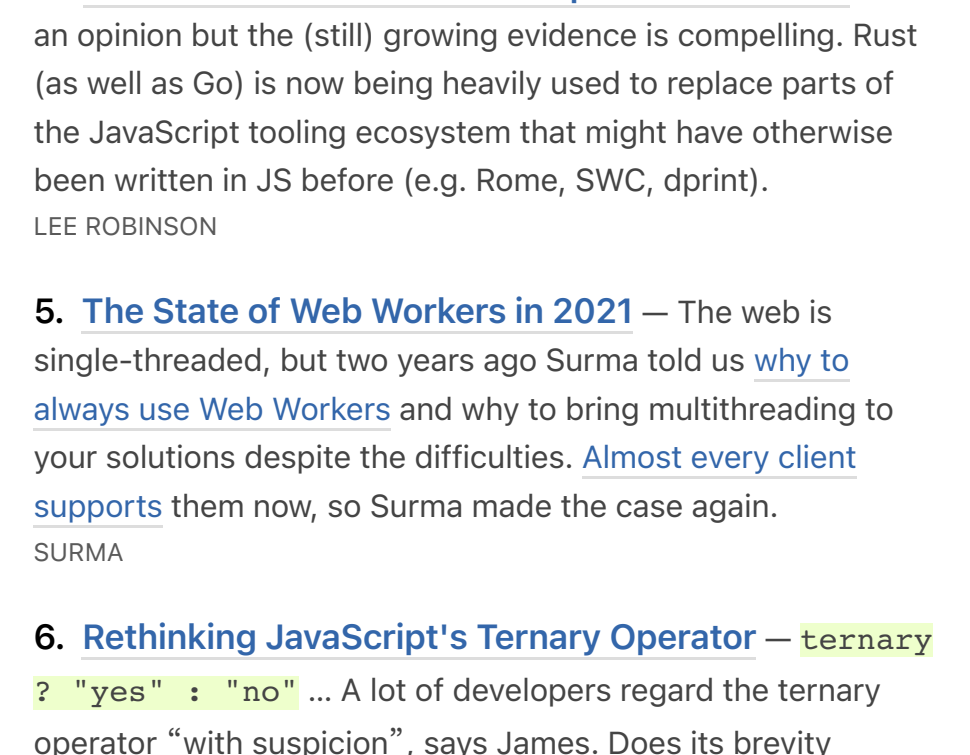


JavaScript Weekly

The Best of JavaScript Weekly in 2021

This is the last issue of the year (we're back on January 7, 2022) so we're taking a look back at some of the most popular items of 2021, starting with top links overall before moving on to top libraries, tools, videos, and more. You'll also find a quick month by month rundown in this issue, so there's sure to be something that'll catch your attention :-)

Peter Cooper, your editor



**1. ES2021: Here's the Features (Quickly)** — Back in June of this year, the Ecma General Assembly [approved ES2021](#). Work continues with [ECMAScript 2022 already having a draft spec](#). But this post flying through what's new in ES2021 (not a lot!) was *by far* our most popular link of the year, amazingly. Dr. Axel Rauschmayer also had a popular post [rounding up ES2021](#).

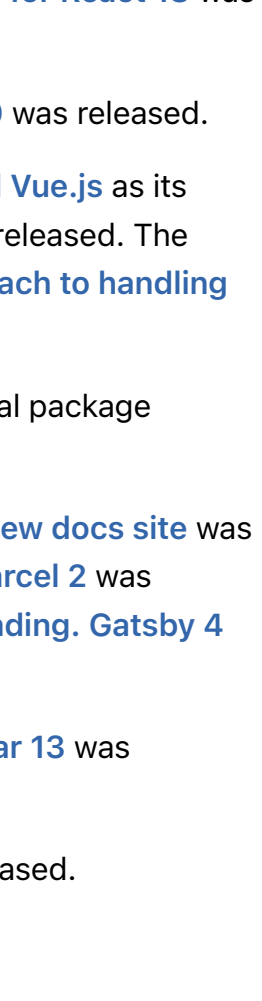
HEMANTH HM

**2. Comparing Svelte and React** — After spending an extended period of time working with both, the author identified his preference based on first hand observations supported with real-world examples. I suspect 2022 will continue to see Svelte taking big leaps forward.

JACK FRANKLIN

**Build a Mobile-Responsive Telehealth Pager App Using Stream's Chat API** — With Direct and Group Chats, emojis & Reactions, Built-in GIF support, the ability to edit & delete messages, specialized commands, and much more, this fully responsive Medical Pager is the best Chat App that you can currently find on YouTube.

STREAM SPONSOR



**3. Comparing the New Generation of Build Tools** — A detailed evaluation of a variety of approaches for bundling JavaScript and other front-end assets, including Snowpack, esbuild, Vite, and wmr. A handy overview.

HUGH HAWORTH

**4. 'Rust is the Future of JavaScript Infrastructure'** — It's an opinion but the (still) growing evidence is compelling. Rust (as well as Go) is now being heavily used to replace parts of the JavaScript tooling ecosystem that might have otherwise been written in JS before (e.g. Rome, SWC, dprint).

LEE ROBINSON

**5. The State of Web Workers in 2021** — The web is single-threaded, but two years ago Surma told us [why to always use Web Workers](#) and why to bring multithreading to your solutions despite the difficulties. [Almost every client supports](#) them now, so Surma made the case again.

SURMA

**6. Rethinking JavaScript's Ternary Operator** — [ternary ? "yes" : "no"](#) ... A lot of developers regard the ternary operator “with suspicion”, says James. Does its brevity warrant its use alone? Is it something you can “trust”? James also looks at a future alternative coming to the language.

