http://127.0.0.1:5501/04_optimization/optim/index.html   ⋮

64 Performance
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Performance

Values are estimated and may vary. The [performance score is calculated](#) directly from these metrics. [See calculator.](#)

▲ 0–49   50–89   90–100

METRICS   Expand view

First Contentful Paint	▲ Time to Interactive
2.2 s	**9.3 s**

Speed Index	Total Blocking Time
4.1 s	**10 ms**

▲ Largest Contentful Paint	Cumulative Layout Shift
9.9 s	**0**

[View Treemap]   [View Original Trace]

Show audits relevant to: All   FCP   TBT   LCP   CLS

OPPORTUNITIES

Opportunity	Estimated Savings
▲ Enable text compression	3 s ⌄
▲ Reduce unused JavaScript	2.55 s ⌄

⚠ Eliminate render-blocking resources   **1 s** ⌄

Reduce unused CSS   **0.15 s** ⌄

These suggestions can help your page load faster. They don't [directly affect](#) the Performance score.

DIAGNOSTICS

○ Avoid chaining critical requests — 10 chains found   ⌄

○ Keep request counts low and transfer sizes small — 33 requests • 1,351 KiB   ⌄

○ Largest Contentful Paint element — 1 element found   ⌄

○ Avoid long main-thread tasks — 4 long tasks found   ⌄

○ Avoid non-composited animations — 5 animated elements found   ⌄

More information about the performance of your application. These numbers don't [directly affect](#) the Performance score.

PASSED AUDITS (31)   Show

84

Accessibility

These checks highlight opportunities to [improve the accessibility of your web app](#). Only a subset of accessibility issues can be automatically detected so manual testing is also encouraged.

ARIA

⚠ Elements with an ARIA `[role]` that require children to contain a specific `[role]` are missing some or all of those required children.   ⌄

⚠ `[role]`s are not contained by their required parent element   ⌄

These are opportunities to improve the usage of ARIA in your application which may enhance the experience for users of assistive technology, like a screen reader.

CONTRAST

⚠️ Background and foreground colors do not have a sufficient contrast ratio.   ⌄

These are opportunities to improve the legibility of your content.

TABLES AND LISTS

⚠️ List items (`<li>`) are not contained within `<ul>` or `<ol>` parent elements.   ⌄

These are opportunities to improve the experience of reading tabular or list data using assistive technology, like a screen reader.

ADDITIONAL ITEMS TO MANUALLY CHECK (10)   Show

These items address areas which an automated testing tool cannot cover. Learn more in our guide on conducting an accessibility review.

PASSED AUDITS (21)   Show

NOT APPLICABLE (19)   Show

100

Best Practices

TRUST AND SAFETY

○ Ensure CSP is effective against XSS attacks   ⌄

GENERAL

○ Detected JavaScript libraries   ⌄

PASSED AUDITS (13)   Show

NOT APPLICABLE (1)   Show

92

SEO

These checks ensure that your page is following basic search engine optimization advice. There are many additional factors Lighthouse does not score here that may affect your search ranking, including performance on Core Web Vitals. Learn more.

CONTENT BEST PRACTICES

⚠   Document does not have a meta description ⌄

Format your HTML in a way that enables crawlers to better understand your app's content.

ADDITIONAL ITEMS TO MANUALLY CHECK (1)   Show

Run these additional validators on your site to check additional SEO best practices.

PASSED AUDITS (11)   Show

NOT APPLICABLE (2)   Show

Captured at Feb 18, 2023, 10:09 AM GMT+7

Initial page load

Emulated Moto G4 with Lighthouse 9.6.8

Slow 4G throttling

Single page load

Using Chromium 110.0.0.0 with devtools

Generated by **Lighthouse** 9.6.8 | File an issue