-ui-core#2014.3.1119

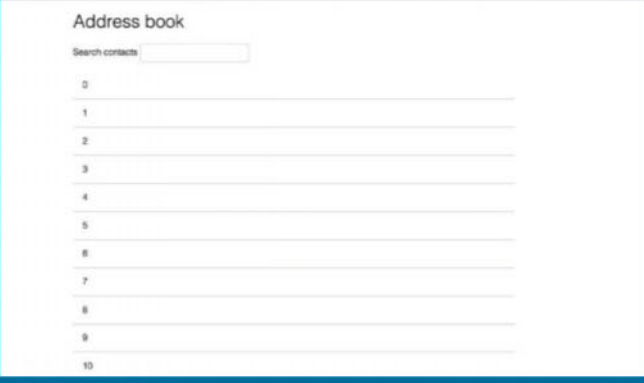
normalize.css#3.0.2 bower_components/normalize.css
angular-aria#1.3.6 bower_components/angular-aria
└─ angular#1.3.6

angular#1.3.6 bower_components/angular
less#2.1.1 bower_components/less
            
```

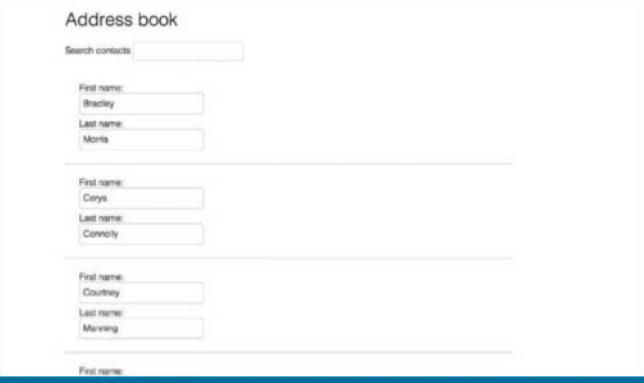
**<Above>**  
 • Installing multiple dependencies with Bower is a breeze, but if you feel more comfortable downloading files that's fine too



**<Above>**  
 • Once our Angular app is initialised it'll create our Kendo UI directives, like this autocomplete search box



**<Above>**  
 • Using a ng-repeat we're iterating over our contact list which you can tell by the ever-increasing \$index



**<Above>**  
 • We're outputting a simple name and surname, which we will then soon expand to include many others

## 06 Get contacts

Our contacts list comes from a static JSON file. For more advanced applications we'd create an Angular \$resource, but as it's one request we'll use \$http instead. Once we've received the contacts we'll loop through each of them and create a new property called 'name' out of the first name and surname, and format the date of birth so that Kendo UI's date picker can actually understand it.

## 07 Display contact list

We've got our list of contacts, now it's time to display them! Using ng-repeat and two filters will display the markup within the <li> with the context of 'contact'. Our contact list comes from the server unsorted so we order them with Angular by the first\_name field.

```

001 <ol class="contact-list">
002   li class="row" data-ng-repeat="contact in contacts |
filter:filter | nameFilter:letterFilter | orderBy:'first_name'"
style="background-color: {{contact.background_colour}};"
003     <form> </form>
004   </li>
005 </ol>
006
            
```

## 08 First and last names

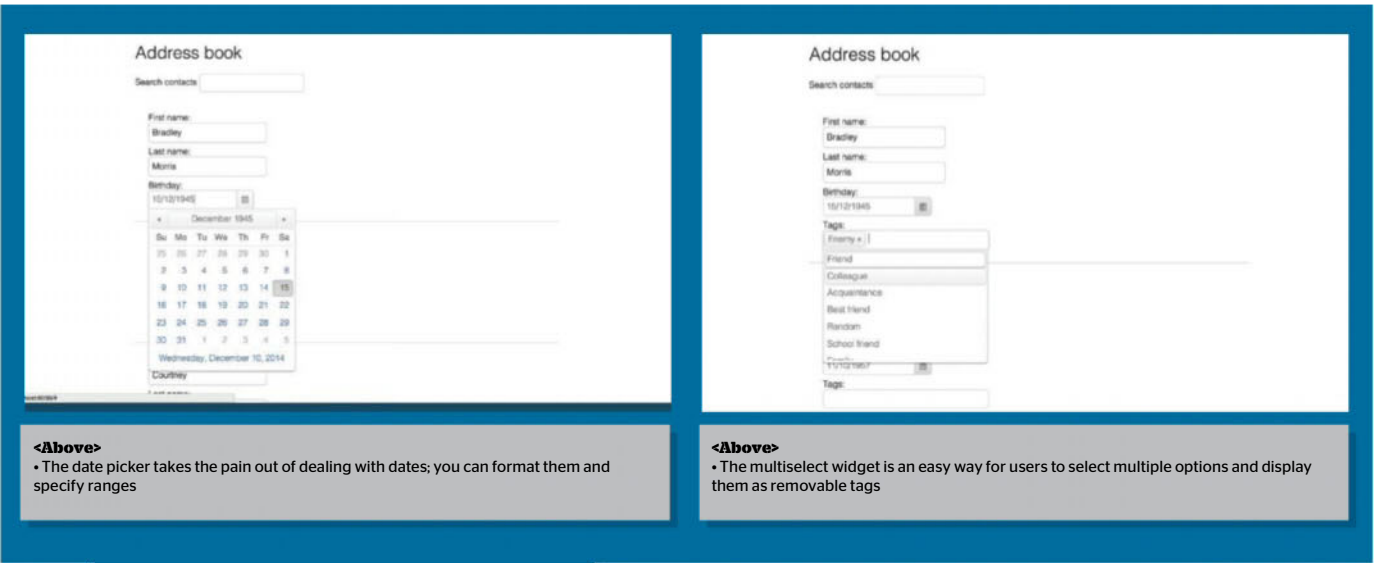
Next we're going to continue to add markup inside the <li> (and <form>) tag. Each label and input pair will be on a new row and after this you should see a list of names. By specifying a model instead of just a value our inputs will be two-way bound so changes we make here can be easily saved.

## 09 Masked text box

The next input will be a Kendo UI special, a masked text box. This means that the input will be forced to conform to the mask that you specify making it useful for inputs like postcodes, Twitter usernames and telephone numbers. In this case the phone number will be a digit and have ten numbers separated by a space.

```

001 <!-- add to head -->
002 <script src="bower_components/kendo-ui-core/src/kendo.
fx.js"></script>
003 <script src="bower_components/kendo-ui-core/src/kendo.data.
js"></script>
004 <script src="bower_components/kendo-ui-core/src/kendo.
maskedtextbox.js"></script>
005 <!-- /add to head -->
006 <label for="phone-{{ $index }}">Phone:</label>
            
```



**<Above>**  
 • The date picker takes the pain out of dealing with dates; you can format them and specify ranges

**<Above>**  
 • The multiselect widget is an easy way for users to select multiple options and display them as removable tags

**Using Kendo responsively**  
 Kendo UI has mobile-specific widgets which theme themselves to the platform they're on if you include relevant JS files.

```
007 <input kendo-masked-text-box id="phone-{{$index}}"ng-model="contact.phone" k-mask="'00000 00000'">
```

**10 Listing address data**  
 We're going to do more of the same with the street, town and county. We're using the special \$index variable to create IDs as otherwise it'd always select the first one. Although these are inputs, we're not creating any save functionality as we're using a static file, but you could implement a resource and `contact.\$save()` to accomplish it.

```
001 <label for="street-{{$index}}">Street:</label>
002 <input id="street-{{$index}}" data-ng-model="contact.address.street">
003 <label for="town-{{$index}}">Town:</label>
004 <input id="town-{{$index}}" data-ng-model="contact.address.town">
005 <label for="county-{{$index}}">County:</label>
006 <input id="county-{{$index}}" data-ng-model="contact.address.county">
```

**11 Postcode masked input**  
 Another masked input will show our postcode. Note that the mask is LLO9 OLL. The 9 denotes that the character is optional but should be a digit if it is present. It's also important to add the quotes, otherwise it'll try to find a variable called LLO9! To save some space you can omit hyphens between words after kendo- (eg kendo-maskedtextbox).

```
001 <label for="postcode">Postcode:</label>
002 <input kendo-masked-text-box id="postcode-{{$index}}" data-ng-model="contact.address.postcode" data-k-mask="'LL09 0LL'">
```

**12 Date picker widget**  
 A new widget means new files to add. This time we'll use Kendo UI's date picker to show your contact's birthday. It'll show a calendar as a drop down where you can select the date. It defaults to the date that we pass to it initially or today if there is no date. Like all Kendo UI widgets it has an extensive API behind it if you wanted to add range checking or event listeners.

**13 Multiselect widget**  
 The multiselect box shows a tag interface so the user can keep track of what they've previously selected. We'll use it to add tags like friend, colleague and enemy, for example, for each contact. Many widgets share common files so they only need to be included once.

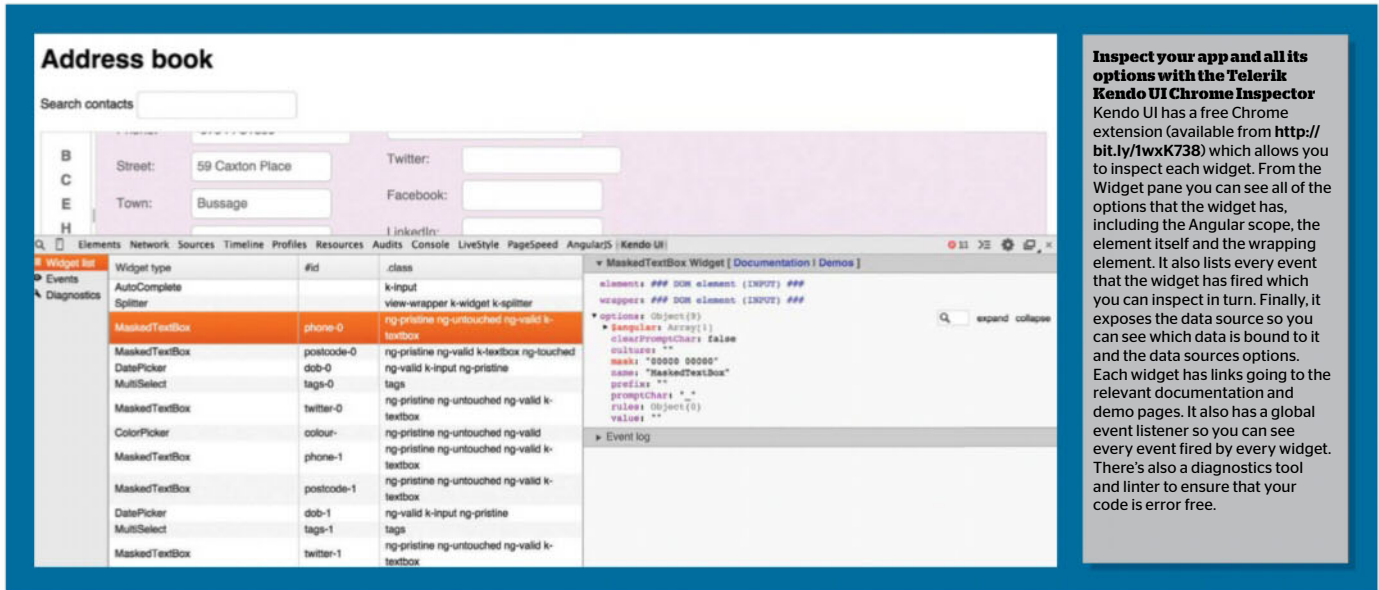
```
001 <!-- add to head -->
002 <script src="bower_components/kendo-ui-core/src/kendo.list.js"></script>
003 <script src="bower_components/kendo-ui-core/src/kendo.multiselect.js"></script>
004 <!-- /add to head -->
005 <label for="tags-{{$index}}">Tags:</label>
006 <select kendo-multi-select id="tags-{{$index}}" class="tags" data-k-options="tagOptions"></select>
007
```

**14 Inputs and themes**  
 Once the tag input is working we'll add some online-based information using more inputs and models. Kendo UI doesn't have a default input widget as this is handled by the browser, but we've styled it to look the same as the Kendo UI 'uniform' theme. Kendo UI includes 14 themes and you can always build your own to suit.

```
001 <div class="inner right-side cf">
002 <label for="email-{{$index}}">Email:</label>
003 <input type="email" id="email-{{$index}}" data-ng-model="contact.email">
004 <label for="website-{{$index}}">Website:</label>
005 <input id="website-{{$index}}" type="url" data-ng-model="contact.url">
006 </div>
007
```







**Inspect your app and all its options with the Telerik Kendo UI Chrome Inspector**  
 Kendo UI has a free Chrome extension (available from <http://bit.ly/1wxK738>) which allows you to inspect each widget. From the Widget pane you can see all of the options that the widget has, including the Angular scope, the element itself and the wrapping element. It also lists every event that the widget has fired which you can inspect in turn. Finally, it exposes the data source so you can see which data is bound to it and the data sources options. Each widget has links going to the relevant documentation and demo pages. It also has a global event listener so you can see every event fired by every widget. There's also a diagnostics tool and linter to ensure that your code is error free.

