EXCHANGE

Practical advice from industry experts

THIS MONTH FEATURING...

SARA SOUEIDAN

Sara is a frontend developer, writer and speaker from Lebanon
w: *sarasoueidan.com*
t: @SaraSoueidan

JASON LENGSTORF

Designer and developer Jason is spending 2015 traveling through Europe
w: *lengstorf.com*
t: @jlengstorf

LARA HOGAN

Lara is the senior engineering manager of performance at Etsy
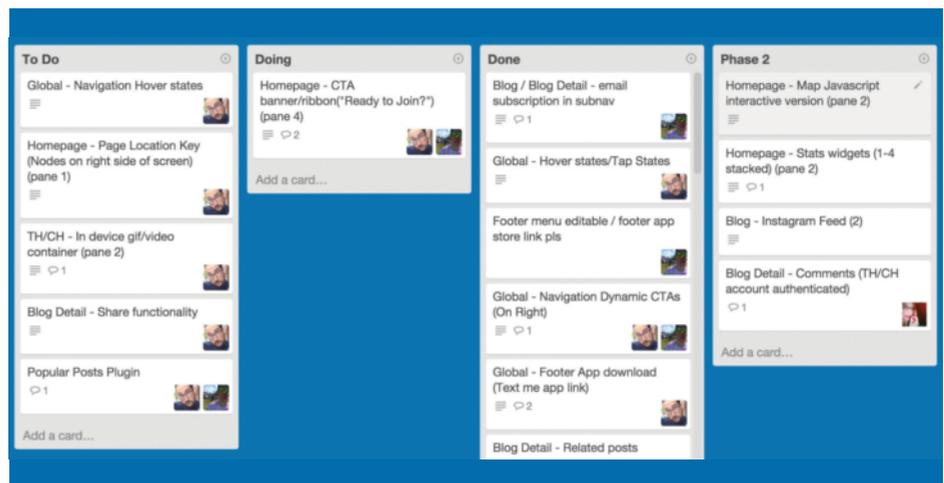**w:** *larahogan.me*
t: @lara_hogan

LUCASZ ZELENZY

Lukasz is the head of organic acquisition at uSwitch.com
w: *uswitch.com*
t: @LukaszZelezny

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* QUESTION OF THE MONTH

What are your tips for workflow across distributed teams?

Madeleine White, Staunton, UK

Distributed teams Tools like Trello (above) can help promote clear and effective communication

JL: In distributed teams, the need for well-defined expectations cannot be overstated. Every step left open to interpretation is a potential point of failure. For every project, write a thorough scope with clear deliverables – if there's anything on the list without a clear 'yes' or 'no' answer to determine if it's finished, the scope needs further clarification. Create concrete processes (and documentation) for any repeatable tasks. Choose tools the team will actually use – I recommend Trello (*trello.com*) and Slack (*slackhq.com*). Most important of all, trust your team to do the job they've been given.

SVG

CANVAS QUESTIONS

SVG or HTML5 Canvas?
Simon Nolan, Manchester, UK
SS: It depends on what you are working on. SVG has many advantages over HTML5 Canvas – the most important being that SVG content is accessible, while Canvas content is not. Moreover, animating SVGs with CSS, SMIL or JS is easier than animating Canvas – the latter requires that you draw every single frame using JavaScript, while SVG can additionally be animated using declarative syntax (CSS or SMIL).

