







77

100





Performance

Accessibility

Best Practices

SEO

**PWA** 



# Performance

Values are estimated and may vary. The <u>performance score</u> is <u>calculated</u> directly from these metrics. <u>See calculator</u>.

0-49

50-89

90-100



**METRICS** 

First Contentful Paint

28.3 s

First Contentful Paint marks the time at which the first text or image is painted. <u>Learn more</u>.

▲ Time to Interactive

32.8 s

Time to interactive is the amount of time it takes for the page to become fully interactive. <u>Learn more</u>.

Collapse view

▲ Speed Index

28.3 s

Speed Index shows how quickly the contents of a page are visibly populated. <u>Learn more</u>.

▲ Total Blocking Time

1,010 ms

Sum of all time periods between FCP and Time to Interactive, when task length exceeded 50ms, expressed in milliseconds. <u>Learn more</u>.

Largest Contentful Paint

32.3 s

Largest Contentful Paint marks the time at which the largest text or image is painted. <u>Learn more</u>

**Cumulative Layout Shift** 

0

Cumulative Layout Shift measures the movement of visible elements within the viewport. <u>Learn more</u>.

#### 7/17/22, 9:16 AM

view Original Trace | view Treemap

















Show audits relevant to: All FCP TBT LCP CLS

### **OPPORTUNITIES**

Opportunity Estimated Savings

▲ Enable text compression

22.35

s

Text-based resources should be served with compression (gzip, deflate or brotli) to minimize total network bytes. <u>Learn</u> <u>more</u>. FCP <u>LCP</u>

URL	Transfer Size	Potential Savings
/vendor.js (localhost)	3,770.0 KiB	2,971.9 KiB
/main.js (localhost)	791.1 KiB	715.4 KiB
/styles.css (localhost)	264.1 KiB	226.3 KiB
/polyfills.js (localhost)	297.0 KiB	223.6 KiB
/styles.js (localhost)	302.5 KiB	219.4 KiB
/scripts.js (localhost)	87.4 KiB	57.2 KiB
/runtime.js (localhost)	6.5 KiB	4.8 KiB

Reduce unused JavaScript

13.5 s ^

Reduce unused JavaScript and defer loading scripts until they are required to decrease bytes consumed by network activity. <u>Learn more</u>. <u>[LCP]</u>

URL	Transfer Size	Potential Savings
/vendor.js (localhost)	3,770.3 KiB	1,784.8 KiB
@angular/core/fesm2015/core.mjs	1,128.6 KiB	409.8 KiB
jquery/dist/jquery.js	306.6 KiB	226.8 KiB

JRL	Transfer Size	Potentia Savings
@angular/animations/fesm2015/browser.mjs	164.3 KiB	141.8 KiE
@angular/forms/fesm2015/forms.mjs	277.8 KiB	110.4 KiE
@angular/cdk/fesm2015/overlay.mjs	133.2 KiB	93.7 KiE
main.js (localhost)	791.4 KiB	509.6 KiE
app/Shared/register-page/register-page.component.html	25.5 KiB	25.5 KiE
app/TAC/create-invite/create-invite.component.html	25.0 KiB	25.0 KiE
app/Management/department-performance/department-performance.component.html	17.0 KiB	17.0 Kil
app/TAC/tac-edit-pool-member/tac-edit-pool-member.component.html	12.8 KiB	12.8 Kil
app/TAC/tac-employee-dashboard/tac-employee-dashboard.component.html	9.7 KiB	9.7 Ki
styles.js (localhost)	302.8 KiB	263.6 Ki
/node_modules/jquery/dist/jquery.min.js	131.3 KiB	99.3 Ki
/node_modules/html-entities/lib/named-references.js	67.1 KiB	67.1 Ki
/node_modules/webpack-dev-server/client/modules/logger/index.js	26.3 KiB	26.3 Ki
/node_modules/events/events.js	14.8 KiB	14.8 Ki
/node_modules/webpack-dev-server/client/index.js	8.1 KiB	8.1 Ki
polyfills.js (localhost)	297.3 KiB	78.7 Ki
node_modules/zone.js/fesm2015/zone.js	124.9 KiB	39.2 Ki
node_modules/events/events.js	14.8 KiB	11.5 Ki
node_modules/webpack-dev-server/client/modules/logger/index.js	26.3 KiB	7.7 Ki
node_modules/html-entities/lib/index.js	7.8 KiB	5.5 Ki
node_modules/webpack-dev-server/client/overlay.js	6.7 KiB	5.2 Ki
scripts.js (localhost)	87.7 KiB	65.9 Ki
	87.7 KiB	65.9 Ki