```
001 app.filter('nameFilter', function () {
002   return function (contacts, searchCriteria) {
003     if (searchCriteria) {
004       return contacts.filter(function (item) {
005         return item.first_name[0] === searchCriteria;
006       });
007     } else {
008       return contacts;
009     }
010   };
011 });
```

**23 Create event queue**

Kendo widgets are created asynchronously. This means that when interacting with them within our controller we may get an error like 'Cannot call method 'setDataSource' of undefined'. To get around this we'll create an Angular service that will queue up events and execute them when the widget becomes available. First we create the service and the addEvent method.

**24 Execute events**

Each event that has been added is held by 'events'. 'fired' is a flag that we set so we can know when it's been executed once so that subsequent additions are executed immediately. We're using 'bind' to bind the callback function with the context of \$scope, otherwise it can't access \$scope.

```
001 function executeEvents (context) {
002   ctx = context;
003   fired = true;
004   for (var i = 0, len = events.length; i < len; i++) {
005     var event = events[i];
006     event.callback.bind(context)();
007   }
008 }
009 return {
010   add: addEvent,
011   execute: executeEvents
012 };
013 };
```

**25 Create letters array**

Step back to when we first get our contacts in the HTTP request ('\$http.get'). We've added quite a bit of functionality since and we need to make changes to reflect this. Within the forEach loop, push the first letter of each first name to an array called 'letters'. We're also going to add a background\_colour property with the pastel colour.

```
001 // add unique letters to alphabet array
002 if ($scope.letters.indexOf(contact.first_name[0]) === -1) {
003   $scope.letters.push(contact.first_name[0]);
004 }
005 contact.background_colour = createBackgroundColour(contact.
colour);
```

**26 Sorting and adding**

Outside of the forEach loop the letters array will likely be unsorted but we can fix this by calling 'sort' to put them into alphabetical order. Secondly we'll utilise the event queue we made to set the data source of the autocomplete widget to our array of contacts.

```
001 $scope.letters.sort();
002 Events.add({
003   callback: function () {
004     $scope.search.setDataSource($scope.contacts);
005   }
006 });
```

**27 Splitter options**

Our splitter only has a single option, to set the first panel size to 5% of the available width. It's an array so you can specify a value for each corresponding pane, but if it's left undefined then it'll take up as much room as is available. More API options for splitter can be found at <http://docs.telerik.com/kendo-ui/api/javascript/ui/splitter>.

```
001 $scope.splitterOptions = {
002   panes: [{
003     size: '5%'
004   }]
005 };
```



# We don't keep secrets



# Tips & Tricks™

Learn the truth about iPhone, iPad, Android, Photoshop and more with the Tips & Tricks series' expert advice and tutorials

## BUY YOUR COPY TODAY

Print edition available at [www.imagineshop.co.uk](http://www.imagineshop.co.uk)

Digital edition available at [www.greatdigitalmags.com](http://www.greatdigitalmags.com)

Available on the following platforms



 [facebook.com/ImagineBookazines](https://facebook.com/ImagineBookazines)

 [twitter.com/Books\\_Imagine](https://twitter.com/Books_Imagine)

# DEVELOPING WITH EMBER CLI

DIG DEEPER INTO CLIENT-SIDE APPLICATION DEVELOPMENT AND FUEL THE FLAMES BY USING EMBER CLI, THE POWERFUL COMMAND-LINE TOOL FOR EMBER PROJECTS

**E**mber.js, the open-source JavaScript web application framework, was initially released in 2011. Since then Ember's users have included LivingSocial and Groupon. Ember has helped to take modern web application development to new levels for client-side web apps thanks to its two-way data-binding capabilities and its detailed API.

Whilst it is possible to download the core library, if you include it in your web page and build an Ember application piece by piece then you will run the potential risk of falling into code issues if your application needs to grow or be refactored for whatever reason.

Part of Ember's charm is its ability to resolve and automatically wire your

application together, a task that it performs using its strict naming conventions and structure. Ember itself puts the user-generated code into a global app namespace object, which is accessible throughout the entire application. But, despite how helpful this framework is, this user-generated code can have a detrimental effect when trying to update, upgrade or revise your app.

Ember CLI is a purpose-built command-line interface tool that gets you up and running with Ember applications in very little time. It does this with a much greater level of simplicity than generating each file manually as and when they're needed and trying to link everything together as the library expects, based on its conventions and requirements.



## The future of Ember with CLI and Ember 2.0

Ember CLI has changed the way Ember applications are being developed. The continued growth of this tool coupled with the future release of Ember 2.0 will change how client-side applications are developed for the better. The ability to develop using the modular syntax provided by the ECScript transpiler makes object management and associated dependencies easier to maintain. This also means it is using cutting edge Javascript processing, paving the way for the future of client-side web applications.

Development consultant at  
Monkeh Works Ltd  
**Matt Gifford**



# NAMING CONVENTIONS

WHETHER YOU'RE AN EXISTING EMBER DEVELOPER OR NEW TO THE LANGUAGE, EMBER CLI EXPECTS YOU TO FOLLOW CERTAIN NAMING CONVENTIONS

The Resolver is incredibly powerful and manages the complex task of correctly assigning file relationships, what is loaded when and the grouping of associated files such as routes, controllers and views. A lot has changed in Ember CLI, so much so in fact that the Resolver has overhauled not only how the modules are written and referenced but also how your files should be named and stored to ensure optimal efficiency. If you have had prior exposure to Ember, the upgrade to CLI will alter how you need to store your files.

Let's take a look at some of these important changes and how they may differ from traditional Ember development practices.

## VIEWS AND PARTIALS

In traditional Ember applications the various modules are namespaced into a global scope, typically this will be App. This is then woven together using an automatic method that is no longer required given the updated ES6 integration in Ember CLI.

Take, for example, rendering an Ember view file inside a Handlebars template. Ember would require the objects to be available as a namespaced view object:

```
App.CategoryListView = Ember.View.extend({});
```

which is then referenced directly inside the template using the namespace:

```
{{view App.CategoryListView}}
```

The Ember CLI implementation of the Resolver has been updated and revised to remove the necessity of any potential issues involved with namespacing all of your objects into a global scope. As a result the view file would use the modular syntax of importing the core and exporting the required functions for availability outside of the file, like the snippet below:

```
// app/views/category-list.js
import Ember from 'ember';
export default Ember.View.extend({});
```

which would then be referenced with the Handlebars template using the dasherized filename. No default namespacing is required within the modules (or any part of Ember CLI) as these are taken care of for you.

```
{{view 'category-list'}}
```

## MANAGING FILENAMES

The Resolver uses the filenames within your Ember CLI application to correctly manage all of the various module associations. All file and folder names must be lower-cased as well as dasherized as opposed to camelCased.

In many traditional Ember applications you may see the filename closely reflect, if not directly, mirror the name of the variable assigned within it to the global scope. For example the App.PostController functionality may be stored within a file with the following name:

```
app/controllers/PostController.js
```

and the corresponding view may then be saved with the similar name:

```
app/views/PostView.js
```

Ember CLI alleviates these requirements and, to an extent, the unnecessary weight added to filenames that should be relevant by their very location within the application structure. Here we would name our model and controller with the same filename, but their location in the relevant directories should remove any complication over their functionality and role within the application.

```
app/models/post.js
app/controllers/post.js
```

## NESTED DIRECTORIES

You can easily use nested directories within your Ember CLI application to help group together related content and files. In this example we have a set of controllers that deal with various actions relating to a blog post:

```
app/controllers/posts/new.js
app/controllers/posts/edit.js
app/controllers/posts/delete.js
app/controllers/posts/details.js
```

These help to clearly separate and group files by their relationship and function, making them easily identifiable within your code editor as you develop. Given the nature of the Resolver these would result in controllers accessible by the following references:

```
controllers.posts/new
controllers.posts/edit
controllers.posts/delete
controllers.posts/details
```

You would not be able to reference these controllers within a Handlebars template as the slashes would be translated back

into dot notation and the file would not be found. You would need to set up an alias in your controllers so that you can access the correct path:

```
import Ember from 'ember';
export default Ember.Controller.extend({
  needs: ['posts/details'],
  postsDetails: Ember.computed.alias('controllers.
posts/details')
});
```

which could then be accessed inside a Handlebar syntax block to get to the controller as required:

```
{{postsDetails.count}}
```

## POD STRUCTURES

Ember CLI also lets you store your grouped files in a pod structure, which you may find easier for file management – especially when your application grows and files become harder to manage and maintain. Instead of storing controllers, routes and views in their respective directories you could group them together like so:

```
app/posts/controller.js
app/posts/route.js
app/posts/view.js
app/posts/template.hbs
```

You can also specify a particular directory into which your pod structures are stored as part of the environment configuration options for the application. Ember CLI would then know exactly where you keep your pod structure and it would manage those files as you would expect and require using the Resolver:

```
// config/environment.js
module.exports = function(environment) {
  var ENV = {
    modulePrefix: 'webdes-app',
    podModulePrefix: 'webdes-app/pods'
  };
  environment: environment,
  baseURL: '/',
  locationType: 'auto',
```

## INSTALL EMBER CLI WITH NODE

Ember CLI can be installed through the Node Package Manager and you will need both node and npm on your local development machine.

```
npm install -g ember-cli
npm install -g bower
npm install -g phantomjs
```

Install Ember CLI globally, and once installed you will have access to the Ember command in the Terminal. Bower helps to manage front-end dependencies and keep them up to date, and the default variant of integration tests will be run using PhantomJS.

# GENERATING AN APPLICATION

LET'S WALK THROUGH BUILDING AN EMBER APPLICATION FROM SCRATCH USING THE CLI TOOLS AND MOCKING AN API

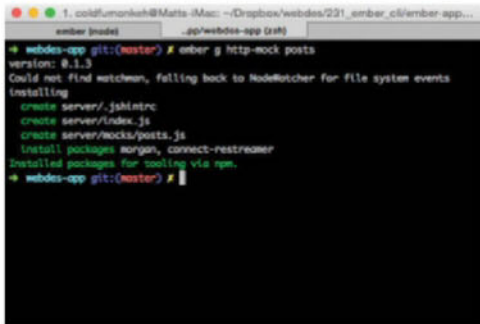
## 01 - CREATE AN APP STRUCTURE

With your terminal or command-prompt session, navigate to your preferred project location. Using the Ember new command facility, generate a new application structure and change directory into the created folder once completed. If you have Git installed locally, the new app will also be initialised as a Git repository to assist your development processes. Use the built-in Ember server command to launch a local server running the application on port 4200 by default.

```
ember new web_app
cd web_app
ember server
```

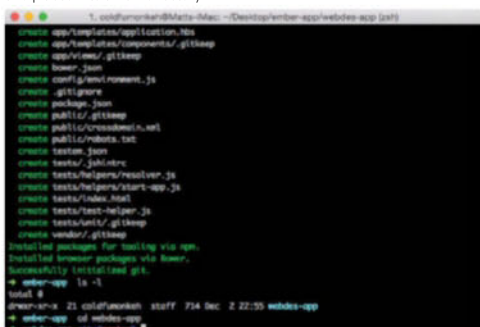
## 02- VIEW THE OUTPUTS

The application in its default state is now visible to be viewed on <http://127.0.0.1:4200>. We haven't added any request information or specific files to the application at all, but it still renders. Open the developer console view or alternative developer tools in whichever browser that you may be viewing the application on. You will see a number of outputs that will show that the application has automatically generated the required route, controller and template on your behalf.



Above There is no API for this application but mock HTTP requests can enable local testing and development on Ember CLI

Below The new application structure will be automatically generated and placed into a new directory



## 03 - REPLACE THE INDEX ROUTE

Open up a new terminal window while keeping one terminal open running the Ember application. Change the current directory inside the terminal window to be inside of your project. Using the CLI tools we can generate a specific route to replace the default index route. This enables us to have more control over what we can access and how we interact with it. Run the following Ember command to generate the route, an accompanying test and apply it to the router.js file.

```
ember g route index
```

## 04 - DEFINE POST MODELS

Open up the freshly generated route file:

```
app/routes/index.js
```

in your editor of choice. The Ember module is imported for you and the route object has been created, which will extend the core route object. We want to list all of the available posts in our application, and as a result this route will need to know which model it can access. Define the model function block and set it to find all post models that are from the built-in Ember Data store.

```
import Ember from "ember";
export default Ember.Route.extend({
  model: function() {
    return this.store.find('post');
  }
});
```

## 05 - POINT TO A NEW ROUTE

With the route created we can tell Ember how we want to use it. Open app/router.js and add the URL resources pointing to the specific routes. Here we will ensure that the index page will use the index route, and once we request a specific post using its ID in the URL we will use the post route.

```
import Ember from 'ember';
import config from './config/environment';
var Router = Ember.Router.extend({
  location: config.locationType
});
Router.map(function() {
  this.resource('index', { path: '/' });
  import config from './config/environment';
  this.resource('post', { path: ':post_id' });
});
```

```
});
export default Router;
```

## 06 - CREATE A SECOND ROUTE

Once again, run the Ember generation tool from your terminal window to create a second route file for the posts resource, which will be used to obtain a specific post from the data store using the ID parameter passed into the URL. Open the generated route file and add another model definition block.

```
ember g route post
// once file is created
import Ember from "ember";
export default Ember.Route.extend({
  model: function(params) {
    return this.store.find('post', params.post_id);
  }
});
```

## 07 - SET THE PROPERTIES

Let's generate a model object to represent the post data. Run the following command in the terminal window. Here we directly define the properties and their data types, but these can be added and refined after the generation if required. You can set computational

## ES6 MODULES

USING TOMORROW'S JAVASCRIPT MODULE SYNTAX TODAY

Ember CLI uses an open-source project called the ES6 Module Transpiler to help manage how you write your JavaScript and various module wiring.

JavaScript lacks any built-in module system - a glaring omission in today's world of code sharing and simple management. ECMAScript 6 (ES6) is the next JavaScript version, which is currently being refined, and one of its major features is the syntax to handle modules effectively. You will see in our code sample, and as you build an Ember CLI application, that we are importing modules for use in our files:

```
import Ember from 'ember';
```

This grants that file access to use the modules in question. Similarly we have to explicitly export our functions to make them available to the rest of the application. If this was omitted they would only be available within that file.

ES6 is not yet fully supported by all browsers, but the use of transpilers means we can write our JavaScript code in this modular way, and it'll be converted into working code for browsers to run.



properties here to manipulate these values (such as concatenating two property values) but the minimum requires the record properties, as we have here.

