


# Web Platform News

All daily news items from June 2019

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*"Web Platform News has long been one of my favorite resources for staying up to date with web development news. Šime doesn't just cover what's new, he covers what's important."*

— Chris Coyier, CSS-Tricks

*"If you've ever had trouble following the fire-hose of Web Standards and general front end development news and content, Šime's work is an invaluable resource for summarizing everything into an easy to skim list. It exists at just the right level of abstraction that helps me be more efficient in my work."*

— Zach Leatherman, Filament Group

- [Fantasai](#): The CSS *text-decoration-width* property has been renamed to **text-decoration-thickness** to make the name of this feature more intuitive and less confusing. (Ed. note: The *text-decoration-thickness* property is already supported in Safari. See [issue 1004](#) for more information.)
- [Zach Leatherman](#): Wakamai Fondue ([wakamaifondue.com](https://wakamaifondue.com)) is a website that can inspect a font file and show its supported **OpenType features** (e.g., fractions), including information about which features are on by default and the CSS code for turning on the ones that are off by default.

- [Thomas Steiner](#): If you're implementing a dark mode on your website, consider **making photographs slightly darker** in dark mode, e.g., by applying CSS *filter: grayscale(50%)* to all non-SVG images ("the majority of the surveyed people prefer slightly less vibrant and brilliant images when dark mode is active").
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- [Adrian Roselli](#): In your website's navigation menu, consider adding the ***aria-current="page"*** attribute to the `<a>` element that corresponds to the currently displayed page.
  - [Hidde de Vries](#): All major browsers allow you to inspect the current page's **accessibility tree**. In Firefox devtools, open the Accessibility panel (you have to enable it in Settings first). In Chrome devtools, open the Accessibility tab in the Elements panel. In Safari, open the Node tab in the Elements panel.
  - [Marshall Vale](#): Google's **DNS over HTTPS** (DoH) service is now generally available. Google's DoH server is located at the [dns.google](https://dns.google) domain (the older, experimental service is still at [dns.google.com](https://dns.google.com) and will be retired in 30 days).
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- [Jake Archibald](#): Instead of showing a potentially annoying "Update available" notification, web games can **automatically apply the update** (and reload the page) when the user presses the "Start" button (to start the game). (Ed. note: The relevant part starts [at 10:15](#).)
- [Raghavendra Satish Peri](#): When **validating web forms** in the browser (using JavaScript), "move the focus to the first form control that has the error or ... the common error message" and "associate the inline errors with form fields by using the *aria-describedby* attribute."
- [J r mie Patonnier](#): Firefox Nightly has added support for setting (and animating) **SVG Geometry Properties** (*x*, *y*, etc.) with CSS ([demo](#)). This feature is already supported in Chrome and Safari.

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- [Jeremy Keith](#): You can check if your web page was **served from cache** in the browser and optionally display a message notifying the user that the page might be out of date (and that they can try refreshing it). One way to detect this is to inject a timestamp into the HTML document on your web server and then compare that timestamp to the user's current time in the browser (via the JavaScript *Date* API).
  - [Colin Bendell](#): Half of all mobile devices have a device pixel ratio (DPR) of 3 or higher (DPR = CSS pixel size / device pixel size), but most people **can't distinguish beyond DPR 2**, at standard viewing distances.
  - [Eric Lawrence](#): Chrome and Firefox allow users to restore the previous browser session on startup. If you select this option, "closing the browser does not delete your session cookies and doesn't empty the HTML session storage ... Browsers with this option configured might keep session cookies alive for a very long time."

"Given this session resumption behavior, it's more important than ever to ensure that your site behaves reasonably upon receipt of an **outdated session cookie** (e.g., redirect the user to the login page instead of showing an error)."

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- [Preet Shih](#): Google's **<model-viewer> web component** is used by Shopify (an e-commerce platform) and NASA (e.g., on [this page](#)), among others.
  - [Michelle Barker](#): In Firefox, some web platform features are experimentally implemented and disabled by default. You can enable individual features for testing purposes on the **about:config page** (e.g., CSS subgrid).
  - [Ben Nadel](#): When CSS *overflow: scroll* is applied to a scroll container whose content doesn't overflow, on macOS the scroll bar will be hidden — because scroll bars are only shown when scrolling, by default — but on Windows it will be shown regardless. Use *overflow: auto* instead to consistently **hide scroll bars** when there is no overflow.

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- [William Woodruff](#): WebAuthn is currently limited to security keys (so, it's not a free option for users) but upcoming Android releases will allow users to use their **phone as a security key**, i.e., Android devices will function as WebAuthn-compatible second factors.
  - [Jeff Posnick](#): Google Search uses a service worker to **locally cache search results**. If the user searches for the same terms again within a short period of time, the search results are served from service worker cache. The service worker is also used to provide a meaningful offline experience:

"The results won't be available until there's an Internet connection, but the service worker allows the search to be deferred and sent to Google's servers as soon as the device goes back online using the Background Sync API."