▲ Minify JavaScript 10.8 s ^

Minifying JavaScript files can reduce payload sizes and script parse time. <u>Learn more</u>. FCP <u>LCP</u>

URL	Transfer Size	Potential Savings
/vendor.js (localhost)	3,770.3 KiB	1,865.6 KiB
/main.js (localhost)	791.4 KiB	105.4 KiB

URL	Transfer Size	Potential Savings
/polyfills.js (localhost)	297.3 KiB	98.8 KiB
/styles.js (localhost)	302.8 KiB	78.1 KiB
/runtime.js (localhost)	6.8 KiB	3.8 KiB

▲ Eliminate render-blocking resources

2.79 s ^

Resources are blocking the first paint of your page. Consider delivering critical JS/CSS inline and deferring all non-critical JS/styles. Learn more. (FCP) (LCP)

## ✓ Show 3rd-party resources (6)

URL	Transfer Size	Potential Savings
/css2?family=Heebo:wght@400;500;600;700&display=swap (fonts.googleapis.com)	0.9 KiB	1,040 ms
css/all.min.css (cdnjs.cloudflare.com)	10.5 KiB	1,350 ms
font/bootstrap-icons.css (cdn.jsdelivr.net)	9.1 KiB	1,230 ms
css/bootstrap.min.css (cdn.jsdelivr.net)	23.8 KiB	420 ms
/css2?family=Roboto:wght@300;400;500&display=swap (fonts.googleapis.com)	0.8 KiB	200 ms
/styles.css (localhost)	264.4 KiB	3,020 ms
/9cb8fe11af.js (kit.fontawesome.com)	4.4 KiB	1,010 ms

▲ Reduce unused CSS

1.8 s ^

Reduce unused rules from stylesheets and defer CSS not used for above-the-fold content to decrease bytes consumed by network activity. Learn more. FCP [LCP]

### ✓ Show 3rd-party resources (2)

URL Transfe	
/styles.css (localhost) 264.4 Ki	B 255.3 KiB
css/bootstrap.min.css (cdn.jsdelivr.net) 23.8 Ki	B 23.2 KiB

URL	Transfer Size	Potential Savings
<pre>/*! * Font Awesome Free 6.1.1 by @fontawesome - https://fontawesome.com * License - https://fontaw</pre>	20.0 KiB	19.8 KiB
css/all.min.css (cdnjs.cloudflare.com)	10.5 KiB	10.4 KiB

# ▲ Remove duplicate modules in JavaScript bundles

1.65 s ^

Remove large, duplicate JavaScript modules from bundles to reduce unnecessary bytes consumed by network activity.

Source	Transfer Size	Potential Savings
node_modules/html-entities		149.30 KiB
/polyfills.js (localhost)	75.50 KiB	
/vendor.js (localhost)	73.85 KiB	
/styles.js (localhost)	75.45 KiB	
node_modules/webpack-dev-server		117.90 KiB
/polyfills.js (localhost)	59.60 KiB	
/vendor.js (localhost)	58.30 KiB	
/styles.js (localhost)	59.60 KiB	
node_modules/events		29.30 KiB
/polyfills.js (localhost)	14.85 KiB	
/vendor.js (localhost)	14.50 KiB	
/styles.js (localhost)	14.80 KiB	
node_modules/ansi-html-community		8.40 KiB
/polyfills.js (localhost)	4.25 KiB	
/vendor.js (localhost)	4.15 KiB	
/styles.js (localhost)	4.25 KiB	
node_modules/webpack		2.70 KiB
/polyfills.js (localhost)	1.35 KiB	
/vendor.js (localhost)	1.35 KiB	
/styles.js (localhost)	1.35 KiB	

1.06 s

Preload Largest Contentful Paint image

Preload the image used by the LCP element in order to improve your LCP time. Learn more. [LCP]

	URL	Potential Savings
img	Images/Current.jpg (localhost)	1,060 ms

Serve images in next-gen formats

0.15 s ^

Image formats like WebP and AVIF often provide better compression than PNG or JPEG, which means faster downloads and less data consumption. <u>Learn more</u>.

	URL	Resource Size	Potential Savings
img	Images/Scheduled.jpg (localhost)	59.2 KiB	30.1 KiB
img	Images/Upcoming.jpg (localhost)	53.6 KiB	22.7 KiB
img	Images/Current.jpg (localhost)	49.5 KiB	19.0 KiB
img.profile-img.mb-2	Images/profilepng (localhost)	22.8 KiB	18.2 KiB

These suggestions can help your page load faster. They don't <u>directly affect</u> the Performance score.

# DIAGNOSTICS

Serve static assets with an efficient cache policy — 11 resources found

A long cache lifetime can speed up repeat visits to your page. Learn more.