```
ember g model post title:string excerpt:string
bodyContent:string date:string
```

## 08 - USE AN ADAPTER

To interact with an API or data store you need to define an adapter for your application to use. Generate this using the CLI tools available and then open `app/adapters/application.js` in your editor. Change the adapter name to `ActiveModelAdapter` and set a default namespace and API host URL, which we'll use to get out data. There are a number of adapter types available, more of which can be found here: <http://emberjs.com/api/data/classes/DS.Adapter.html>.

```
ember g adapter application
// once file is created
import DS from 'ember-data';
export default DS.ActiveModelAdapter.extend({
  namespace: 'api',
  host: 'http://127.0.0.1:4200'
});
```

## 09 - MOCK HTTP REQUESTS

We have no API up and running, but for local development and some testing we can easily create mock HTTP requests using Ember CLI and its Node capabilities. Generate a new mock for the posts data that generates a Node Express server underneath, inside of which we can add some sample data with properties that match those set into the post model object created previously. The Ember server will launch this mock API automatically for us.

```
ember g http-mock posts
```

## 10 - WORK WITH HANDLEBARS

Ember uses the Handlebars templating engine by default, an incredibly powerful way to output dynamic data and react to the display output using conditional blocks. Create a new template file:

```
app/templates/index.hbs
```

which will be rendered for our default view. This loops over the available post models and displays the title as well as generating a link to the specific post using one of the built-in helpers, `{{link-to}}`.

```
<table class='table'>
<thead>
<tr><th>Recent Posts</th></tr>
```

```
</thead>
<tbody>
<tr><td>
<div class='intro'>{{excerpt}}</div>
</td></tr>
</tbody>
</table>
```

## 11 - MAKE ANOTHER TEMPLATE

Create the second template for the application:

```
app/templates/post.hbs
```

which will display the selected post information. Using the Handlebars syntax we can directly reference the model properties by name as we have ensured the route provides us with the model we need. We have an extra tag for the date, which uses a custom template helper to render the date for us, and we'll create this now.

```
<h1>{{title}}</h1>
<p>Posted <small class='muted'>{{format-date date}}</small></p>
<hr>
<div class='intro'>{{excerpt}}</div>
<div class='below-the-fold'>
  {{bodyContent}}
</div>
```

## 12 - GENERATE THE LIBRARY

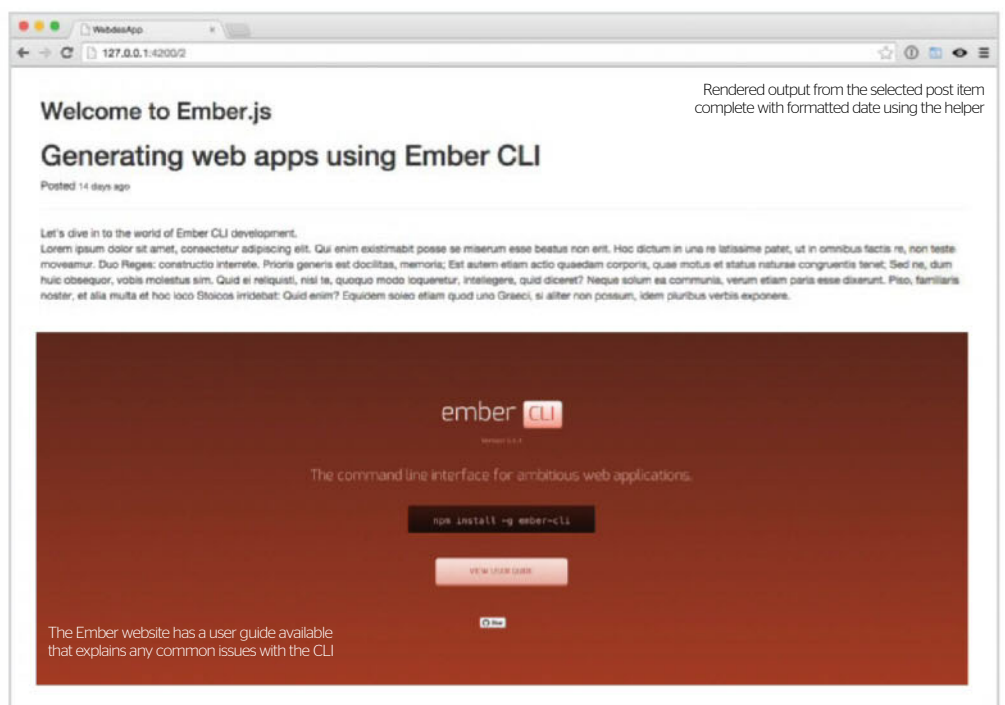
Download and save the `moment.js` library using Bower with `'bower install moment --save'`. Open `Brocfile.js` to

import the library for use in the application by adding the `app.import` line below. Finally, generate the helper file, and add the code to return a nicely formatted date using the value we send in from the template file itself.

```
// Brocfile
app.import('bower_components/moment/moment.js');
// Terminal
small></p>
ember g helper format-date
<div class='intro'>{{excerpt}}</div>
// app/helpers/format-date.js
import Ember from "ember";
export default Ember.Handlebars.
makeBoundHelper(function(value) {
  return moment(value).fromNow();
});
```

## WHAT IS EMBER'S RESOLVER?

Ember will automatically generate missing routes, controllers, views and templates if they have not been explicitly created. It does this through the use of the built-in Resolver. Naming conventions are incredibly important to Ember because they tell Ember what to load and when. In our example, `routes/post.js` knows to use `controllers/post.js` and `templates/post.hbs` to render output. You can define a different template within your controller if you want to, but sensible defaults are already at play to get you up and running quickly and efficiently.



# TESTING, TESTING

ENSURE YOUR CODE IS OPTIMAL AND YOUR EMBER APPLICATION RUNS AS EXPECTED BY GENERATING TESTS

Ember CLI ships with a built-in testing suite using QUnit, a JavaScript unit-testing framework built by the jQuery team. Every action file in your Ember application, for example the controllers, routes, views and helpers, that is generated by the CLI tool will also have an accompanying test file created for it. These files are placed directly into the /tests directory in your project location and a default test scenario is then also created inside of each file. This process is done so that it can check for the existence of the test's real-life counterpart file inside of your application structure. These files act as a good starting point for creating your custom test methods.

There are a number of ways to run your tests using the CLI tool. You can run the full suite of tests that you may have using 'ember test', or you can specify the additional flag to run it after every change to any of the files by using 'ember test -server'. These two methods are ideal for implementing your tests into any

continuous integration system such as Hudson, Jenkins or Travis CI, or when you are working with JavaScript task runners like Grunt or Gulp.

Alternatively when you run the Ember server command to load your application, the test runner is available to be viewed in your browser and ready for you to rerun on any file change. This can be accessed by using http://127.0.0.1:4200/tests. You can also select, if you wish, for the test runner to display pop-up notifications for a successful or failed run by selecting a checkbox in the interface.

Test your model data, controller actions or integration testing for document elements on the page; QUnit makes it all possible and relatively simple to manage.

If you use the CLI tool to generate your application structure, it will also include the ember-qunit package, which will open up a number of specific functions and helpers to assist you when get to the testing stage of your Ember application.

## USE EMBER'S DATA SUITE

INTERACT WITH YOUR DATA WITH EASE THANKS TO THE PURPOSE-BUILT DATA MODULE

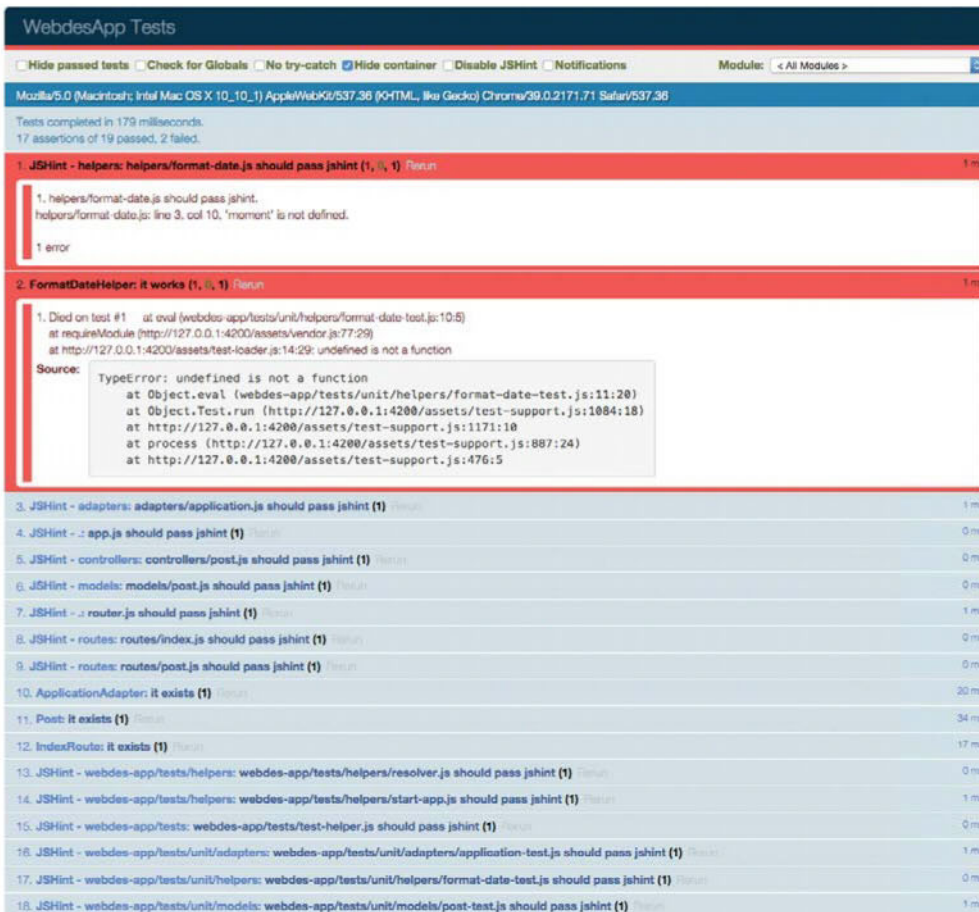
Dynamic data and the interaction between the front-end client-side code and the underlying server-side API or data store are fundamental to Ember applications. Ember Data, a purpose built data suite for Ember apps, is constantly being upgraded, revised and remodelled to improve performance and add extra functionality.

In the sample application we created a simple post model object to work with data and represent a single record from the data store, or an array of records if dealing with the index page.

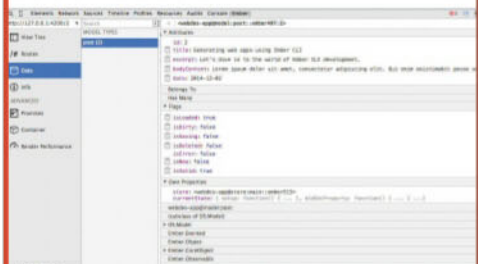
As well as helping to deal with data content modelling and management, Ember Data also has the option to use different adapters for different types of data access such as REST data, Active Model data from Rails applications or Fixtures for purely calling any test content.

Default or custom serializers can also be employed to fine tune how your application manages any data you request and respond with.

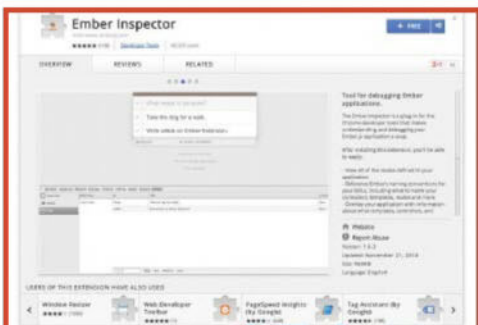
Find out more about Ember Data at <http://emberjs.com/api/data/modules/ember-data.html>.



The test runner instantly lets you know which files contain problems and a stack track on how to fix them



Selecting a model object reveals the populated content as well as flags and properties available to reference



## INSPECTING EMBER

Debugging your Ember application is a crucial part of effective development and helping to understand what it is doing and rendering. Install the Chrome Ember Inspector plugin for this specific task, it's available for free from the Chrome Web Store.



# UNLOCK THE POWER OF ANDROID

www.littlegreenrobot.co.uk



# Android magazine

Available from all good newsagents and supermarkets

ON SALE NOW

> Hack your Nexus > Secure your Android > 25 Android Wear apps

HARDWARE REVIEWS



ANDROID HACKING



TIPS & TRICKS



APP REVIEWS



HELP & ADVICE

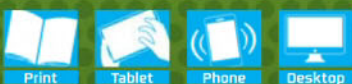


# BUY YOUR ISSUE TODAY

Print edition available at [www.imagineshop.co.uk](http://www.imagineshop.co.uk)

Digital edition available at [www.greatdigitalmags.com](http://www.greatdigitalmags.com)

Available on the following platforms



[facebook.com/littlegreenrobot](https://facebook.com/littlegreenrobot)



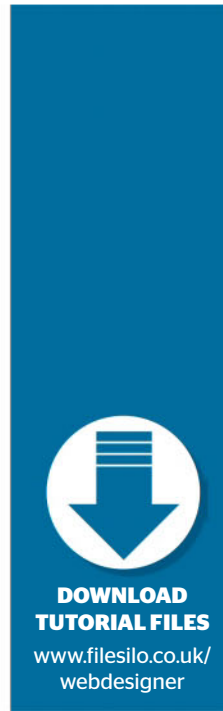

[twitter.com/lgrobot](https://twitter.com/lgrobot)



# Build an emoticon translator with Browserify

Package CommonJS modules with Browserify using the Moment and Emoticon modules

**tools | tech | trends** NPM, Node.js, Browserify, Watchify, Emoticon (Titus Wormer), Moment.js, JavaScript, a text editor, a terminal emulator/interface **expert** Sean M. Tracey

**The packaged web app**

"Packaged web apps have extra implicit permissions that allow greater access to the system they run on. With Firefox Marketplace and Chrome OS, developers will be more willing to write for iOS/Android."

Creative technologist  
**Sean Tracey**  
at Redweb

**B**rowserify takes our Node apps and all of its dependencies and bundles them together into one big JavaScript file that we can insert into an HTML page. Now we can run and write Node apps on the web! In this tutorial, we're going to set up Browserify, bundle up basic application logic and modules and then, we're going to build an interactive emoticon translator with Emoticon from Titus Wormer.

## 01 Install Browserify

Let's hit the ground running then, we're going to use NPM to install Browserify. Browserify itself is not so much a module but more of a tool, in much the same way that NPM is. We're going to install Browserify as a global module so that we can access it across our projects. Enter the following into your terminal to get started:

```
001 $npm install -g browserify
002
```

## 02 Create a new project

Assuming all has gone well, you'll now have Browserify installed on your system. Next, we will need to create a project folder - it can be called anything you like, but for this tutorial the project folder is going to be called 'browserifyProject'. Enter the following commands into your terminal:

```
001 mkdir browserifyProject && cd browserifyProject;
002
```

Lovely, we now have a space to work in.

## 03 Pick a module, any module

In order to show off what Browserify can do, we need to install another module that we want to use in our browser. For this example we'll be using the Moment module. The Moment module is a really nice Common JS module that easily lets us handle date stamps and times.

```
001 npm install moment
002
```

## 04 Understanding Common JS modules

What is a CommonJS module? Well, it's a module that's written almost exclusively in JavaScript so that it works with both browser and server without any (or much) developer intervention. Browserify will only really work well with

CommonJS modules because our browsers can't run things that are written in other languages, like C++.

## 05 Create a moment (app)

To demonstrate Browserify in its most basic usage, we're going to write an app that prints out the date. Create a file named 'input.js' and open it in your favourite text editor. Enter the following code and then save the file.

```
001 var moment = require('moment');
002 console.log(moment().format("DD-MM-YYYY"));
003
```

Run it with `node input.js` and you should see something like 04-12-2014 appear in your console.

## 06 Bundle our first Browserify package

Now that we have some code and modules that we want to package together, we can let Browserify do its thing. It's very simple to bundle an app:

```
001 browserify input.js -o output.js
002
```

...will do the trick. If you look in your browserifyProject folder, you should now have an output.js file! But before we play with that, let's talk about what just happened in a little detail.

## 07 Abstract Syntax Tree explained

When Browserify is packaging up our code, what is it actually doing? Well, it's working through something known as an 'abstract syntax tree'. It takes your input file and looks for every instance of require() and opens that file and repeats the process. Doing this, it builds up a list of all of the modules/dependencies your app needs to work and when Browserify has finished this process it puts them all together into one big file in the right order.



## 08 Fire up our web app

Create a simple HTML page (or use the included template.html file). Just before the `</body>` tag add the following:

```
001 <script src="path/to/your/output.js"></script>
002
```

and then open the HTML file in a browser. If you open up your browser's Web Inspector, you will see the exact same output that we got when we ran our `input.js` file with Node. Now, we have just made our first server/client compatible JavaScript app.

## 09 Create a second project

So, that's our lightning fast introduction on using Browserify, now let's make something a little more fun and complicated to really get to grips with it. Have you ever struggled with reading emoticons? You have? Good! because we're going to make an emoticon translator app. Make another project folder and create a file called `'emoti.js'`.

```
001 cd ~/ && mkdir emojiTranslator && cd emojiTranslator && touch
emoti.js;
002
```

## 10 Install the emoticon module

There are many, many different emoticons and there are variations on almost every single one of them. Collating all of that information and putting it into a useable format is going to take time. Fortunately for us Titus Wormer has dealt with all of this already, so we're going to install his nifty emoticon module and use it to power our translator.

```
001 npm install emoticon
002
```

## 11 Manipulate DOM elements

Node doesn't have direct access to DOM elements, it's a not a browser so why would it? But when Browserify packages an app that has references to DOM elements (by using `getElementById()`) and it's included after those elements in the HTML markup, then we can reference them just as we would in any other JavaScript file.

## 12 Assign module globals

In much the same way, if we want to access the methods of a module in the browser from another script file, we can have our module assign itself to the window object to enable us access. For example, If we wanted to access moment in the global scope, we'd assign it to window like the following:

```
001 //input.js
002 var moment = require('moment');
003 console.log(moment().format("DD-MM-YYYY"));
004 window.moment = moment;
005 //core.js
006 console.log(window.moment().format("MM-DD-YYYY")); //We're
feeling American!
007 </code>
```

## 13 Create HTML/CSS for our translator

If we're going to make an emoji translator, it needs to look pretty. Create an `index.html` and `styles.css` file in the root of your project folder and add the following code to each:

```
001 <code index.html>
002 <!DOCTYPE html>
003 <html>
004 <head>
005 <meta content="text/html; charset=utf-8" http-equiv="Content-
Type">
006 <title>Emoticon Translator</title>
007 <link rel="shortcut icon" href="favicon.ico">
008 <link rel="stylesheet" href="styles.css" type="text/css" />
009 <meta name="viewport" content="initial-scale=1.0, user-
scalable=no" />
010 </head>
011 <body>
012 <div id="translator">
013 <p>Emoticon Translator</p>
014 <input id="emoticonInput" type="text">
015 <p>Translation:</p>
016 <div id="emoticonOutput"></div>
017 <div id="translationOptions">
018 <span data-is-active="true">text &#8594; emoji</span>
019 <span>emoji &#8594; text</span>
020 </div>
021 </div>
022 </body>
023 </html>
024 </code>
025 <code styles.css>
026 @charset "UTF-8";
027 /* CSS Document */
028 *{
029 -webkit-transform: translateZ(0);
030 /*-webkit-perspective: 1000;*/
031 /*-webkit-backface-visibility: hidden;*/
032 }
033 p{
034 padding: 0;
035 margin: 5px 0 8px 0;
036 color: #a3a3a3;
037 }
038 html{
039 height:100%;
040 width:100%;
041 background-color:rgb(245,245,245);
042 background-position:center 0px;
043 background-size:100%;
044 }
045 body{
046 font-family: Arial, Helvetica, sans-serif;
047 <body>
048 font-size:12pt;
049 margin:0px;
050 background-attachment: scroll;
051 background-repeat: repeat-y;
052 width:100%;
053 height:100%;
054 }
055 #translator{
056 display: block;
057 width: 500px;
```

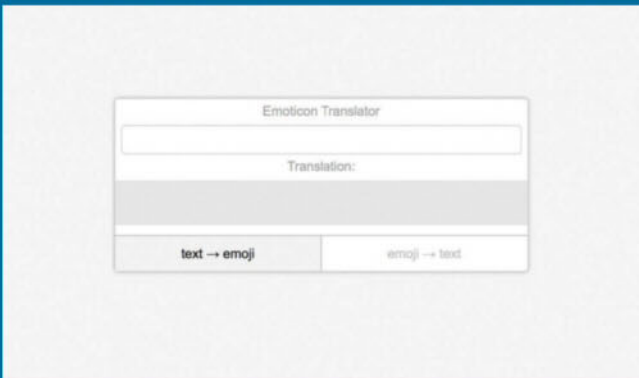
# Build an emoticon translator with Browserify

```
Last login: Wed Dec 10 07:35:25 on ttys003
Seans-MacBook-Pro:~ seantracey$ npm install -g browserify
```

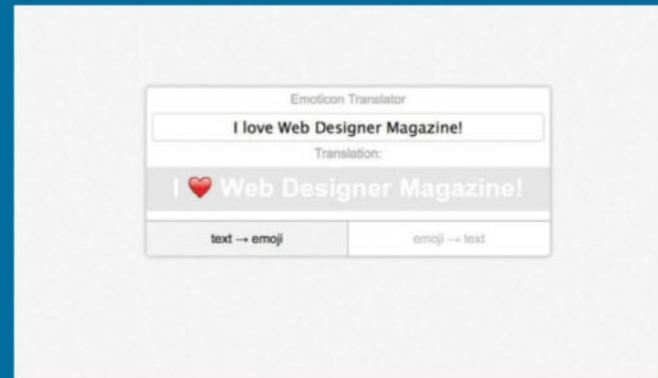
**<Above>**  
 • Every project starts with a single line, this is how we have started ours: with `npm install -g browserify`



**<Above>**  
 • Moment.js is a supernifty Node.js module for parsing and prettifying dates and times. Certainly beats `Date.now() * 1`



**<Above>**  
 • When we put our HTML/CSS together, we should get a tidy modal-like dialog with an input and output area just above two soon-to-be buttons



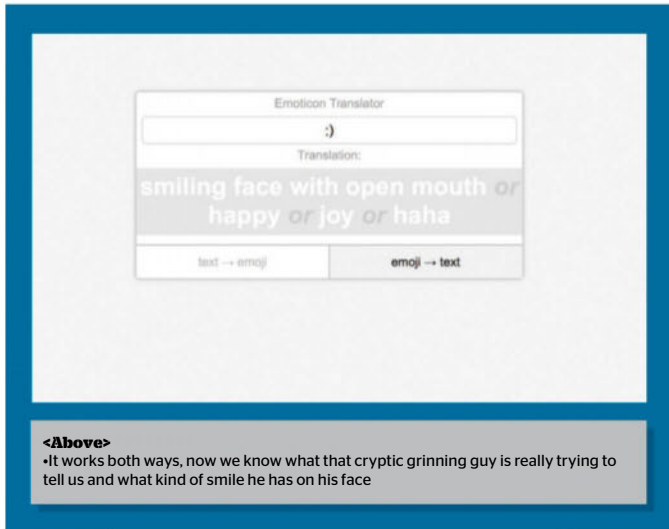
**<Above>**  
 • When we test our final code, we type whole sentences and get the emoji equivalent of certain keywords returned

**Weapon of Choice**  
 You may have gotten the gist from this article that we've used Mac/Linux. Don't worry if you don't have either of these, this code and its tools are platform agnostic.

```
058 text-align: center;
059 position: fixed;
060 left: 50%;
061 margin-left: -250px;
062 top: 50%;
063 border: 1px solid rgba(0,0,0,0.2);
064 border-radius: 5px;
065 box-shadow: 0 0 5px rgba(0,0,0,0.3);
066 background: white;
067 margin-top: -100px;
068 }
069 #translator #emoticonInput{
070 font-size: 1.2em;
071 border: 1px solid rgba(0,0,0,0.2);
```

```
072 border-radius: 5px;
073 padding: 5px 8px;
074 text-align: center;
075 background-color: rgba(255,255,255,0.8);
076 width: 468px;
077 }
078 #translator #emoticonOutput{
079 font-size: 2em;
080 margin-top: 8px;
081 background-color: #e5e5e5;
082 color: white;
083 text-align: center;
084 padding: 5px 0 8px 0;
085 font-weight: 800;
086 min-height: 42px;
087 }
088 #translator #emoticonOutput em{
089 color: rgba(0,0,0,.1);
090 }
091 #translator #translationOptions{
092 border-top: 1px solid #acacac;
093 margin-top: 12px;
094 }
```





**<Above>**  
 •It works both ways, now we know what that cryptic grinning guy is really trying to tell us and what kind of smile he has on his face

## Spaghetti code

Normally, tools that are designed to help streamline your workflow end up becoming part of the problem. Fortunately, Browserify is not one of these tools, it does one or two things really well and that makes it super useful for developing with.

```

095 #translator #translationOptions span{
096 width: 50%;
097 display: block;
098 float: left;
099 padding: 12px 0;
100 cursor: pointer;
101 box-sizing: border-box;
102 color: #bcbcbc;
103 }
104 #translator #translationOptions span:first-of-type{
105 border-right: 1px solid #acacac;
106 }
107 #translator #translationOptions span[data-is-active=true]{
108 background-color: #f2f2f2;
109 color: black;
110 }
111

```

## 14 Bind events

Now that we have the HTML and CSS, it's time for the main event. Open `emoti.js` and add the following:

```

001 var emoticon = require('emoticon'),
002 emotiSearch = document.getElementById('emoticonInput'),
003 output = document.getElementById('emoticonOutput'),
004 output = document.getElementById('emoticonOutput'),
005 options = document.body.getElementsByTagName('span');
006 window.emoticon = emoticon;
007 for(var x = 0; x < options.length; x += 1){

```

```

008 options[x].addEventListener('click', function(){
009 //...Button code
010 }, false);
011 }
012

```

When you Browserify this code, so long as the script tag that contains the bundle comes after the document elements, the script will be able to access them. With that in mind, we can bind events to elements with `addEventListener()`.

## 15 The emoticon to text translator

Now it's time to write our translator code. Like all good translators it will be able to convert both ways, to and from emoticons.

All we're doing here is checking the input element whenever a key is pressed and working through the emoticons known to the emoticon app to try and find a match. If we find one, we put it into the output in place of the word the user typed.

## 16 Watchify explained

While we code, we often make mistakes and when we're in the process of packing up code, moving it and then changing our markup, mistakes can get tiresome. Well, Browserify has a friend to help us with that! Watchify. Watchify watches any file that we're editing for changes and then bundles it up for us on the fly. No more productivity bottleneck in your workflow!

## 17 Install Watchify

Installing and working with Watchify is as painless as installing and working with Browserify. Like Browserify, Watchify is more of a tool than a module, so again, using NPM we'll install Watchify as a global package.