- [Jordon Mears](#): The preview version of **Google Earth for Web**, powered by WebAssembly, is now available. You can try out the beta ([direct link](#)) in Chromium-based browsers and Firefox — it runs single-threaded in browsers that don't have (re-)enabled *SharedArrayBuffer* yet — but not in Safari because of its lack of full support for WebGL2.

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- [Remy Sharp](#): [webmention.app](#) is a site that makes it easy to send **outgoing webmentions** (a webmention is the evolution of a pingback). For example, if you publish a blog post that includes a link to a site that accepts webmentions, you can use [webmention.app](#) to automatically send that notification.
  - [Daniel Tonon](#): "`<section>` is a generic **catch-all sectioning element** that you use when it doesn't make sense to use the other sectioning elements." A rule of thumb for using it correctly: "If you can't think of a meaningful heading to apply to a `<section>`, then it probably shouldn't be a `<section>`."
  - [Gilles Dubuc](#): Event Timing is experimentally available in Chrome (as an Origin Trial), and Wikipedia is taking part in the trial. This API can be used to accurately

determine the **duration of event handlers** with the goal of surfacing slow events. "We quickly identified 3 very frequent slow click handlers experienced frequently by real users on Wikipedia."

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- [Raghavendra Satish Peri](#): If you provide additional instructions for a form field (e.g., "Use DD/MM/YY" below a text field), use the ***aria-describedby* attribute** to bind the instruction to the field. "If the instruction is not bound to form fields, then assistive technology users who use the Tab key might miss key information."
  - [Kyle Pflug](#): Microsoft is developing a new **WebView2 control** powered by the upcoming Chromium-based Microsoft Edge that will allow developers to host web content within native Windows apps. "For the first time, Windows apps (UWP or Win32) will be able to leverage fully modern and fully consistent web platform across all versions of Windows, without requiring extra overhead."
  - [Ethan Marcotte](#): The CSS *::first-letter* pseudo-element can be used to style **drop caps** but their alignment isn't consistent across the major browser engines, and the box heights are too tall.
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- [Vittorio Giovara](#): Vimeo is contributing to the development of rav1e, **Mozilla's AV1 encoder**: "In order for AV1 to succeed, there is a need of an encoder like x264, a free and open-source encoder, written by the community, for the community, and available to everyone. Vimeo believes in what Mozilla is doing."
- [Adrian Roselli](#): The "**Using ARIA**" specification includes a section that lists all the ARIA roles and properties that are not available as features in HTML ([section 2.14](#)).
- [Nick Doty](#): When using **permissioned features**, explain the implications of a permission before prompting the user and don't assume that a permission granted once guarantees permanent access.

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- [Louis Lazaris](#): When retrieving the **dimensions of a DOM element**, the `getBoundingClientRect` method returns more precise values than the `offsetWidth` and `offsetHeight` properties, and it also takes into account the transformations that are applied to the element via CSS Transforms.
  - [Federico Viticci](#): "Google Docs is now fully usable in the **iPad version of Safari**, including rich text formatting and real-time chat. In fact, the Google Docs website accessed on iPadOS is now better than the Google Docs app for iPad, which only offers a subset of functionalities of the web app."
  - [Diego González](#): Samsung is experimentally working on a CSS library based on their new One UI design language. It is called **One UI CSS** and includes styles for common form controls such as buttons, menus, and sliders, as well as other assets (web fonts, SVG icons, polyfills).

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- [Jonathan Davis](#): The next version of Safari will add support for the **`navigator.maxTouchPoints` property**, which returns "the maximum number of simultaneous touch contacts supported by the device." (Ed. note: This feature, which is already supported on Android, can be used to detect if the device supports multi-touch.)
  - [Simeon Vincent](#): We plan to replace the blocking Web Request API, but our goal isn't to weaken ad blockers. With the new API, Chrome will no longer have to **expose sensitive data to extensions**. ("The browser can perform the action requested by the extension without sending it all the data associated with the network request.")
  - [Sam Thorogood](#): You can use the **`matches` method** to test if a DOM element matches a CSS class or ID value.
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- [Philip Walton](#): Chrome experimentally supports the **Layout Instability API**. Websites can use this performance API to monitor unexpected layout shifts. (Ed. note: There's a "How to avoid unexpected layout shifts" section at the end.)
  - [Mark Nottingham](#): "DNS over TLS (DoT) encrypts DNS traffic, and **DNS over HTTPS** (DoH) goes one step further by effectively hiding it inside of encrypted web traffic, thereby making it difficult to observe, block or modify."
  - [Daniel Aleksandersen](#): If you serve a favicon in the **ICO format**, consider enabling Gzip (or Brotli) compression for it on your web server (the two relevant media types are *image/vnd.microsoft.icon* and *image/x-icon*).
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- [Javier Fernández](#): The new **CSS *white-space: break-spaces*** value enables responsive logging systems that fully "preserve the text formatting of the logged information." (Ed. note: See the second image in the "The feature" section.)
  - [Sam Thorogood](#): You can wrap a web form in a `<fieldset>` element and then toggle its *disabled* attribute to **disable all form fields** at once, for example, to prevent users from interacting with form fields during form submission.
  - [Maciej Kocemba](#): The preview version of **Opera GX** for Windows is now available. This is a special version of Opera that lets users limit how much CPU and RAM is available to the browser.
  - [Pete LePage](#): The next version of Chrome will show an **install icon in the address bar** on desktop if the site meets Chrome's PWA installability criteria.
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- [Sam Thorogood](#): DOM elements have useful methods, including *remove*, which removes the element from the DOM tree, and ***prepend* and *append***, which add one or more nodes to the element (as children).