URL	Cache TTL	Transfer Size
/vendor.js (localhost)	None	3,770 KiB
/main.js (localhost)	None	791 KiB
/styles.js (localhost)	None	303 KiB
/polyfills.js (localhost)	None	297 KiB
/styles.css (localhost)	None	264 KiB
/scripts.js (localhost)	None	88 KiB
Images/Scheduled.jpg (localhost)	None	59 KiB
Images/Upcoming.jpg (localhost)	None	54 KiB
Images/Current.jpg (localhost)	None	50 KiB
Images/profilepng (localhost)	None	23 KiB
/runtime.js (localhost)	None	7 KiB

Ensure text remains visible during webfont load

Leverage the font-display CSS feature to ensure text is user-visible while webfonts are loading. Learn more. FCP LCP

URL

Potential Savings

...webfonts/fa-solid-900.woff2 (cdnjs.cloudflare.com) 370 ms

▲ Image elements do not have explicit width and height

Set an explicit width and height on image elements to reduce layout shifts and improve CLS. Learn more CLS

URL

img.profile-img.mb-2 ....Images/profile\_.png (localhost)

Large network payloads cost users real money and are highly correlated with long load times. Learn more. [LCP]

✓ Show 3rd-party resources (1)

URL	Transfer Size
/vendor.js (localhost)	3,770.3 KiB
/main.js (localhost)	791.4 KiB
/styles.js (localhost)	302.8 KiB
/polyfills.js (localhost)	297.3 KiB
/styles.css (localhost)	264.4 KiB
/scripts.js (localhost)	87.7 KiB
webfonts/fa-solid-900.woff2 (cdnjs.cloudflare.com)	74.4 KiB
Images/Scheduled.jpg (localhost)	59.5 KiB
Images/Upcoming.jpg (localhost)	53.8 KiB
Images/Current.jpg (localhost)	49.8 KiB

Minimize main-thread work — 3.1 s

Consider reducing the time spent parsing, compiling and executing JS. You may find delivering smaller JS payloads helps with this. <u>Learn more</u> (TBT)

Category	Time Spent
Script Evaluation	1,394 ms
Other	1,008 ms
Parse HTML & CSS	284 ms
Style & Layout	256 ms
Script Parsing & Compilation	81 ms

Category	Time Spent
Rendering	71 ms
Garbage Collection	4 ms

Reduce JavaScript execution time - 1.4 s

Consider reducing the time spent parsing, compiling, and executing JS. You may find delivering smaller JS payloads helps with this. <u>Learn more</u>. (TBT)

✓ Show 3rd-party resources (1)

URL	Total CPU Time	Script Evaluation	Script Parse
/styles.js (localhost)	1,090 ms	1,042 ms	25 ms
Unattributable	813 ms	25 ms	1 ms
http://localhost:4200	473 ms	6 ms	3 ms
http://localhost:4200	462 ms	220 ms	0 ms
/9cb8fe11af.js (kit.fontawesome.com)	68 ms	62 ms	1 ms

O Avoid chaining critical requests — 13 chains found

The Critical Request Chains below show you what resources are loaded with a high priority. Consider reducing the length of chains, reducing the download size of resources, or deferring the download of unnecessary resources to improve page load. Learn more. FCP LCP

Maximum critical path latency: 1,650 ms

Initial Navigation

http://localhost:4200

/css2?family=Heebo:wght@400;500;600;700&display=swap (fonts.googleapis.com) - 320 ms, 0.88 KiB

- ...css/all.min.css (cdnjs.cloudflare.com)
  - ...webfonts/fa-solid-900.woff2 (cdnjs.cloudflare.com) 370 ms, 74.40 KiB
- ...font/bootstrap-icons.css (cdn.jsdelivr.net) 350 ms, 9.09 KiB
- ...css/bootstrap.min.css (cdn.jsdelivr.net) 350 ms, 23.83 KiB

/css2?family=Roboto:wght@300;400;500&display=swap (fonts.googleapis.com)

- ...v30/KFOmCnqEu....woff2 (fonts.gstatic.com) 110 ms, 11.38 KiB
- ...v30/KFOICnqEu....woff2 (fonts.gstatic.com) 320 ms, 10.84 KiB

/icon?family=Material+Icons (fonts.googleapis.com) - 350 ms, 0.41 KiB

/styles.css (localhost) - 20 ms, 264.38 KiB

/9cb8fe11af.js (kit.fontawesome.com) - 320 ms, 4.37 KiB

/runtime.js (localhost) - 10 ms, 6.80 KiB

/polyfills.js (localhost) - 40 ms, 297.28 KiB

/vendor.js (localhost) - 90 ms, 3,770.30 KiB

/main.js (localhost) - 70 ms, 791.35 KiB

O User Timing marks and measures — 35 user timings

Consider instrumenting your app with the User Timing API to measure your app's real-world performance during key user experiences. <u>Learn more</u>.