JAMES SINCLAIR

**React Authentication, Simplified** — In this article, we lay out a new approach to authentication (plus access control & SSO) in React applications.

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JavaScript's 2021: Month by Month

**JANUARY:** The [State of JS 2020 results](#) came out. As did [Snowpack 3.0](#). React's original creator [left Facebook](#).

**FEBRUARY:** [npm 7.0](#) was released, as was [Vite 2.0](#).

**MARCH:** The Node.js team began thinking about [the next 10 years of Node](#). Meanwhile, [jQuery 3.6.0 was released](#). [V8 sped up its release cycle](#). The [ES2021 candidate spec](#) was released. [V8 9.0](#) was released. The [Deno company was founded](#).

**APRIL:** [Node.js 16](#) was released. The ES module approach in Node [began to take off](#).

**MAY:** The Rome folks [created a company, raised money, hired folks](#) and more.

**JUNE:** [Undici 4](#) was released and pushed as a new better alternative HTTP client for Node.js. The [plan for React 18](#) was unveiled. ES2021 was fully approved.

**JULY:** Low code environment [Node-RED 2.0](#) was released.

**AUGUST:** The Wikimedia Foundation [picked Vue.js](#) as its frontend framework of choice. [Vue 3.2](#) was released. The Ruby on Rails team considered [a new approach to handling JavaScript](#) in its popular Ruby framework.

**SEPTEMBER:** Node.js gained an experimental package manager *manager* (sic) called [Corepack](#).

**OCTOBER:** [Node 17](#) was released. React's [new docs site](#) was unveiled. jQuery Mobile [was deprecated](#). [Parcel 2](#) was released. The Remix project took [\\$3m in funding](#). [Gatsby 4](#) was released.

**NOVEMBER:** [React 18 entered beta](#). [Angular 13](#) was released. Remix was [open sourced](#).

**DECEMBER:** [Create React App 5.0](#) was released.

Top Code & Tools of 2021

**zx: A Tool for Writing Better Shell Scripts** — Rather than using something like [bash](#) to throw together a quick script, [zx](#) provides a variety of niceties to do the same with the JavaScript you know and love.

GOOGLE

**Over 100 Algorithms and Data Structures Demonstrated in JS** — Examples of many common algorithms (e.g. bit manipulation, Pascal's triangle, Hamming distance) and data structures (e.g. linked lists, tries, graphs) with explanations.

OLEKSII TREKHLEB ET AL.

**Shortcut Puts the Agile in Agile and the “Can” in Kanban**

SHORTCUT (FORMERLY CLUBHOUSE.IO) SPONSOR

**HTM 3.1.0: A JSX Alternative using Standard Tagged Templates** — This clever library has been around a few years but continues to see updates. Think JSX-style syntax but in plain JavaScript (using tagged templates) that requires *no transpilation* but still supports things like rest spread and referencing components.

JASON MILLER

css ×html ×javascript ×

write some tags

**Tagify: An Elegant Input Component for Tags** — The polished demos show a lot of effort has been put in here.

GITHUB REPO.

YAIR EVEN-OR

**Typehole: VS Code Tool to Automatically Generate TypeScript Types and Interfaces** — An extension that helps you automate creating the initial static types for runtime values.

RIKU ROUVILA

**Cheetah Grid: The Fastest Open-Source Data Table for the Web?** — A bold claim from a library we hadn't encountered before. There's [a live demo here](#) with 1,000,000 records in a table if you want to try it for yourself, though. A new release just dropped this week too.

FUTURE CORP

Jobs

**React Frontend or Full-Stack Engineer at Uplift (US Consultancy)** — Enjoy a flexible schedule while building web and mobile apps with modern technologies on a wide variety of projects.

UPLIFT AGENCY LTD

**Engineering Manager - Front End (Remote)** — With over 8 million clients, Kraken is one of the world's largest, most successful bitcoin exchanges.

KRAKEN

**Find JavaScript Jobs with Hired** — Create a profile on Hired to connect with hiring managers at growing startups and Fortune 500 companies. It's free for job-seekers.

HIRED

Popular Videos of 2021

► **JavaScript's Creator Brendan Eich Shares His JavaScript Story** — Lex Fridman is an AI researcher who's becoming well known for high quality [interviews](#) and here he spoke with Brendan Eich about his coding history, JavaScript's full origin story, the browser wars, and Brave.

LEX FRIDMAN

► **What You Need to Know About React 18** — This year we shared [this official plan for React 18](#) and while it's still 'almost here' the community set to work chewing over what it all means.

HARRY WOLFF

**Beyond onClick: Handling Events in React**

LIGHTSTEP SPONSOR

► **Coding Up a Mario Game in JavaScript with Kaboom.js** — One of the most popular JavaScript YouTubers of 2021 showed us how to create a basic platformer in the course of an hour in her typically breezy, easy to follow manner.

ANIA KUBÓW

► **Ten JavaScript Clean Code Examples** — Thoughts on ten examples of approaches worth considering if you're trying to keep your code clean. It's based on [this article](#) by Ibeh Ubachukwu.

ADRIAN TWAROG

► **Have Single-Page Apps Ruined the Web?** — The creator of frontend framework Svelte spoke about the criticisms lodged towards single-page apps and how 'transitional apps' may be the way forward. Might be an idea to keep in mind for 2022.

RICH HARRIS

That's a wrap..

Phew, that was a lot of ground to re-cover, but hopefully it's resurfaced some things you missed at the time :-)

Many thanks for reading JavaScript Weekly this year. From all of us here at Cooperpress, season's greetings to you, however you celebrate (or not!) 😊

—

Peter Cooper, your editor

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