

Related Roadmaps

Frontend Roadmap

JavaScript Roadmap

# Frontend Performance

## High Priority

- ☐ Minimize number of iframes
- ☐ Minified CSS - Remove comments, whitespaces etc
- ☐ CSS files are non-blocking
- ☐ Inline the Critical CSS (above the fold CSS)
- ☐ Avoid the embedded / inline CSS
- ☐ Analyse stylesheets complexity
- ☐ Compress your images / keep the image count low
- ☐ Choose your image format appropriately
- ☐ Minify your JavaScript
- ☐ Non Blocking JavaScript: Use async / defer
- ☐ Use HTTPs on your website
- ☐ Keep your page weight < 1500 KB (ideally < 500 kb)
- ☐ Keep your page load time < 3 seconds
- ☐ Keep the Time To First Byte < 1.3 seconds
- ☐ Minimize HTTP Requests
- ☐ Serve files from the same protocol
- ☐ Avoid requesting unreachable files (404)
- ☐ Set HTTP cache headers properly
- ☐ GZIP / Brotli compression is enabled

## Medium Priority

- ☐ Minified HTML - Remove comments and whitespaces
- ☐ Use Content Delivery Network
- ☐ Prefer using vector image rather than bitmap images
- ☐ Set width and height attributes on images (aspect ratio)
- ☐ Avoid using Base64 images
- ☐ Offscreen images are loaded lazily
- ☐ Ensure to serve images that are close to your display size
- ☐ Avoid multiple inline JavaScript snippets <script>
- ☐ Keep your dependencies up to date
- ☐ Check for performance problems in your JavaScript files
- ☐ Service Workers for caching / performing heavy tasks
- ☐ Cookie size should be less than 4096 bytes
- ☐ Keep the cookie count less than 20

## Low Priority

- ☐ Pre-load URLs where possible
- ☐ Concatenate CSS into a single file
- ☐ Remove unused CSS
- ☐ Use WOFF2 font format
- ☐ Use preconnect to load your fonts faster
- ☐ Keep the web font size under 300kb
- ☐ Prevent Flash or Invisible Text
- ☐ Keep an eye on the size of dependencies

## Performance Tools

- PageSpeed Insights
- Lighthouse
- WebPageTest
- Chrome DevTools
- Bundlephobia
- Squoosh.app

## More Resources

- Framework Specific Guides
- Recommended Talks / Guides