Name	Туре	Start Time	Duration
Zone	Measure	867.23 ms	0.47 ms
Zone:ZoneAwarePromise	Measure	867.77 ms	0.63 ms
Zone:util	Measure	870.98 ms	1.92 ms
Zone:legacy	Measure	872.99 ms	0.01 ms
Zone:queueMicrotask	Measure	873.06 ms	0.04 ms
Zone:timers	Measure	873.17 ms	1.53 ms
Zone:requestAnimationFrame	Measure	874.84 ms	0.06 ms
Zone:blocking	Measure	874.98 ms	0.13 ms
Zone:EventTarget	Measure	875.12 ms	1.28 ms
Zone:MutationObserver	Measure	876.4 ms	0.2 ms
Zone:IntersectionObserver	Measure	876.64 ms	0.16 ms
Zone:FileReader	Measure	876.82 ms	0.18 ms
Zone:on_property	Measure	876.99 ms	27.91 ms
Zone:customElements	Measure	904.99 ms	0.41 ms
Zone:XHR	Measure	905.45 ms	0.36 ms

Name	Туре	Start Time	Duration
Zone:geolocation	Measure	905.89 ms	0.21 ms
Zone:PromiseRejectionEvent	Measure	906.12 ms	0.08 ms
Zone	Mark	867.26 ms	
Zone:ZoneAwarePromise	Mark	867.78 ms	
Zone:toString	Mark	868.54 ms	
Zone:util	Mark	871 ms	
Zone:legacy	Mark	873 ms	
Zone:queueMicrotask	Mark	873.07 ms	
Zone:timers	Mark	873.17 ms	
Zone:requestAnimationFrame	Mark	874.86 ms	
Zone:blocking	Mark	874.99 ms	
Zone:EventTarget	Mark	875.12 ms	
Zone:MutationObserver	Mark	876.41 ms	
Zone:IntersectionObserver	Mark	876.65 ms	
Zone:FileReader	Mark	876.82 ms	
Zone:on_property	Mark	877 ms	
Zone:customElements	Mark	905.01 ms	
Zone:XHR	Mark	905.45 ms	
Zone:geolocation	Mark	905.9 ms	
Zone:PromiseRejectionEvent	Mark	906.12 ms	

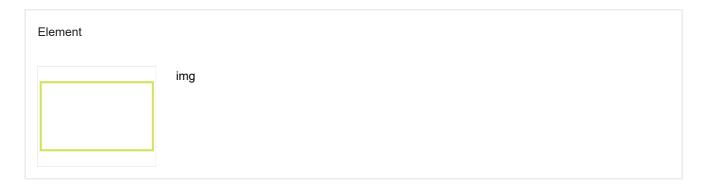
O Keep request counts low and transfer sizes small — 26 requests • 5,883 KiB

To set budgets for the quantity and size of page resources, add a budget.json file. <u>Learn more</u>.

Resource Type	Requests	Transfer Size
Total	26	5,883.0 KiB
Script	7	5,260.6 KiB
Stylesheet	7	309.9 KiB
Image	4	186.2 KiB
Font	3	96.6 KiB
Other	4	27.5 KiB
Document	1	2.2 KiB
Media	0	0.0 KiB
Third-party	14	174.0 KiB

O Largest Contentful Paint element — 1 element found

This is the largest contentful element painted within the viewport. <u>Learn More [LCP]</u>



O Avoid long main-thread tasks — 8 long tasks found

Lists the longest tasks on the main thread, useful for identifying worst contributors to input delay. Learn more TBT

✓ Show 3rd-party resources (1)

URL	Start Time	Duration
/styles.js (localhost)	32,098 ms	1,138 ms
/9cb8fe11af.js (kit.fontawesome.com)	4,530 ms	279 ms
Unattributable	742 ms	275 ms

URL	Start Time	Duration
http://localhost:4200	1,083 ms	226 ms
http://localhost:4200	615 ms	72 ms
Unattributable	1,017 ms	66 ms
http://localhost:4200	1,347 ms	60 ms
Unattributable	692 ms	50 ms

More information about the performance of your application. These numbers don't <u>directly affect</u> the Performance score.