- [Rob Larsen](#): The HTML5 Boilerplate CSS file, main.css, has renamed the “visuallyhidden” class to “**sr-only**” (screen reader-only) to make its purpose more clear. (Ed. note: See [issue 948](#) for more information about visually hidden elements.)
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- [Liv Erickson](#): **Hubs by Mozilla** is a web app that allows users to create virtual rooms and share them with other people, for collaboration and communication. Hubs is now available on Oculus Quest (a standalone, wire-free VR headset).
  - [Azu](#): The JavaScript **optional chaining operator** (*obj?.prop*) and nullish coalescing operator (*x ?? y*) proposals have been moved to Stage 2 of the TC39 process. (Ed. note: See [issue 902](#) for more information about the TC39 process.)
  - [Adrian Roselli](#): “Try to ensure that interactive controls are at least **44 by 44 pixels in size** ... and have enough dead space between them to help avoid mis-clicks or mis-taps.”
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- [Joseph Pecoraro](#): Web Inspector in the latest Safari Technology Preview includes a new **CPU usage timeline** that breaks down CPU usage by individual threads (main, worker, and other) over time.
  - [Willow Cheng](#): Chrome and Safari (but not Firefox) display **language-appropriate quotation marks** if the page declares the language of the quotation via the `<q lang>` attribute (e.g., `<q lang="fr">Bonjour le monde</q>`).
  - [Chris Coyier](#): Firefox is experimentally implementing a feature that would automatically reserve space for images (that are sized using CSS) based on their width and height attributes in the HTML code in order to **reduce layout jank** during page load.
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- [Petter Nilsen](#): If Google removes the **webRequest API** from Chromium without implementing an adequate alternative, we will consider restoring the API in the Vivaldi browser and creating a limited extensions store.
  - [Owen Williams](#): When the user chooses “**Sign in with Apple**” on iOS, Apple “anonymizes the user’s email address and identity almost entirely, so the developer never receives their real details.”
  - [Šime Vidas](#): CSS Scroll Snap is supported in Chrome, Safari, and the next version of Firefox. **Scroll snapping** works well on touch screen devices but there are some usability issues on desktop platforms.
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- [Dave Camp](#): Firefox now blocks **cookies from known trackers** by default (when the cookie is used in a third-party context). This change is currently in effect only for new Firefox users; existing users will be automatically updated to the new policy “in the coming months.”
  - [Stefan Judis](#): When serializing objects via `JSON.stringify()`, if the object has a **custom toJSON method**, the return value of that method will be serialized instead.
  - [Alan Toner](#): New research suggests that **targeted ads** bring publishers just 4% more in revenue than contextual ads.
  - [Pete LePage](#): Chrome for Android now allows websites to **share images** (and other file types) via the `navigator.share` method. (Ed. note: See [issue 1014](#) for more information about the Web Share API).
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- [Alan Jeffrey](#): Patrick Walton from Mozilla is working on a vector graphics renderer that can **render text smoothly at all angles** when viewed with an AR (Augmented Reality) headset. We plan to use it in our browsers for AR headsets (Firefox Reality).

- [Valerie Young](#): The ECMAScript **Internationalization APIs** for date and time formatting (*Intl.DateTimeFormat* constructor), and number formatting (*Intl.NumberFormat* constructor) are widely supported in browsers.
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- [Hadley Beeman](#): The W3C Technical Architecture Group (responsible for managing the Web architecture) has published a set of 12 **ethical principles**, incl. the responsibility to build web technologies that counter misinformation (“allowing information sources to be traceable”) and user agents that allow users to render web content as they want (user style sheets, ad blockers, etc.).
  - [Brian Wong](#): Twitter, which supports security key-based two-factor authentication (2FA), has switched from U2F to FIDO2, the newest **authentication protocol**, which includes the JavaScript WebAuthn API. (Ed. note: See [issue 980](#) for more information about FIDO2.)
  - [Harry Roberts](#): Hosting your static assets on other sites (CDNs) hinders **HTTP/2 prioritization**.

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