

Cross-Browser Compatibility Checklist

HTML & CSS

- Use semantic HTML5 elements (e.g., <header>, <main>, <section>).
- Validate HTML/CSS using W3C Validator and CSS Validator.
- Use a CSS reset or normalize.css to remove inconsistent default styles.
- Avoid proprietary or deprecated tags (e.g., <marquee>, <center>).
- Use vendor prefixes where needed (e.g., -webkit-, -ms-, -moz-) — or automate with Autoprefixer.

Layout & Styling

- Check Flexbox and Grid behavior across Chrome, Firefox, Safari, and Edge.
- Verify z-index stacking, position, and overflow rules.
- Test form elements (inputs, buttons, dropdowns) for consistent styling and behavior.
- Avoid using browser-specific pseudo-elements or selectors without fallbacks.

JavaScript

- Use transpilation tools like Babel to support older browsers (e.g., IE11, if needed).
- Add polyfills for features like fetch, Promise, or Object.assign if used.
- Avoid or handle optional chaining (?), nullish coalescing (??), etc., carefully.
- Check event handling differences (focus, click, etc.).

Features & APIs

- Use feature detection (e.g., 'geolocation' in navigator) rather than user-agent sniffing.
- Use Modernizr or similar to conditionally load scripts/styles for unsupported features.
- Ensure accessibility APIs and ARIA attributes behave consistently across screen readers and browsers.

Responsive Design

- Check responsiveness on all major browsers using developer tools.
- Test media queries, flex wrapping, and viewport units (vw/vh).
- Confirm touch events work on mobile browsers (iOS Safari, Android Chrome).

Testing

- Test on latest versions of Chrome, Firefox, Safari, Edge (and IE11 if required).
- Use tools like BrowserStack, CrossBrowserTesting, or LambdaTest for cross-browser device emulation.
- Perform manual and automated tests with different screen sizes and OS combinations.

Debugging

- Use browser dev tools to compare rendering issues.
- Log and test for JavaScript errors specific to each browser.
- Watch for differences in how cookies, localStorage, or sessionStorage behave.