PASSED AUDITS (21)	Hide
Properly size images	^
Serve images that are appropriately-sized to save cellular data and improve load time. Learn more.	
Defer offscreen images	^
Consider lazy-loading offscreen and hidden images after all critical resources have finished loading to lower time to interactive. <u>Learn more</u> .	
Minify CSS	^
Minifying CSS files can reduce network payload sizes. <u>Learn more</u> . FCP <u>LCP</u>	
Efficiently encode images	^
Optimized images load faster and consume less cellular data. <u>Learn more</u> .	
Preconnect to required origins	^

### Warnings:

- A `ink rel=preconnect>` was found for "https://fonts.gstatic.com" but was not used by the browser. Check that you are using the `crossorigin` attribute properly.
- More than 2 `link rel=preconnect>` connections were found. These should be used sparingly and only to the most important origins.

Consider adding `preconnect` or `dns-prefetch` resource hints to establish early connections to important third-party origins. <u>Learn more</u>. (FCP) (LCP)

Initial server response time was short — Root document took 10 ms Keep the server response time for the main document short because all other requests depend on it. Learn more. [FCP] LCP **URL** Time Spent http://localhost:4200 10 ms Avoid multiple page redirects Redirects introduce additional delays before the page can be loaded. Learn more. [FCP] [LCP] Preload key requests Consider using `<link rel=preload>` to prioritize fetching resources that are currently requested later in page load. Learn more. FCP [LCP] Use HTTP/2 HTTP/2 offers many benefits over HTTP/1.1, including binary headers and multiplexing. Learn more. Use video formats for animated content Large GIFs are inefficient for delivering animated content. Consider using MPEG4/WebM videos for animations and PNG/WebP for static images instead of GIF to save network bytes. Learn more [LCP]

Avoid serving legacy JavaScript to modern browsers — Potential savings of 1 KiB

Polyfills and transforms enable legacy browsers to use new JavaScript features. However, many aren't necessary for modern browsers. For your bundled JavaScript, adopt a modern script deployment strategy using module/nomodule feature detection to reduce the amount of code shipped to modern browsers, while retaining support for legacy browsers. <a href="Learn More"><u>Learn More (TBT)</u></a>

URL	Potential Savings
/polyfills.js (localhost)	0.2 KiB
polyfills.js:1054	@babel/plugin-transform-classes
/styles.js (localhost)	0.2 KiB
styles.js:4680	@babel/plugin-transform-classes
/vendor.js (localhost)	0.2 KiB

URL Potential Savings

vendor.js:16295 @babel/plugin-transform-classes

Avoids an excessive DOM size — 73 elements

A large DOM will increase memory usage, cause longer <u>style calculations</u>, and produce costly <u>layout reflows</u>. <u>Learn more</u>. <u>(TBT)</u>

Statistic	Element	Value
Total DOM Elements		73
Maximum DOM Depth	a.text-white	12
Maximum Child Elements	body.mat-typography	7

Minimize third-party usage  $\,$  — Third-party code blocked the main thread for 0 ms

Third-party code can significantly impact load performance. Limit the number of redundant third-party providers and try to load third-party code after your page has primarily finished loading. <u>Learn more</u>. (TBT)

Third-Party	Transfer Size	Main-Thread Blocking Time
Cloudflare CDN	85 KiB	0 ms
webfonts/fa-solid-900.woff2 (cdnjs.cloudflare.com)	74 KiB	0 ms
css/all.min.css (cdnjs.cloudflare.com)	10 KiB	0 ms
JSDelivr CDN	33 KiB	0 ms
css/bootstrap.min.css (cdn.jsdelivr.net)	24 KiB	0 ms
font/bootstrap-icons.css (cdn.jsdelivr.net)	9 KiB	0 ms
FontAwesome CDN	32 KiB	0 ms
css/free.min.css?token=9cb8fe11af (ka-f.fontawesome.com)	21 KiB	0 ms
css/free-v4-shims.min.css?token=9cb8fe11af (ka-f.fontawesome.com)	5 KiB	0 ms
/9cb8fe11af.js (kit.fontawesome.com)	4 KiB	0 ms

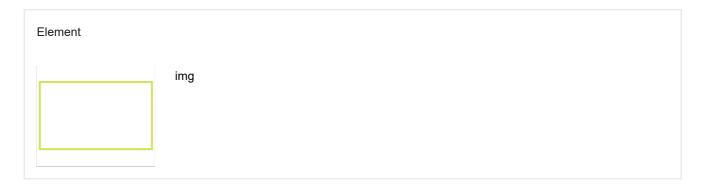
Third-Party	Transfer Size	Main-Thread Blocking Time
Google Fonts	24 KiB	0 ms
v30/KFOmCnqEuwoff2 (fonts.gstatic.com)	11 KiB	0 ms
v30/KFOICnqEuwoff2 (fonts.gstatic.com)	11 KiB	0 ms

Lazy load third-party resources with facades

Some third-party embeds can be lazy loaded. Consider replacing them with a facade until they are required. <u>Learn more</u>. <u>(TBT)</u>

Largest Contentful Paint image was not lazily loaded

Above-the-fold images that are lazily loaded render later in the page lifecycle, which can delay the largest contentful paint. <u>Learn more</u>.