```

001 $ npm install -g watchify
002

```

Depending on your setup, you may have to run this command as root.

## 18 Look for mistakes with Watchify

Watchify supplants Browserify, it fills the exact same role except when you save the file. Watchify will automatically bundle your package and put it where it's been told. The usage is exactly the same as Browserify, simply enter:

```

001 watchify emoti.js -o bundle.js
002

```

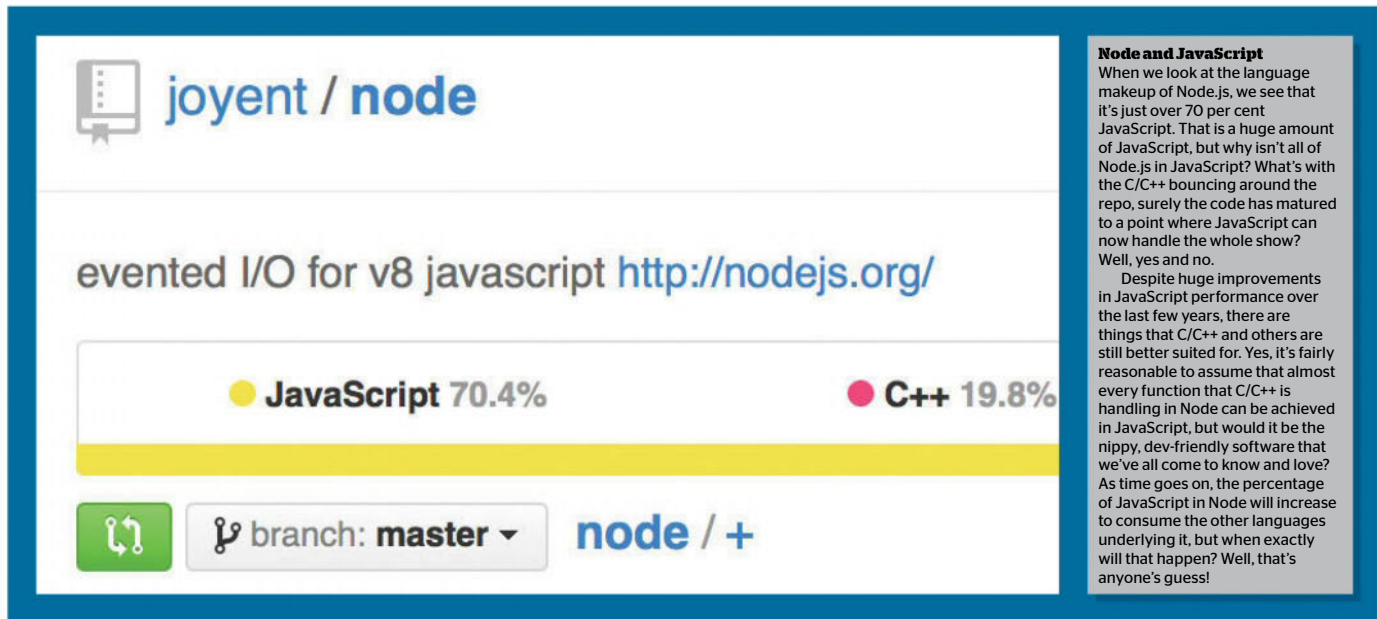
## 19 The text to emoticon translator

We've entered the code to convert words to emoticons, let's do the reverse now. Edit your previous code so that it matches the code below and now we have the workings for both a text to emoticon translator and an emoticon to text translator. Lovely. Now it's time to test it!

```

001 var emoti_app = (function(){
002 var emoticon = require('emoticon'),
003 emotiSearch = document.getElementById('emoticonInput'),
004 output = document.getElementById('emoticonOutput'),
005 options = document.body.getElementsByTagName('span'),
006 translatorType = 1;
007 window.emoticon = emoticon;
008 for(var x = 0; x < options.length; x += 1){
009 options[x].addEventListener('click', function(){
010 if(this.getAttribute('id') === "ttoe"){

```



**Node and JavaScript**  
When we look at the language makeup of Node.js, we see that it's just over 70 per cent JavaScript. That is a huge amount of JavaScript, but why isn't all of Node.js in JavaScript? What's with the C/C++ bouncing around the repo, surely the code has matured to a point where JavaScript can now handle the whole show? Well, yes and no.

Despite huge improvements in JavaScript performance over the last few years, there are things that C/C++ and others are still better suited for. Yes, it's fairly reasonable to assume that almost every function that C/C++ is handling in Node can be achieved in JavaScript, but would it be the nippy, dev-friendly software that we've all come to know and love? As time goes on, the percentage of JavaScript in Node will increase to consume the other languages underlying it, but when exactly will that happen? Well, that's anyone's guess!

```

011 translatorType = 1;
012 } else if(this.getAttribute('id') === "etot"){
013 translatorType = 2;
014 }
015 for(var y = 0; y < options.length; y += 1){
016 options[y].setAttribute('data-is-active', 'false');
017 }
018 this.setAttribute('data-is-active', 'true');
019 }, false);
020 }
021 emotiSearch.addEventListener('keyup', function(){
022 if(translatorType === 1){
023 var textToTranslate = this.value,
024 words = textToTranslate.split(' ');
025 translated = [];
026 output.innerHTML = "";
027 for(var a = 0; a < words.length; a += 1){
028 var word = words[a],
029 replacement = undefined;
030 for(emoji in emoticon.emoticon){
031 var thisEmoji = emoticon.emoticon[emoji],
032 tags = undefined;
033 if(thisEmoji !== undefined){
034 tags = thisEmoji.tags;
035 }
036 for(var b = 0; b < tags.length; b += 1){
037 if(tags[b] === word.toLowerCase())
038 {
039 replacement =
040 thisEmoji.emoji;
041 }
042 }
043 }
044 if(replacement === undefined){
045 translated.push(word);
046 } else {
047 translated.push(replacement);
048 }

```

```

049 }
050 output.innerHTML = translated.join(' ');
051 } else if(translatorType === 2){
052 var inputEmoticon = this.value,
053 result = emoticon.emoticon[inputEmoticon];
054 output.innerHTML = "";
055 if(result !== undefined){
056 output.innerHTML = result.description;
057 for(var g = 0; g < result.tags.length; g += 1){
058 if(inputEmoticon !== result.tags[g]){
059 output.innerHTML += " or " +
060 result.tags[g];
061 }
062 }
063 }
064 }
065 }, false);
066 })();
067

```

## 20 Test it out

Using either Watchify or Browserify bundle up your emoti.js package:

```

001 browserify emoti.js -o bundle.js
002 watchify emoti.js -o bundle.js
003

```

and then move bundle.js to the root of your project directory. Open your index.html and add a script tag referencing the bundle.js file right before the </body> tag..

Now, if you open your index.html file in a browser and type, you will see the words converted to and from emoticons. Finally, no more ambiguity in IM conversations!

## 21 Wrap up

In this tutorial we've covered what Browserify can do and how it can enhance our workflow and efficiency by offering truly server and client compatible code. There are other alternatives to Browserify, like require.js, but none are as easy to implement. No configuration, no environment setup, it just works and that's great.



January  
Sale

TRY SOMETHING NEW  
FOR JUST **£1\***

BROADEN YOUR MIND

EXPAND YOUR HORIZONS

CHOOSE A TRIAL SUBSCRIPTION TO ANY ONE OF OUR INSPIRING  
AND INFORMATIVE MAGAZINES AND YOU'RE GUARANTEED  
TO LEARN SOMETHING NEW WITH EVERY ISSUE!



KNOWLEDGE & SCIENCE



TECHNOLOGY



VIDEOGAMES

**3 TRIAL ISSUES OF ANY  
MAGAZINE FOR JUST**  
**ORDER ONLINE AT**  
**IMAGINESUBS.CO.UK/JAN151**  
**OR CALL**  
**0844 856 0644 (QUOTE JAN151)**

**£1\***



\*This offer entitles new UK Direct Debit subscribers to receive their first three issues for £1. After these issues standard subscription pricing will apply. Subscribers can cancel this subscription at any time. New subscriptions will start from the next available issue. Offer code Jan151 must be quoted to receive this special subscription price. Details of the Direct Debit Guarantee are available on request. This offer expires 01/03/2015. Imagine Publishing reserves the right to restrict this type of offer to one per household.



To advertise here contact Daniel  
 daniel.gunton@imagine-publishing.co.uk  
 +44 (0)1202 586421

Get your listing **highlighted!** Contact Daniel  
 daniel.gunton@imagine-publishing.co.uk  
 +44 (0)1202 586421

# Hosting listings

Got a deal  
 you think we  
 should list?

Whether you're a hosting firm keen to promote your products or a happy customer who wants a favourite provider to be listed, drop us a line with the details!

webdesigner@imagine-publishing.co.uk

Keep an eye on the latest packages and deals with our comprehensive list of service providers

NAME AND URL	PACKAGE	PHONE NUMBER	COST PER YEAR	WEB SPACE	MONTHLY BANDWIDTH	POP3 ACCOUNTS	DATABASE SUPPORT	SHOPPING CART	VIRUS FILTER	FIREWALL	PHONE SUPPORT	EMAIL SUPPORT	WEB CONTROL PANEL	SERVICE LEVEL AGREEMENT
<b>111WebHost</b> <small>.com</small> 111webhost.com	Budget Web Hosting Pack	N/A	£10	1GB	1GB	5	✓	✗	Add-on	N/A	✗	✓	✓	✗
	WordPress Web Hosting Pack	N/A	£20	5GB	2GB	100	✓	✓	Add-on	N/A	✗	✓	✓	✗
	Start-up Web Hosting Pack	N/A	£25	5GB	Unlimited	100	✓	✓	Add-on	N/A	✗	✓	✓	✗
	Unlimited Web Hosting Pack	N/A	£50	Unlimited	Unlimited	Unlimited	✓	✓	Add-on	N/A	✗	✓	✓	✗
	Unlimited Multi-site Web Hosting Pack	N/A	£300	Unlimited	Unlimited	Unlimited	✓	✓	Add-on	N/A	✗	✓	✓	✗
123-reg (www.123-reg.co.uk)	Starter	0845 859 0018	£29.88	1GB	5GB	20	✗	✗	✗	✓	✓	✓	✓	✗
123-reg (www.123-reg.co.uk)	Plus	0845 859 0018	£59.88	5GB	50GB	500	✓	✗	✗	✓	✓	✓	✓	✗
123-reg (www.123-reg.co.uk)	Pro	0845 859 0018	£107.88	10GB	100GB	750	✓	✗	✗	✓	✓	✓	✓	✗
123-reg (www.123-reg.co.uk)	Bus Pro	0845 859 0018	£179.88	20GB	Unlimited	1,000	✓	✗	✗	✓	✓	✓	✓	✗
123-reg (www.123-reg.co.uk)	Plus (MS)	0845 859 0018	£59.88	2GB	25GB	100	✓	✗	✗	✓	✓	✓	✓	✗
123-reg (www.123-reg.co.uk)	Pro (MS)	0845 859 0018	£107.88	5GB	50GB	500	✓	✗	✗	✓	✓	✓	✓	✗
123-reg (www.123-reg.co.uk)	Bus Pro (MS)	0845 859 0018	£179.88	10GB	150GB	1,000	✓	✗	✗	✓	✓	✓	✓	✗
2020Media (www.2020media.com)	Light User	0870 321 2020	£45	20MB	1GB	3	✓	✓	✓	✓	✓	✓	✓	✗
2020Media (www.2020media.com)	Everyday	0870 321 2020	£100	200MB	10GB	15	✓	✓	✓	✓	✓	✓	✓	✗
2020Media (www.2020media.com)	Business/Pro	0870 321 2020	£275	500MB	20GB	50	✓	✓	✓	✓	✓	✓	✓	✗
2020Media (www.2020media.com)	JAVA Tomcat	0870 321 2020	£300	100MB	3GB	15	✓	✓	✓	✓	✓	✓	✓	✗
2020Media (www.2020media.com)	ASP.Net	0870 321 2020	£275	100MB	3GB	15	✓	✓	✓	✓	✓	✓	✓	✗
4D Hosting (www.4dhosting.com)	Big Web Hosting	0207 183 0602	£60	5GB	Unlimited	20	✓	✓	✓	✓	✓	✓	✓	✓
4D Hosting (www.4dhosting.com)	Bigger Web Hosting	0207 183 0602	£120	10GB	Unlimited	75	✓	✓	✓	✓	✓	✓	✓	✓
4D Hosting (www.4dhosting.com)	Biggest Web Hosting	0207 183 0602	£180	20GB	Unlimited	100	✓	✓	✓	✓	✓	✓	✓	✓
4D Hosting (www.4dhosting.com)	Big VPS	0207 183 0602	£204	75GB	500GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
4D Hosting (www.4dhosting.com)	Bigger VPS	0207 183 0602	£360	100MB	1,000GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
4D Hosting (www.4dhosting.com)	Biggest VPS	0207 183 0602	£720	200GB	1,500GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
Blackfoot Hosting Ltd (www.blackfoot.co.uk)	Home	N/A	£40	500MB	5GB	5	✓	✓	✓	✓	✗	✓	✓	✗
Blackfoot Hosting Ltd (www.blackfoot.co.uk)	Business	N/A	£50	1GB	20GB	100	✓	✓	✓	✓	✗	✓	✓	✗
Blackfoot Hosting Ltd (www.blackfoot.co.uk)	eCommerce	N/A	£100	2GB	40GB	200	✓	✓	✓	✓	✗	✓	✓	✗
Blackfoot Hosting Ltd (www.blackfoot.co.uk)	Professional	N/A	£150	3GB	60GB	300	✓	✓	✓	✓	✗	✓	✓	✗
Blacknight (www.blacknight.com)	Minimus	35359 918 3072	£45	10GB	200GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✗
Blacknight (www.blacknight.com)	Medius	35359 918 3072	£79	20GB	400GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✗
Blacknight (www.blacknight.com)	Maximus	35359 918 3072	£45	30GB	600GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✗
CityCM (www.citycm.co.uk)	City250	0330 223 0120	£10.99	250MB	5GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
CityCM (www.citycm.co.uk)	City500	0330 223 0120	£14.99	500MB	10GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
CityCM (www.citycm.co.uk)	City2000	0330 223 0120	£29.90	2GB	50GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
CityCM (www.citycm.co.uk)	City10000	0330 223 0120	£49.90	10GB	100GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
CityCM (www.citycm.co.uk)	CityR10	0330 223 0120	£120	10GB	50GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
CityCM (www.citycm.co.uk)	CityR20	0330 223 0120	£180	20GB	100GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
CityCM (www.citycm.co.uk)	CityR30	0330 223 0120	£240	30GB	150GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
CityCM (www.citycm.co.uk)	City VPS15	0330 223 0120	£180	15GB SSD	400GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
CityCM (www.citycm.co.uk)	City VPS30	0330 223 0120	£300	30GB SSD	600GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
CityCM (www.citycm.co.uk)	City VPS75	0330 223 0120	£420	75GB SSD	600GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
Designwasp (http://designwasp.com)	Starter	0844 372 9848	£30	3GB	20GB	1,000	✓	✓	✗	✓	✓	✓	✓	✓
Designwasp (http://designwasp.com)	Home	0844 372 9848	£40	10GB	50GB	10,000	✓	✓	✗	✓	✗	✓	✓	✗
Designwasp (http://designwasp.com)	Business	0844 372 9848	£60	Unlimited	Unlimited	Unlimited	✓	✓	✗	✓	✗	✓	✓	✗
Designwasp (http://designwasp.com)	Windows Unlimited	0844 372 9848	£60	Unlimited	Unlimited	Unlimited	✓	✓	✗	✓	✗	✓	✓	✗
Designwasp (http://designwasp.com)	Windows Home	0844 372 9848	£40	10GB	50GB	1,000	✓	✓	✗	✓	✗	✓	✓	✗
Designwasp (http://designwasp.com)	CheapHost	0844 372 9848	£10	300MB	100MB	5	✗	✗	✓	✓	✗	✗	✓	✗
Digital Gibbon Ltd (http://digitalgibbon.com)	Cheeky Chimp	NA	£0	500MB	Unlimited	5	✓	✗	✓	✓	NA	✓	✓	✗
Digital Gibbon Ltd (http://digitalgibbon.com)	Digital Gibbon	NA	£12	5GB	Unlimited	10	✓	✗	✓	✓	NA	✓	✓	✗
Digital Gibbon Ltd (http://digitalgibbon.com)	Silverback	NA	£24	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	NA	✓	✓	✗
Digital Gibbon Ltd (http://digitalgibbon.com)	Wordpress hosting	NA	£12	5GB	Unlimited	10	✓	✗	✓	✓	NA	✓	✓	✗
Donhost (www.donhost.co.uk)	Reseller Unix	0845 226 5566	£399.99	Unlimited	Unlimited	Unlimited	✓	✗	✓	✓	✓	✓	✓	✗
Donhost (www.donhost.co.uk)	Reseller Windows	0845 226 5566	£499.99	Unlimited	Unlimited	Unlimited	✓	✗	✓	✓	✓	✓	✓	✗
Donhost (www.donhost.co.uk)	Enterprise	0845 226 5566	£89.99	1GB	2GB	250	✓	✗	✓	✓	✓	✓	✓	✗
Donhost (www.donhost.co.uk)	Commerce	0845 226 5566	£179.99	2GB	5GB	500	✓	✗	✓	✓	✓	✓	✓	✗
Donhost (www.donhost.co.uk)	Designer	0845 226 5566	£119.99	1GB	2GB	250	✓	✗	✓	✓	✓	✓	✓	✗
Donhost (www.donhost.co.uk)	Developer	0845 226 5566	£259.99	2GB	5GB	500	✓	✗	✓	✓	✓	✓	✓	✗



## Featured host of the month: **111WebHost** 111webhost.com



Getting more out of one of our quality listed hosting providers

111WebHost is a provider committed to making website hosting easy to use while offering the best possible value. It provides solutions for small- and medium-sized businesses as well as individuals – and web designers and developers are high on their list. 111WebHost offers a range of top-value packages starting at

the ridiculously low price of £1 per month. For this, users get 1GB of webspace and 1GB of monthly traffic. For those looking for more, there is 5GB of webspace and unlimited traffic for just £2.50 a month. Unlimited webspace and traffic is available for just £5 a month. They also provide specialist hosting for WordPress, Joomla and Drupal.

NAME AND URL	PACKAGE	PHONE NUMBER	COST PER YEAR	WEB SPACE	MONTHLY BANDWIDTH	POP3 ACCOUNTS	DATABASE SUPPORT	SHOPPING CART	VIRUS FILTER	FIREWALL	PHONE SUPPORT	EMAIL SUPPORT	WEB CONTROL PANEL	SERVICE LEVEL AGREEMENT
eHosting (www.ehosting.com)	Starter	0844 999 4100	£23.88	1GB	25GB	10	X	X	X	X	X	✓	✓	✓
eHosting (www.ehosting.com)	Personal	0844 999 4100	£59.88	2.5GB	Unlimited	50	✓	X	X	X	X	✓	✓	✓
eHosting (www.ehosting.com)	Expert	0844 999 4100	£95.88	5GB	Unlimited	250	✓	X	X	X	X	✓	✓	✓
eHosting (www.ehosting.com)	Virtual	0844 999 4100	£227.88	50GB	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
Equipphase (www.equipphase.net)	Bronze	0121 314 4865	£30	200MB	2GB	10	✓	✓	X	✓	X	✓	✓	✓
Equipphase (www.equipphase.net)	Silver	0121 314 4865	£42	400MB	5GB	20	✓	✓	X	✓	X	✓	✓	✓
Equipphase (www.equipphase.net)	Gold	0121 314 4865	£72	800MB	10GB	100	✓	✓	X	✓	X	✓	✓	✓
Equipphase (www.equipphase.net)	Platinum	0121 314 4865	£114	1,200MB	40GB	200	✓	✓	✓	✓	✓	✓	✓	✓
Eurofasthost.com (www.eurofasthost.com)	Email Only	02380 249 823	£40	1GB	2GB	10	X	X	✓	✓	✓	✓	✓	✓
Eurofasthost.com (www.eurofasthost.com)	Essential	02380 249 823	£75	2GB	5GB	10	X	X	✓	✓	✓	✓	✓	✓
Eurofasthost.com (www.eurofasthost.com)	Superior	02380 249 823	£140	5GB	10GB	25	✓	✓	✓	✓	✓	✓	✓	✓
Eurofasthost.com (www.eurofasthost.com)	Premium	02380 249 823	£250	10GB	25GB	100	✓	✓	✓	✓	✓	✓	✓	✓
Evohosting (www.evohosting.co.uk)	Starter	N/A	£29.99	500MB	1GB	3	✓	✓	✓	✓	X	✓	✓	✓
Evohosting (www.evohosting.co.uk)	Home	N/A	£54.99	2.5GB	30GB	50	✓	✓	✓	✓	X	✓	✓	✓
Evohosting (www.evohosting.co.uk)	Business	N/A	£79.99	6.5GB	Unlimited	Unlimited	✓	✓	✓	✓	X	✓	✓	✓
