MontpellierJS News

Du 29/03/2019 au 28/05/2019

Articles

- <u>Kyle Simpson: 'I've Forgotten More JavaScript Than Most People Ever Learn'</u> This
 is a heck of a bold quote to pick for a title, but it's still a neat interview with the
 author of the fantastic <u>You Don't Know JS books</u> (which you can still read online for
 free).
- How Facebook is Building the New Facebook.com with React, GraphQL and Relay —
 The forthcoming redesign is <u>fully powered by React and Relay</u> and this 35 minute
 digs into the technicalities.

Best Practices

- <u>JavaScript Clean Code: Some Best Practices</u> You might not sign up for all of them (particularly those around classes and inheritance), but these 'Uncle Bob'-inspired tips might help you think more about how you name things and structure your code.
- <u>'Make It Hard to Screw Up'-Driven Development</u> Great points from Chris Coyier here. "We'll always be screwing up code, but we can also always be finding ways not to." Those ways include leaning on tools like linters and JSX, and even your co-workers.
- Move fast with confidence Paul Armstrong @ ReactEurope 2019
- Recommended VS Code Extensions for Angular Developers John Papa

Design Patterns

- <u>The Design Patterns Game</u> A quick online game to help test your familiarity with the 'Gang of Four' design patterns.
- <u>Design Patterns in Modern JavaScript Development</u> An architecture-focused post that aims to whet your appetite for software design patterns.

Functional Programming

 <u>Functional-ish JavaScript</u> — Baby steps you might want to consider when making your JavaScript code more functional in nature.

Unit Testing

How to Know What to Test — "Given enough time and experience, you develop an
intuition for knowing what to test."

- <u>The Perfect Unit Test</u> You might recognize Jack's name if you've been a long time subscriber as he used to write a lot of great posts. He's back now with some basic tips on how to craft better unit tests.
- Eric Elliott ponders what TDD means to him in TDD Changed My Life.

Node.js

- <u>'You Should Never Ever Run Directly Against Node.js in Production. Maybe.'</u> In short, directly running Node apps (particularly those that act as servers) can be brittle, so why not use tools like supervisor, nodemon or pm2 to keep things robust?
- <u>Choosing The Right Node.js Framework: Next, Nuxt, Nest?</u> A handy examination of the differences between three very popular server-side rendering frameworks.

In-Depth

- What's New in JavaScript At this week's Google I/O '19, Mathias Bynens and Sathya Gunasekaran of the V8 team gave a fantastic 30 minute 'state of the union' on the state of JavaScript as a language and what new features are being baked in.
- <u>JavaScript Engines: How Do They Even Work?</u> A whirlwind tour covering concepts like the call stack, memory, event loop, and callback queue.

Beyond JavaScript

- <u>Web Components Will Replace Your Frontend Framework</u> A bold claim but Danny makes a lot of good points and shows off the basic concepts well.
- How We Used WebAssembly to Speed Up Our Webapp by 20X A case study
 exploring how to speed up web apps by replacing slow JavaScript calculations with
 compiled WebAssembly. (Note: WebAssembly is becoming soimportant lately that
 we're working on a special issue about it. Watch this space.)
- WebAssembly at eBay: A Real-World Use Case Notes on how the eBay
 engineering team approached building a better barcode scanner using WebAssembly
 to replace a pure JavaScript version.

Conferences

- Angular Fans! Here's All The Talks from ng-conf 2019 There's a lotto go through here, but this is truly a one-stop shop for up to date Angular talks. Highlights include the keynote talk, how enterprises are using Angular, John Papa delivering a batch of Angular tips, and a complete workshop on using ngRx for state management.
 - If you prefer a write-up of what's going on in the Angular world, Sam Julien has written up the state of Angular at ng-conf 2019.

- <u>ReactEurope 2019</u> The Original European React Conference (<u>day 1</u>, <u>day 2</u>, <u>lightning talks</u>). J'ai eu la chance d'y aller grâce à ma boîte (Rakuten Aquafadas), et voici les présentations que j'ai bien aimées :
 - The State of React Jared Palmer* (introduction)
 - Saving the Web, 16ms at a Time Joshua Comeau (optimisation)
 - o React-spring: on animations and hooks Alec Larson (animations)
 - Move fast with confidence Paul Armstrong* (bonnes pratiques)
 - Coders are the new Rock Stars Dan Stein aka DJ Fresh (fun)
 - FBT: An i18n Framework for Complex Grammar & UI John Watson (traduction)
 - A year of CodeSandbox, tech edition Ives van Hoorne (à 22 ans, il écrit un IDE utilisable dans le navigateur, refuse une offre de Facebook et lève 2,4 millions de dollars d'investissements, sympa!)
 - Security and Data in React Richard Threlkeld (sécurité)
 - The Future of the Web Lee Byron (évolution du web)
 - My 1st experience with TypeScript Sébastien Picq* (TypeScript)
 - <u>Five Steps Towards Your Testing Dream Lisa Gagarina</u>* (tests unitaires)
 - * : mes préférées