Avoid large layout shifts

These DOM elements contribute most to the CLS of the page. [CLS]

Uses passive listeners to improve scrolling performance

Consider marking your touch and wheel event listeners as `passive` to improve your page's scroll performance. <u>Learn</u> <u>more</u>.

Avoids document.write()

For users on slow connections, external scripts dynamically injected via `document.write()` can delay page load by tens of seconds. <u>Learn more</u>.

Avoid non-composited animations

Animations which are not composited can be janky and increase CLS. Learn more CLS

mas a <meta name="viewport"> lag willi wiath oi initiai-scale

A `<meta name="viewport">` not only optimizes your app for mobile screen sizes, but also prevents <u>a 300 millisecond delay to user input</u>. <u>Learn more</u>. (TBT)

Avoids unload event listeners

The `unload` event does not fire reliably and listening for it can prevent browser optimizations like the Back-Forward Cache. Use `pagehide` or `visibilitychange` events instead. <u>Learn more</u>



# 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.

#### NAMES AND LABELS

▲ Image elements do not have [alt] attributes	b
Informative elements should aim for short, descriptive alternate text. Decorative elements can be ignored with an empty alt attribute. <u>Learn more</u> .	
Failing Elements	
img	
img	
img	

▲ Links do not have a discernible name	^
Link text (and alternate text for images, when used as links) that is discernible, unique, and focusable improves the navigation experience for screen reader users. <u>Learn more</u> .	
Failing Elements	
a.img-card	
a.img-card	
a.img-card	

These are opportunities to improve the semantics of the controls in your application. This may enhance the experience for users of assistive technology, like a screen reader.

#### ADDITIONAL ITEMS TO MANUALLY CHECK (10)

Hide

Tabbing through the page follows the visual layout. Users cannot focus elements that are offscreen. Learn more.

Interactive controls are keyboard focusable

Custom interactive controls are keyboard focusable and display a focus indicator. Learn more.

Interactive elements indicate their purpose and state

Interactive elements, such as links and buttons, should indicate their state and be distinguishable from non-interactive elements. Learn more.

The user's focus is directed to new content added to the page

A

If new content, such as a dialog, is added to the page, the user's focus is directed to it. <u>Learn more</u> .	
O User focus is not accidentally trapped in a region	
A user can tab into and out of any control or region without accidentally trapping their focus. Learn more.	
O Custom controls have associated labels	
Custom interactive controls have associated labels, provided by aria-label or aria-labelledby. <u>Learn more</u> .	
O Custom controls have ARIA roles	
Custom interactive controls have appropriate ARIA roles. <u>Learn more</u> .	
O Visual order on the page follows DOM order	
DOM order matches the visual order, improving navigation for assistive technology. <u>Learn more</u> .	
O Offscreen content is hidden from assistive technology	
Offscreen content is hidden with display: none or aria-hidden=true. <u>Learn more</u> .	
O HTML5 landmark elements are used to improve navigation	
Landmark elements ( <main>, <nav>, etc.) are used to improve the keyboard navigation of the page for assistive technology <a href="Learn more">Learn more</a>.</nav></main>	۱.
These items address areas which an automated testing tool cannot cover. Learn more in our guide on <u>conducting an accessibilit</u> review.	у.

PASSED AUDITS (10) Hide

[aria-hidden="true"] is not present on the document <body></body>	^
Assistive technologies, like screen readers, work inconsistently when `aria-hidden="true"` is set on the document ` <bod> <u>Learn more</u>.</bod>	ody>`.
[user-scalable="no"] is not used in the <meta name="viewport"/> element and the [maximum-scale] attribute is not less than 5.	\$
Disabling zooming is problematic for users with low vision who rely on screen magnification to properly see the conter a web page. <u>Learn more</u> .	nts of
[aria-hidden="true"] elements do not contain focusable descendents	^