Evohosting (www.evohosting.co.uk)	eCommerce	N/A	£159.99	30GB	Unlimited	Unlimited	✓	✓	✓	✓	X	✓	✓	✓
Fasthosts (www.fasthosts.co.uk)	Personal	0808 168 6777	£32.87	5GB	Unlimited	50	✓	X	✓	✓	✓	✓	✓	X
Fasthosts (www.fasthosts.co.uk)	Business Bronze	0808 168 6777	£58.38	50GB	Unlimited	500	✓	Option	✓	✓	✓	✓	✓	X
Fasthosts (www.fasthosts.co.uk)	Business Silver	0808 168 6777	£76.39	Unlimited	Unlimited	Unlimited	✓	Option	✓	✓	X	✓	✓	X
Fasthosts (www.fasthosts.co.uk)	Business Gold	0808 168 6777	£101.89	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	X	✓	✓	X
Fasthosts (www.fasthosts.co.uk)	WD Starter	0808 168 6777	£149.99	20GB	Unlimited	Unlimited	✓	Option	Option	✓	X	✓	✓	X
Fasthosts (www.fasthosts.co.uk)	WD Advanced	0808 168 6777	£199.99	Unlimited	Unlimited	Unlimited	✓	Option	Option	✓	X	✓	✓	X
Giacom (www.giacom.com)	Business Pro	0800 542 7500	£199	100MB	2GB	100	✓	✓	✓	✓	✓	✓	✓	✓
Heart Internet (www.heartinternet.co.uk)	Starter Professional	0845 644 7750	£29.80	2.5GB	10GB	1,000	X	X	X	X	✓	✓	✓	✓
Heart Internet (www.heartinternet.co.uk)	Home Professional	0845 644 7750	£89.99	Unlimited	Unlimited	10,000	✓	✓	X	✓	X	✓	✓	✓
Heart Internet (www.heartinternet.co.uk)	Business Professional	0845 644 7750	£129.99	Unlimited	Unlimited	Unlimited	✓	✓	X	✓	X	✓	✓	✓
Heart Internet (www.heartinternet.co.uk)	Reseller Professional	0845 644 7750	£349.99	Unlimited	Unlimited	Unlimited	✓	✓	X	✓	X	✓	✓	✓
Hostway (www.hostway.co.uk)	Silver	0808 180 1880	£79.50	150MB	3GB	5	X	Option	✓	✓	X	✓	✓	X
Hostway (www.hostway.co.uk)	Gold	0808 180 1880	£139.50	300MB	5GB	10	✓	Option	✓	✓	✓	✓	✓	X
Hostway (www.hostway.co.uk)	Gold Plus	0808 180 1880	£189.50	450MB	10GB	30	✓	Option	✓	✓	✓	✓	✓	X
Hostway (www.hostway.co.uk)	Platinum	0808 180 1880	£359.50	600MB	20GB	50	✓	Option	✓	✓	✓	✓	✓	X
Hostway (www.hostway.co.uk)	Platinum Plus	0808 180 1880	£599.50	1.2GB	40GB	10	✓	Option	✓	✓	✓	✓	✓	X
Hostway (www.hostway.co.uk)	Email Plus	0808 180 1880	£49.95	50MB	N/A	5	N/A	N/A	N/A	X	✓	✓	✓	X
LD Hosts (http://ldhosts.co.uk)	LD Budget (Linux)	07891 235858	£11.88	1GB	1GB	500	✓	✓	X	✓	✓	✓	✓	X
LD Hosts (http://ldhosts.co.uk)	LD Home (Linux)	07891 235858	£23.88	10GB	10GB	5,000	✓	✓	X	✓	✓	✓	✓	X
LD Hosts (http://ldhosts.co.uk)	LD Pro (Linux)	07891 235858	£41.88	50GB	50GB	20,000	✓	✓	X	✓	✓	✓	✓	X
LD Hosts (http://ldhosts.co.uk)	LD Unlimited (Linux)	07891 235858	£60	Unlimited	Unlimited	Unlimited	✓	✓	X	✓	✓	✓	✓	X
LD Hosts (http://ldhosts.co.uk)	Windows Home	07891 235858	£17.88	2GB	2GB	1,000	✓	✓	X	✓	✓	✓	✓	X
LD Hosts (http://ldhosts.co.uk)	Windows Unlimited	07891 235858	£60	Unlimited	Unlimited	Unlimited	✓	✓	X	✓	✓	✓	✓	X
Media Temple (http://mediatemple.net)	Shared-Server Pro	+1 310 841 5500	£64	2GB	1TB	1,000	✓	✓	✓	✓	✓	✓	✓	✓
Media Temple (http://mediatemple.net)	Shared-Server Advanced	+1 310 841 5500	£109	5GB	1.5TB	5,000	✓	✓	✓	✓	✓	✓	✓	✓
NameHog (www.namehog.net)	Email Only	01604 212 904	£11.99	2.5GB	15GB	10	X	X	✓	✓	✓	✓	✓	✓
NameHog (www.namehog.net)	Starter	01604 212 904	£36.99	10GB	150GB	Unlimited	X	X	✓	✓	✓	✓	✓	✓
NameHog (www.namehog.net)	Home Pro	01604 212 904	£59.99	25GB	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
NameHog (www.namehog.net)	Business	01604 212 904	£109.99	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
Namesco (www.names.co.uk)	StartUp Plus	0845 363 3632	£89.99	500MB	5GB	10	✓	✓	✓	✓	✓	✓	✓	✓
Namesco (www.names.co.uk)	Business	0845 363 3632	£149.99	2,000MB	20GB	100	X	X	✓	✓	✓	✓	✓	✓
Namesco (www.names.co.uk)	Business Plus	0845 363 3632	£89.99	3,000MB	30GB	200	✓	✓	✓	✓	✓	✓	✓	✓
Namesco (www.names.co.uk)	Designer	0845 363 3632	£239.88	1GB	20GB	200	✓	✓	✓	✓	✓	✓	✓	✓
Namesco (www.names.co.uk)	Designer Plus	0845 363 3632	£479.88	Unlimited	30GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓



DEVELOPER	0800 808 5450	£32.89	1GB	Unlimited	500	✓	✓	✓	✓	✓	✓	✓	✓	✓
ONE	0800 808 5450	£109.99	5GB	Unlimited	1000	✓	✓	✓	✓	✓	✓	✓	✓	✓
RESELLER	0800 808 5450	£274.89	Unlimited	Unlimited	1000	✓	✓	✓	✓	✓	✓	✓	✓	✓
VM500 Server	0800 808 5450	£300	20GB	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓	✓
2200DC Server	0800 808 5450	£720	160GB	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓	✓
3000DC Server	0800 808 5450	£1,200	2x500GB	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓	✓
2600QC Server	0800 808 5450	£1,800	2x500GB	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓	✓

To advertise here contact Daniel  
 daniel.gunton@imagine-publishing.co.uk  
 +44 (0)1202 586421

Get your listing **highlighted!** Contact Daniel  
 daniel.gunton@imagine-publishing.co.uk  
 +44 (0)1202 586421


# Hosting listings

Keep an eye on the latest packages and deals with our comprehensive list of service providers

Discover what an **enhanced listing** can do for your business. Contact Daniel on:

+44 (0)1202 586421

Continued...

NAME AND URL	PACKAGE	PHONE NUMBER	COST PER YEAR	WEB SPACE	MONTHLY BANDWIDTH	POP3 ACCOUNTS	DATABASE SUPPORT	SHOPPING CART	VIRUS FILTER	FIREWALL	PHONE SUPPORT	EMAIL SUPPORT	WEB CONTROL PANEL	SERVICE LEVEL AGREEMENT
Netplan (www.netplan.co.uk)	Shared 100	0207 1000 424	£60	100MB	1GB	5	✓	✓	✓	✓	✓	✓	✓	✓
Netplan (www.netplan.co.uk)	VS100	0207 1000 424	£600	5GB	5GB	5	✓	✓	✓	✓	✓	✓	✓	✓
Netplan (www.netplan.co.uk)	VS200	0207 1000 424	£1,000	10GB	10GB	10	✓	✓	✓	✓	✓	✓	✓	✓
Netplan (www.netplan.co.uk)	VS300	0207 1000 424	£2,000	15GB	50GB	20	✓	✓	✓	✓	✓	✓	✓	✓
Netplan (www.netplan.co.uk)	Dedicated Servers	0207 1000 424	£3,000+	73GB+	1,500GB	100+	✓	✓	✓	✓	✓	✓	✓	✓
 <b>Patchman Web Hosting</b> <a href="http://www.patchman-hosting.co.uk">www.patchman-hosting.co.uk</a>	Bronze Package (Linux)	01642 424 237	£35.88	1GB	Unlimited	1	1	✓	Option	✓	✓	✓	✓	✗
	Silver Package (Linux)	01642 424 237	£59.88	3GB	Unlimited	3	3	✓	Option	✓	✓	✓	✓	✗
	Gold Package (Linux)	01642 424 237	£83.88	5GB	Unlimited	25	5	✓	Option	✓	✓	✓	✓	✗
Reddex UK (www.reddexuk.com)	Reddex Design Starter	0843 289 4625	£18	1GB	Unlimited	10	✓	✗	✓	✓	✓	✓	✓	✓
Reddex UK (www.reddexuk.com)	Reddex Design Business	0843 289 4625	£59.88	10GB	Unlimited	100	✓	✓	✓	✓	✓	✓	✓	✓
Streamline.net (www.streamline.net)	Trial (3 month)	0844 941 1000	N/A	10GB	Unlimited	1,000	✓	Option	✓	✓	✓	✓	✓	✗
Streamline.net (www.streamline.net)	Starter	0844 941 1000	£23.88	500MB	Unlimited	20	✓	Option	✓	✓	✓	✓	✓	✗
Swish Hosting (www.swishhosting.co.uk)	Email	08445 67 69 71	£18	-	Unlimited	Unlimited	✗	✗	✓	✓	✓	✓	✓	✗
Swish Hosting (www.swishhosting.co.uk)	Windows Hosting	08445 67 69 71	£66	-	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✓
Tidy Web Hosting (www.tidywebhosting.co.uk)	Entry	0844 884 9100	£25	100MB	1GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✗
Tidy Web Hosting (www.tidywebhosting.co.uk)	Home	0844 884 9100	£50	500MB	5GB	Unlimited	✓	✓	✓	✓	✓	✓	✓	✗
TwentyHost (www.twentyhost.co.uk)	Basic55	0845 641 0776	£24	100MB	1,500MB	25	✓	✓	✓	✓	✓	✓	✓	✓
TwentyHost (www.twentyhost.co.uk)	Standard55	0845 641 0776	£45	200MB	3,000MB	50	✓	✓	✓	✓	✓	✓	✓	✓
TwentyHost (www.twentyhost.co.uk)	Business55	0845 641 0776	£70	500MB	7,500MB	100	✓	✓	✓	✓	✓	✓	✓	✓
TwentyHost (www.twentyhost.co.uk)	Advanced55	0845 641 0776	£110	1,000MB	15,000MB	200	✓	✓	✓	✓	✓	✓	✓	✓
UK2.NET (www.uk2.net)	Starter Hosting	0808 168 2427	£24	500MB	1GB	✗	✓	✓	✓	✓	✓	✓	✓	✗
UK2.NET (www.uk2.net)	Business Hosting	0808 168 2427	£54	Unlimited	Unlimited	Unlimited	✓	✓	✓	✓	✓	✓	✓	✗
VARIHOST (www.varihost.net)	WordPress Basic	0208 144 7057	£47.88	2GB	10GB	10	✓	✗	✗	✓	✓	✓	✓	✓
VARIHOST (www.varihost.net)	WordPress Plus	0208 144 7057	£71.88	4GB	100GB	100	✓	✓	✗	✓	✓	✓	✓	✓
VARIHOST (www.varihost.net)	WordPress Extra	0208 144 7057	£119.88	unlimited	Unlimited	Unlimited	✓	✓	✗	✓	✓	✓	✓	✓
WebFusion (www.webfusion.co.uk)	Fusion Professional	0845 130 1602	£107.40	5GB	50GB	1,000	✓	✗	✓	✓	✓	✓	✓	✗
WebFusion (www.webfusion.co.uk)	Fusion Business	0845 130 1602	£179.40	10GB	150GB	1,500	✓	✗	✓	✓	✓	✓	✓	✗
Z-Host (z-host.co.uk)	Z-100	N/A	£15	100MB	10GB	Unlimited	✓	✓	✓	✓	✗	✓	✓	✓
Z-Host (z-host.co.uk)	Z-200	N/A	£21	100MB	10GB	Unlimited	✓	✓	✓	✓	✗	✓	✓	✓
Z-Host (z-host.co.uk)	Z-500	N/A	£42	500MB	20GB	Unlimited	✓	✓	✓	✓	✗	✓	✓	✓
Z-Host (z-host.co.uk)	Z-1000	N/A	£60	1GB	40GB	Unlimited	✓	✓	✓	✓	✗	✓	✓	✓
Zen Internet (www.zen.co.uk)	Bronze (Linux)	0845 058 9000	£47.88	2GB	10GB	10	✓	✓	✓	✓	✓	✓	✓	✗
Zen Internet (www.zen.co.uk)	Silver (Linux)	0845 058 9000	£95.88	5GB	50GB	25	✓	✓	✓	✓	✓	✓	✓	✗
Zen Internet (www.zen.co.uk)	Gold (Linux)	0845 058 9000	£143.88	10GB	100GB	50	✓	✓	✓	✓	✓	✓	✓	✗
Zen Internet (www.zen.co.uk)	Platinum (Linux)	0845 058 9000	£239.88	50GB	250GB	100	✓	✓	✓	✓	✓	✓	✓	✗
Zen Internet (www.zen.co.uk)	Reseller (Linux)	0845 058 9000	£479.88	150GB	500	250	✓	✓	✓	✓	✓	✓	✓	✗

## Golden rules to top hosting We identify and explain the key criteria for success...

- 1 The best resources for you**  
 Selecting your ideal package is largely determined by the kinds of resources and quantity of features you require from your hosting solution. Key aspects such as web space and monthly bandwidth are important for those services likely to be subjected to heavy amounts of traffic, which is why package solutions for enterprise applications are typically much more expensive. The general rule of thumb is not to buy more than you need or underestimate potential requirements.
- 2 Competitive and reliable**  
 The hosting market is big business and hosting providers do try to drive prices down in a bid to entice your custom. Use our chart to compare costs, but be sure to visit the vendor websites to keep track of the latest deals, as they do change. Remember that low price should not always be a deciding factor and that paying a premium for a more reliable, trusted and experienced vendor can offer you much better value for money in the long term.
- 3 Putting you in control**  
 Modern hosting is all about giving customers the power to set up, monitor and maintain their web space with minimal fuss. Most commercial vendors offer access to award-winning and intuitive control panels that enable you to log in remotely and intuitively tweak your account - without the need to relay complicated instructions down the phone. Be sure to find out from your potential host as much as you can about the control panel and request a demo.
- 4 Fantastic customer support**  
 If all else fails and you need some extra help to get your hosting back online, then a commitment to future customer support is key. Many vendors offer a service-level agreement which outlines what you can expect here, however most will be more explicit about whether phone support is included or email contact is preferred. Think about what you need for your own peace of mind and factor good, comprehensive technical support against the price.



# IMAGE IS EVERYTHING

www.advancedphotoshop.co.uk

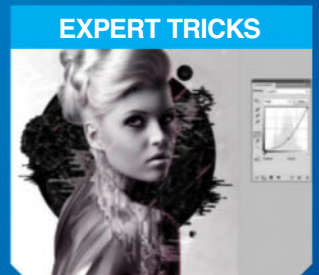


## ADVANCED PHOTOSHOP®

Available from all good newsagents and supermarkets