Releases & Announcements

- Microsoft has <u>launched React Native for Windows</u>, bringing the once native mobile development framework to Windows 10 desktop, Xbox, and tablet ecosystems too.
- <u>Announcing TypeScript 3.4</u> The optionally static typed JavaScript superset takes another step forward introducing faster incremental builds, type inference improvements, and const assertions.
- <u>Announcing TypeScript 3.5 Release Candidate</u> Faster (in both type checking and incremental builds), a new Omit helper type, smarter union type checking, and more.
- Node.js 12 Released, And It's a Big One The newest 'current' branch of Node.js upgrades to <u>V8 7.4</u> which brings many memory and perf improvements for free as well as support for private class fields, TLS 1.3, diagnostic reports, <u>all-new ES module support</u>, and more. NodeSource also have <u>a webinar on new features in Node 12</u> next Wednesday.
 - New Features in Node 12 You Shouldn't Miss Node 12 came out last week, and this post reflects on some of the new features.
- <u>Create React App 3.0 Released</u> The popular tool to set up a modern React app in a single command takes some key steps forward with support for Jest 24, hooks, TypeScript linting, and more.
- <u>Vue DevTools 5.0: A DevTools Extension for Debugging Vue Apps</u> A significant new release (<u>5.0.0</u>) that adds a variety of new features including new tabs and NativeScript support. For <u>Firefox</u> and <u>Chrome</u>.
- Material-UI 4.0: Google Material Design-Inspired React Components

- Relay 4.0.0 Released: A Framework for Building Data-Driven React Apps "Simply declare your data requirements using GraphQL and let Relay figure out how and when to fetch your data."
- <u>Electron 5.0.0 Released</u> Just 3 months after 4.0, Electron 5, the popular system for building Node and Web technology based desktop apps, is here. It's mostly a dependency bump release, but with Node 12 and Chromium 73 now under the hood, that's no bad thing.
- <u>GitHub Gets Its Own npm-Supporting Package Registry</u> npm packages are one of a few types of package that can be hosted and this will certainly shake up the JavaScript packaging ecosystem. NodeSource has <u>a list of the pros and cons</u> of this development for Node developers.
- <u>Babylon.js 4.0: The (Very) Powerful WebGL Graphics Engine</u> Such a significant release that they've released <u>a 2 minute video trailer</u> for it! With 4.0 Babylon has gone fully modular, so it's more efficient than ever to distribute to end users. Want to play? Enjoy <u>this editable live demo.</u>

Tools

- Faster, Smarter JavaScript Debugging in Firefox DevTools If you haven't tried out Firefox for a while, now's a great time as the JavaScript debugging tools in the developer edition have had some huge improvements, such as support for setting breakpoints within a line, logpoints, and the ability to debug Web Workers.
- <u>Majestic: A Zero Config GUI for Jest</u> An interesting tool to help make your
 JavaScript testing life a little easier. Try it now by running npx majestic in the folder
 of any project that uses <u>Jest</u> for testing (assuming you have npm installed).
- Octotree 3.0: A Browser Extension for Greater GitHub Code Trees A tool that gives
 you an IDE-like code tree when browsing projects on GitHub.
- <u>Shepherd: Guide Your Users Through a Tour of Your App</u> A way to step-by-step highlight features of your app/page. Try the <u>live demo</u>. Angular, Ember, React, and Vue wrappers are available.
- <u>react-spring</u> Bring your components to life with simple spring animation primitives. Sa <u>vidéo</u> à ReactEurope 2019.

Learning

- <u>JavaScript Allongé: A Deep Dive into JavaScript's Functionality, Composition, and More</u> A long-time popular JavaScript e-book that's now free (if you so choose).
 The ultimate in weekend reading.
- <u>The Front-End Developer Handbook 2019</u> This popular, detailed guide returns for another year. Updated with plenty of useful resources, learning materials and dev tools.

Security

 A DoS vulnerability <u>has been found in the popular Axios HTTP library</u> where a malicious server operator could gum down your client-side code.

Interesting

- Advanced Map Shading with JavaScript and WebGL This is a really neat and thorough look at an interesting use for JavaScript: shading satellite imagery. The final result is beautiful.
- Watch Me Build a Trading Bot Siraj is one of the more engaging developers on YouTube and here he shows off the development of a currency trading bot using a variety of JavaScript related technologies.
- To celebrate Minecraft's 10th birthday, Mojang have rebuilt Minecraft Classic in JavaScript and made it free to play. The source shows they've used Babylon.js for the 3D.
- <u>React LoadCon: Use Your Favicon to Show Progress</u> Turns your page's favicon (as displayed in the browser tab) into a donut or circle that can indicate progress.
 <u>GitHub repo</u>.

Sources: <u>DailyJS</u>, <u>JavaScript Weekly</u>, <u>React Status</u>.

Alane Parisot, pour MontpellierJS (alane.parisot@gmail.com).