SVG has an accessible DOM API, many authoring and optimisation tools, and – of course – is scalable. These advantages

Mike MacDougall - Performance Hero

Mike found many opportunities to reduce scroll jank in the apps, including removing blending backgrounds and using rasterization.
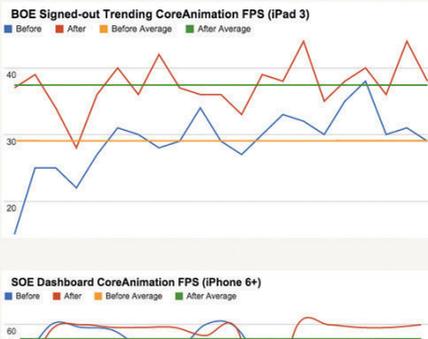
Incentives The team at Etsy has a 'Performance Hero' award to celebrate great site improvements

make SVG the better choice for things like infographics, for example, and web app user interfaces. HTML5 Canvas is a great choice for creating interactive and dynamic bitmap images, generating and exporting raster graphics, editing images, and operations that require pixel-based control.

PERFORMANCE
BUY-IN INCENTIVES
What's your advice on incentivising buy-in of web performance through gamification in a team environment?
Kevin Lozandier, California, US
LH: We celebrate performance wins from other development teams at Etsy. We have a wall monitor dedicated to celebrating a 'Performance Hero' – someone who has found a great performance improvement on their product or feature and improved the site substantially. We update this and dole out lots of high fives whenever there's a big new win; people respond really well to the positivity and encouragement. We've found that when people see it, they're reminded to look for their own performance wins.

SEO
PR SECRETS
Do you think SEO and PR are coming a lot closer together, with great PR leading to better rankings?
James Bavington, Rugby, UK
LZ: During the last few years, it's been clear that PR and SEO are playing on the

same team. It's kind of a trend now. You can see the same with SEO and social media, for example. When PR is really focused on high quality content, we SEOs may help with nuances like search volume, optimisation and seasonal demand fluctuation. All of that helps PR content to rank better and that's why, whenever possible, PR and SEO should work closely together.

WORKFLOW
SILVER BULLETS
Do you think agile is the silver bullet for all workflow problems?
Bailey Bradley, Sheffield, UK
JL: Unfortunately, there's no such thing as a silver bullet. I've seen agile teams implode, and waterfall teams run like well-oiled machines. The trick is to find an approach that everyone in your organisation is willing to follow, then follow it religiously. This is doubly important for management! If the process isn't followed, it's completely useless. But when everyone works together and plays by the same rules, teams tend to function wonderfully.

SEO
ON THE WAY OUT
Will SEO become obsolete?
Phil Ward, Adelaid, AU
LZ: SEO is at the root of search engines so the concept of it will remain the same. Imagine how a search engine would look without organic results – it would just be a classifieds website. A few years

Should we use CSS, JS or SMIL for animations?
Jack Hawkings, Rome, IT

SS: CSS, SMIL and JavaScript each have pros and cons. Weigh them up with your needs to make a decision .... *[For an extended answer, visit netm.ag/SS-265]*

**CSS FOR TRANSFORMATIONS**
CSS is often great for animations. CSS animations on SVGs perform better on mobile than SMIL animations. However, not all SVG properties can be animated via CSS.
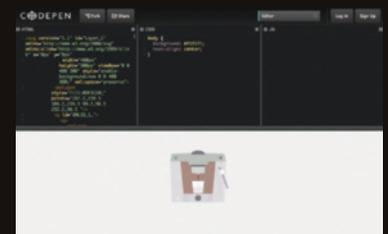
SMIL ISN'T FUTURE-PROOF
The advantage to SMIL animations over JS animations is that they are preserved when the SVG is embedded as an image. However, SMIL will be deprecated in favour of the Web Animations API.
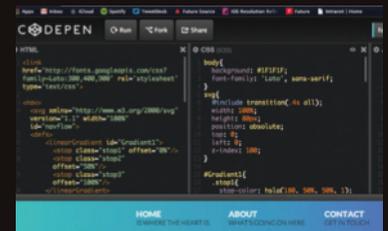
JS OFFERS CREATIVE FREEDOM
JS makes animating easier if you use one of many available SVG animation libraries, and gives you finer control over timing functions and easing.

ago, people were freaking out about voice recognition search, saying it would kill SEO and the way we used to use search engines. The only place I see people using voice recognition is on commercials trying to sell voice recognition. Long live SEO!