ON SALE NOW

> Professional tips for selections > Design an infographic > Action composites



## BUY YOUR ISSUE TODAY

Print edition available at [www.imagineshop.co.uk](http://www.imagineshop.co.uk)

Digital edition available at [www.greatdigitalmags.com](http://www.greatdigitalmags.com)

Available on the following platforms



 [facebook.com/AdvancedPhotoshop](https://facebook.com/AdvancedPhotoshop)

 [twitter.com/advancedpshop](https://twitter.com/advancedpshop)



Synology®



THE MOST REQUESTED  
SYNOLOGY NAS EVER IS HERE!

Full HD  
1080p

DLNA

# DS415<sub>play</sub>

FOUR-BAY NAS SERVER FEATURING  
VIDEO TRANSCODING WITH LOSSLESS QUALITY



## ENJOY FULL HD STREAMING QUALITY ON TV

Featuring 1080p Full HD video transcoding, DS415play satisfies multimedia enthusiasts' requirement for on-demand high-quality video streaming.

## A TRUE DLNA® CERTIFIED MEDIA SERVER

Serving as a ready DLNA DMS (Digital Media Server) with the capability to host digital multimedia contents for remote playback, DS415play could stream music, photos and videos to DLNA-compliant devices.

## BACKED UP WITH ENHANCED COMPUTING PERFORMANCE

Dual core CPU powered by a built-in Floating-Point Unit and hardware transcoding engine, speeds up thumbnail processing and enables photo-viewing. A refreshingly new experience.

Other models available include DS214play, DS213j and DS414j. To see the full product range visit [www.synology.com](http://www.synology.com)

### Where to Buy

[amazon.co.uk](http://amazon.co.uk) [dabs.com](http://dabs.com) [ebuyer.com](http://ebuyer.com) [broadbandbuyer.co.uk](http://broadbandbuyer.co.uk)

### Award & Recognition

[expertreviews](http://expertreviews.com)  
BEST BUY





«klikpic»

Websites for photographers

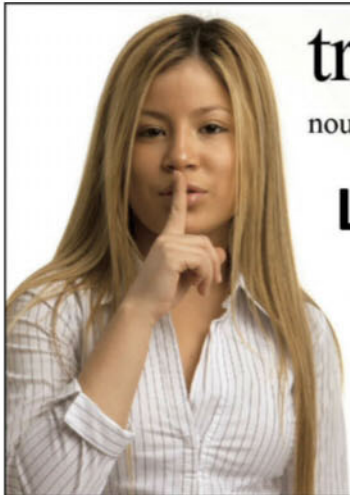
Try the **new** Klikpic for only £40 pa includes ecommerce



- Stunning range of new templates.
- New admin system makes it even easier to use.
- Stylish slideshows and carousels throughout.
- New blog styles with extra options.
- Easy upload and link to your social media.
- And much more besides!

Compatible with mobile phones and tablets

Visit [www.klikpic.com](http://www.klikpic.com) for a **FREE 14 day trial**



trade secret

noun {c} ~tred si kriht - A secret formula, method, or device that gives one an advantage over competitors.

Low cost address lookup for your website

- Buy online from £15 + vat
- Eliminate spelling mistakes
- Reduced abandoned carts
- 80% reduction of keystrokes entering addresses
- Create a professional image for your clients
- Simple integration with SDK & working examples

For more details visit [postcode-software.net](http://postcode-software.net) or call **0845 83 82 666**

From less than  
**1p**  
per lookup




I spy with my little eye domains ending in...  
.actor .buzz **.club** .email **.guru**  
.ink .host **.ninja** **.photos** **.press**  
.recipes **.pub** **.reviews** .support  
.tips **.website** .webcam **.wiki**


Think  
**Different**  
Think  
**Context**  
Think  
**Available**




[www.blacknight.host](http://www.blacknight.host) [sales@blacknight.host](mailto:sales@blacknight.host) @blacknight




**Domains**  
.COM just £5.80/pa




**Hosting**  
FREE Domain Name




**Cloud**  
SSD Server from £5/pm





**Servers**  
Save 50% for 3 months



**Datacentre**  
Rackspace from £35/pm



**netcetera**  0800 808 5450  
 [netcetera.co.uk/wdm](http://netcetera.co.uk/wdm)

# YOUR FREE RESOURCES

LOG IN TO [WWW.FILESILO.CO.UK/WEBDESIGNER-231](http://WWW.FILESILO.CO.UK/WEBDESIGNER-231) AND DOWNLOAD THE LATEST COLLECTION OF MUST-HAVE VIDEOS AND RESOURCES

**EWD UI**  
Open source UI Kit...

Find out more... >

1,567	1,900	567

**EXPERT CSS 3D VIDEO GUIDES (PT 2)**  
DISCOVER THE SECRETS OF A NEW DIMENSION

OVER 160 MINS OF VIDEO TUTORIALS

ACTIONS FOR PHOTOSHOP CS6 AND CC

## 3D RETRO TEXT

CREATOR

**30+ RETRO ACTIONS**  
GET INSTANT 3D EFFECTS

TOTAL RESOURCES **45**

City Digital Agency  
Illuminating Brands

We bring life to your project through successful design and brand strategies

**TUTORIAL FILES**  
THIS ISSUE'S ASSETS

**YOUR BONUS RESOURCES**

ON OUR BRAND NEW FILESILO THIS ISSUE YOU WILL FIND AN UNMISSABLE COLLECTION OF VIDEO GUIDES AND RESOURCES

- 160 Minutes of expert CSS 3D video guides from CartoonSmart
- 8 Clean identity and branding mockups templates from SparkleStock
- 9 Bootstrap templates: Interno, Flat Corp and Two Bytes responsive template packs from W3 Layouts
- The Recharge regular font from Typodermic fonts
- 30+ Retro 3D Photoshop actions from SparkleStock

**FileSilO**

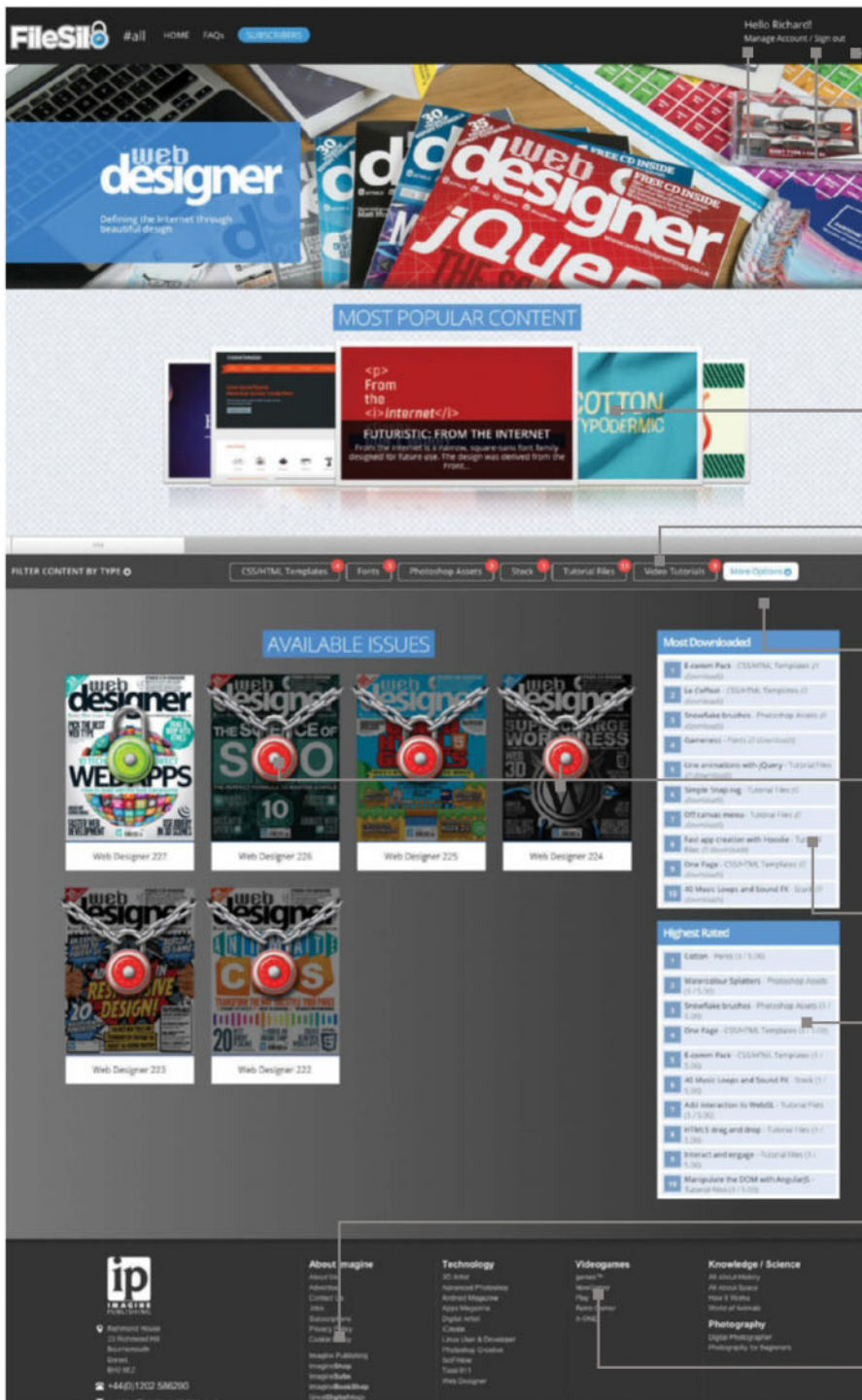
[www.filesilo.co.uk/webdesigner-231](http://www.filesilo.co.uk/webdesigner-231)



# FILESILO – THE HOME OF PRO RESOURCES

## DISCOVER YOUR FREE ONLINE ASSETS

- 🔒 A rapidly growing library
- 🔒 Updated continually with cool resources
- 🔒 Lets you keep your downloads organised
- 🔒 Browse and access your content from anywhere
- 🔒 No more torn disc pages to ruin your magazines
- 🔒 No more broken discs
- 🔒 Print subscribers get all the content
- 🔒 Digital magazine owners get all the content too!
- 🔒 Each issue's content is free with your magazine
- 🔒 Secure online access to your free resources



This is the new FileSilo site that replaces your disc. You'll find it by visiting the link on the following page.

The first time you use FileSilo you'll need to register. After that, you can use the email address and password you provided to log in.

The most popular downloads are shown in the carousel here, so check out what your fellow readers are enjoying!

If you're looking for a particular type of content like brushes or fonts, use the filters here to refine your search.

Can't find the resource you're looking for in these filters? Click on More Options to specify exactly what kind of resource you want.

Green open padlocks show the issues you have accessed. Red closed padlocks show the ones you need to buy or unlock.

Top Downloads are listed here, so you can get an instant look at the most popular downloaded content.

Check out the Highest Rated list to see the resources that other readers have voted for as the best!

Find out more about our online stores, and useful FAQs like our cookie and privacy policies and contact details.

Discover our amazing sister magazines and the wealth of content and information that they provide.

# HOW TO USE **FileSilo**

EVERYTHING YOU NEED TO KNOW ABOUT ACCESSING YOUR NEW DIGITAL REPOSITORY

To access FileSilo, please visit [www.filesilo.co.uk/webdesigner-231](http://www.filesilo.co.uk/webdesigner-231)

**01** Follow the instructions on-screen to create an account with our secure FileSilo system, or log in and unlock the issue by answering a simple



question about the magazine. You can access the content for free with your issue.

**02** If you're a print subscriber, you can easily unlock all the content by entering your unique Subscriber ID. You can find this on all correspondence from Imagine Publishing, including the clear plastic envelopes your magazine gets delivered to your door in every month.

**03** You can access FileSilo on any desktop, tablet or smartphone device using any popular browser (such as Safari, Firefox or Google Chrome). However, we recommend that you use a desktop to download content, as you may not be able to download files to your phone or tablet.

**04** If you have any problems with accessing content on FileSilo, or with the registration process, take a look at the FAQs online or email [filesilohelp@imagine-publishing.co.uk](mailto:filesilohelp@imagine-publishing.co.uk).



**SLIDE-IN MENU**

**OBSTER**

Off canvas menu  
Create a slide-in menu...

227 33 kB (zip) 0 0 3

**CSS SCROLLING BACKGROUND**

Hello, we're **Elespacio.**

Create a constant scrolling background  
Use CSS to add animation to backgrounds...

227 2 kB (zip) 0 0 3

**JQUERY**

OVER THE HILLS  
*the Dead pirates*

Line animations with jQuery  
Create a Looney Tunes style opener...

227 1 kB (zip) 2 0 3

## MORE TUTORIALS AND INSPIRATION?

Web Designer is all about giving web designers and developers what they want. Make sure that you pay a visit to the Web Designer website where you will find a treasure trove of design and development tutorials. All the latest technologies and tools are covered including HTML5, CSS3, jQuery, PHP and responsive design. Plus, delve into the lives of the world's biggest agencies with our exclusive interviews. Find out how they design and develop some of the best websites seen on the web.



[www.webdesignermag.co.uk](http://www.webdesignermag.co.uk)

Issue 232 of **web designer** is on sale **05 February 2015** from [GreatDigitalMags.com](http://GreatDigitalMags.com)



# FOR THE GNU GENERATION

www.linuxuser.co.uk

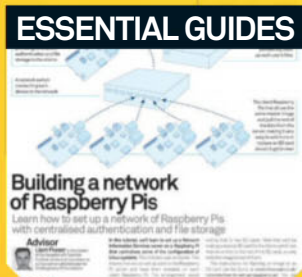


## Linux User & Developer

Available from all good newsagents & supermarkets today

ON SALE NOW:

» SUSECon '14 report » Raspberry Pi robots » Total online privacy



# BUY YOUR ISSUE TODAY

Print edition available at [www.imagineshop.co.uk](http://www.imagineshop.co.uk)

Digital edition available at [www.greatdigitalmags.com](http://www.greatdigitalmags.com)

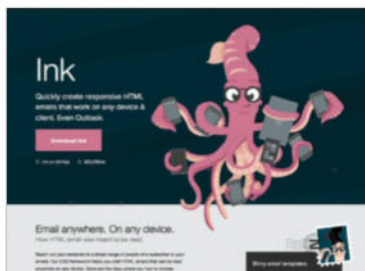
Available on the following platforms



facebook.com/LinuxUserUK twitter.com/LinuxUserMag

# FUTURE FRAMEWORKS

A definitive list of the best contemporary frameworks. Find out how to use them to build future-proof sites



## MAKE EMAILS RESPONSIVE

Design emails that will work on all devices with Zurb's INK framework



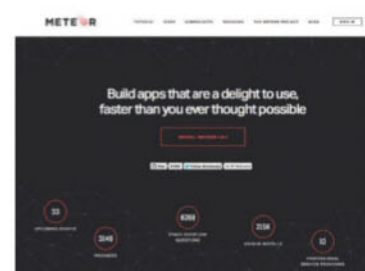
## DYNAMIC SITES WITH PYTHON

How to use the powerful language for more effective site builds



## HOW TO CODE 3D WITH CSS

Add a different dimension with the king of styling, CSS



## FAST APPS WITH METEOR.JS

Build brilliant applications quicker than you ever thought possible

Visit the **WEB DESIGNER** online shop at

**imagineshop.co.uk**

for back issues, books and merchandise

ALL IN YOUR LATEST  
**WEB DESIGNER**  
Issue 232 on sale  
Thursday 5th February 2014





ART  
+

TECH

## A fusion of creativity

Brilliant technology. Amazing art. It's a match that helps deliver great images and videos to creative professionals like you.

40 million images  
2 million videos  
40,000 new files added daily

**shutterstock**<sup>®</sup>

Explore our innovative new tools  
at [shutterstock.com/labs](https://shutterstock.com/labs).



Only the best need apply...



We believe in better business online

| Telephone: 020 3004 9644

| Email: [info@iwdro.org](mailto:info@iwdro.org)

| [www.iwdro.org](http://www.iwdro.org)