Focusable descendents within an `[aria-hidden="true"]` element prevent those interactive elements from being available to users of assistive technologies like screen readers. Learn more. The page contains a heading, skip link, or landmark region Adding ways to bypass repetitive content lets keyboard users navigate the page more efficiently. Learn more. Background and foreground colors have a sufficient contrast ratio Low-contrast text is difficult or impossible for many users to read. Learn more. Document has a <title> element The title gives screen reader users an overview of the page, and search engine users rely on it heavily to determine if a page is relevant to their search. Learn more. [id] attributes on active, focusable elements are unique ^ All focusable elements must have a unique 'id' to ensure that they're visible to assistive technologies. Learn more. <html> element has a [lang] attribute If a page doesn't specify a lang attribute, a screen reader assumes that the page is in the default language that the user chose when setting up the screen reader. If the page isn't actually in the default language, then the screen reader might not announce the page's text correctly. Learn more. <html> element has a valid value for its [lang] attribute Specifying a valid <u>BCP 47 language</u> helps screen readers announce text properly. <u>Learn more</u>. Heading elements appear in a sequentially-descending order Properly ordered headings that do not skip levels convey the semantic structure of the page, making it easier to navigate and understand when using assistive technologies. Learn more. NOT APPLICABLE (32) Hide

O [accesskey] values are unique

Access keys let users quickly focus a part of the page. For proper navigation, each access key must be unique. Learn more.

O [aria-\*] attributes match their roles

Each ARIA `role` supports a specific subset of `aria-*` attributes. Mismatching these invalidates the `aria-*` attributes. Learn more.
O button, link, and menuitem elements have accessible names
When an element doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. <u>Learn more</u> .
O ARIA input fields have accessible names
When an input field doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. <u>Learn more</u> .
O ARIA meter elements have accessible names
When an element doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. <u>Learn more</u> .
ARIA progressbar elements have accessible names
When a `progressbar` element doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. <u>Learn more</u> .
O [role]s have all required [aria-*] attributes
Some ARIA roles have required attributes that describe the state of the element to screen readers. <u>Learn more</u> .
Elements with an ARIA [role] that require children to contain a specific [role] have all required children.
Some ARIA parent roles must contain specific child roles to perform their intended accessibility functions. <u>Learn more</u> .
[role]s are contained by their required parent element
Some ARIA child roles must be contained by specific parent roles to properly perform their intended accessibility functions. <u>Learn more.</u>
O [role] values are valid
ARIA roles must have valid values in order to perform their intended accessibility functions. <u>Learn more</u> .
O ARIA toggle fields have accessible names
When a toggle field doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. <u>Learn more</u> .

ARIA tooltip elements have accessible names	^
When an element doesn't have an accessible name, screen readers announce it with a generic name, making it unus for users who rely on screen readers. <u>Learn more</u> .	sable
ARIA treeitem elements have accessible names	^
When an element doesn't have an accessible name, screen readers announce it with a generic name, making it unus for users who rely on screen readers. <u>Learn more</u> .	sable
O [aria-*] attributes have valid values	^
Assistive technologies, like screen readers, can't interpret ARIA attributes with invalid values. <u>Learn more</u> .	
O [aria-*] attributes are valid and not misspelled	^
Assistive technologies, like screen readers, can't interpret ARIA attributes with invalid names. <u>Learn more</u> .	
O Buttons have an accessible name	^
When a button doesn't have an accessible name, screen readers announce it as "button", making it unusable for use rely on screen readers. <u>Learn more</u> .	rs who
O <dl>'s contain only properly-ordered <dt> and <dd> groups, <script>, <template> or <div> elements.</td><td>^</td></tr><tr><td>When definition lists are not properly marked up, screen readers may produce confusing or inaccurate output. <u>Learn</u></td><td>more.</td></tr><tr><td>O Definition list items are wrapped in <dl> elements</td><td>^</td></tr><tr><td>Definition list items (`<dt>` and `<dd>`) must be wrapped in a parent `<dl>` element to ensure that screen readers call properly announce them. <u>Learn more</u>.</td><td>n</td></tr><tr><td>O ARIA IDs are unique</td><td>^</td></tr><tr><td>The value of an ARIA ID must be unique to prevent other instances from being overlooked by assistive technologies. more.</td><td><u>Learn</u></td></tr><tr><td>O No form fields have multiple labels</td><td>^</td></tr><tr><td>Form fields with multiple labels can be confusingly announced by assistive technologies like screen readers which us either the first, the last, or all of the labels. <u>Learn more</u>.</td><td>e</td></tr><tr><td>O <frame> Or <iframe> elements have a title</td><td>^</td></tr><tr><td>Screen reader users rely on frame titles to describe the contents of frames. Learn more.</td><td></td></tr></tbody></table></script></dd></dt></dl>	