PERFORMANCE
RETINA RESOLUTION
Are double-res images worth their weight? Especially if traffic to your site is under 6 per cent retina?
Andy Layman, Seattle, US
LH: Using the new picture spec, you're able to deliver correctly-sized images (including retina) to the right devices, which is a huge performance win as it reduces unnecessary overhead. The question is really: is the development time needed to optimise and deliver those images worth it, if your traffic is under 6 per cent retina? Weigh the development investment against the engagement metric gains from delivering more beautiful images.

SVG
CLEANED UP
I'd love to know best SVG 'cleaning up' practices – Illustrator and Sketch leave bloat.
James Rosen, San Francisco, US
SS: Editors do generate a lot of bloat and unnecessary code that you can (read: should) remove before using your SVG. Cleaning up SVG code is recommended whether you are going to dig into the code and style/animate/script the SVG, or you are going to just use the SVG as a static image on your website. The most popular SVG optimisation tool is SVGO (*github. com/svg/svgo*). SVGO comes with many tools that you can fit into almost any workflow – like Grunt and Gulp plugins, OS X folder actions and GUIs.

Note that optimising an SVG using SVGO could change the SVG document structure and might eventually affect any scripting and animations you have applied, so choose your optimisations wisely. If you are only going to use the SVG as a static image, you won't have anything to worry about – just make sure the SVG `viewBox` is preserved.

Retina resolution Here the size at which the Google logo is displayed is smaller than the size of the logo file

SEO
SITEMAP SHARING
Sitemap submission – yes or no?
Jordan Foord, Sydney, AU
LZ: There is a big ongoing debate about the pros and cons, and dos and don'ts relating to sitemaps. My answer is – it doesn't cost anything to generate one (especially if you use *XML-Sitemaps.com* or similar), but it may help your site to have one. Remember about the HTML version too, as a part of your website.

PERFORMANCE
HACK HANGOVER
Will there be a hangover from all our performance 'hacks' once HTTP/2 and SPDY is rolled out?
Justin Avery, London, UK
LH: Yes! I wish we could say that one day we will be in HTTP/1 land, and a switch will be flipped, and the next day we'll be in HTTP/2 land. Unfortunately, there will be a long time in which we have to plan for a mix of the two. We'll have to continue to do things like concatenate assets for a while. As we creep closer to more support, check out: *caniuse. com/#feat=spdy* for specific cases.

SVG
SCALE AND ROTATE
What is the best option for scaling and rotating SVG elements in a group through JS? On the group or each element?
Leif Ringstad, Copenhagen, DK
SS: For JS, SMIL or CSS animations, it depends on whether you want to preserve the spatial relationships of the elements within the group. If you want to preserve

them, transform the entire group. If you only need to transform one element in the group, then do just that.

SEO
SUBDOMAINS
Are subdomains bad practice for SEO?
Lallo Vigil, Colorado, US
LZ: It's more about website architecture than SEO. Take a look at Wikipedia or HubPages. Wikipedia places each language version on a subdomain, while HubPages – a blogging platform – places each user on a subdomain. If any user starts linking to their own blogposts against Google's TOS, a manual action will likely be placed on a specific subdomain rather than the whole site.

WORKFLOW
EMAIL TIMESAVERS
Is there a way to automate some of the emails I have to write for every project?
Louis Castaldo, Florida, US
JL: Absolutely! For personal use, try TextExpander for Mac (*netm.ag/text-265*) or PhraseExpress for Windows (*phraseexpress.com*). With these you can create abbreviations for your frequently used snippets of text. For example, when I type 'callme' it auto-expands to my hours and contact info. If you're working on a team, tools like Zendesk have 'macros', which are like TextExpander snippets with added functionality. Both tools allow for variable input where you can insert the client's name or other info that changes in each message. Give these a try – it should save you thousands of keystrokes a day! ∎