<pre></pre>	^
When an image is being used as an ` <input/> ` button, providing alternative text can help screen reader users understand the purpose of the button. Learn more.	t
O Form elements have associated labels	^
Labels ensure that form controls are announced properly by assistive technologies, like screen readers. <u>Learn more</u> .	
Lists contain only <li>elements and script supporting elements (<script> and <template>).</td><td>^</td></tr><tr><td>Screen readers have a specific way of announcing lists. Ensuring proper list structure aids screen reader output. <u>Learn</u> more.</td><td></td></tr><tr><td>O List items (<li>) are contained within <ul> or <ol> parent elements</td><td>^</td></tr><tr><td>Screen readers require list items (`<li>') to be contained within a parent `<ul>' or `<ol>' to be announced properly. Learn more.</td><td>1</td></tr><tr><td>The document does not use <meta http-equiv="refresh"></td><td>^</td></tr><tr><td>Users do not expect a page to refresh automatically, and doing so will move focus back to the top of the page. This may create a frustrating or confusing experience. <u>Learn more</u>.</td><td>,</td></tr><tr><td>O <object> elements have alternate text</td><td>^</td></tr><tr><td>Screen readers cannot translate non-text content. Adding alternate text to `<object>` elements helps screen readers cor meaning to users. Learn more.</td><td>nvey</td></tr><tr><td>No element has a [tabindex] value greater than 0</td><td>^</td></tr><tr><td>A value greater than 0 implies an explicit navigation ordering. Although technically valid, this often creates frustrating experiences for users who rely on assistive technologies. <u>Learn more</u>.</td><td></td></tr><tr><td>O Cells in a  element that use the [headers] attribute refer to table cells within the same table.</td><td>^</td></tr><tr><td>Screen readers have features to make navigating tables easier. Ensuring `` cells using the `[headers]` attribute only refer to other cells in the same table may improve the experience for screen reader users. Learn more.</td><td>1</td></tr><tr><td>elements and elements with [role="columnheader"/"rowheader"] have data cells they describe.</td><td>^</td></tr><tr><td>Screen readers have features to make navigating tables easier. Ensuring table headers always refer to some set of cells may improve the experience for screen reader users. <u>Learn more</u>.</td><td>3</td></tr></tbody></table></script></li>	

[lang] attributes have a valid value
 Specifying a valid BCP 47 language on elements helps ensure that text is pronounced correctly by a screen reader. Learn more.
 (video> elements contain a <track> element with [kind="captions"]
 When a video provides a caption it is easier for deaf and hearing impaired users to access its information. Learn more.



# **Best Practices**

#### TRUST AND SAFETY

O Ensure CSP is effective against XSS attacks

A strong Content Security Policy (CSP) significantly reduces the risk of cross-site scripting (XSS) attacks. Learn more

Description

Directive

Severity

No CSP found in enforcement mode

High

# GENERAL



PASSED AUDITS (13)

24/31

USES HTTP5

All sites should be protected with HTTPS, even ones that don't handle sensitive data. This includes avoiding <u>mixed content</u>, where some resources are loaded over HTTP despite the initial request being served over HTTPS. HTTPS prevents intruders from tampering with or passively listening in on the communications between your app and your users, and is a prerequisite for HTTP/2 and many new web platform APIs. <u>Learn more</u>.

Avoids requesting the geolocation permission on page load

Users are mistrustful of or confused by sites that request their location without context. Consider tying the request to a user action instead. <u>Learn more</u>.

Avoids requesting the notification permission on page load

Users are mistrustful of or confused by sites that request to send notifications without context. Consider tying the request to user gestures instead. <u>Learn more</u>.

Avoids front-end JavaScript libraries with known security vulnerabilities

Some third-party scripts may contain known security vulnerabilities that are easily identified and exploited by attackers. Learn more.

Allows users to paste into password fields

Preventing password pasting undermines good security policy. Learn more.

Displays images with correct aspect ratio

Image display dimensions should match natural aspect ratio. Learn more.

Serves images with appropriate resolution

Image natural dimensions should be proportional to the display size and the pixel ratio to maximize image clarity. <u>Learn</u> more.

Page has the HTML doctype

Specifying a doctype prevents the browser from switching to quirks-mode. Learn more.

Properly defines charset

A character encoding declaration is required. It can be done with a `<meta>` tag in the first 1024 bytes of the HTML or in the Content-Type HTTP response header. <u>Learn more</u>.

Avoids deprecated APIs

 $\wedge$ 

Deprecated APIs will eventually be removed from the browser. Learn more.

No browser errors logged to the console

Errors logged to the console indicate unresolved problems. They can come from network request failures and other browser concerns. <u>Learn more</u>

No issues in the Issues panel in Chrome Devtools

Issues logged to the 'Issues' panel in Chrome Devtools indicate unresolved problems. They can come from network request failures, insufficient security controls, and other browser concerns. Open up the Issues panel in Chrome DevTools for more details on each issue.

Page has valid source maps

Source maps translate minified code to the original source code. This helps developers debug in production. In addition, Lighthouse is able to provide further insights. Consider deploying source maps to take advantage of these benefits. <u>Learn more</u>.

URL Map URL

/runtime.js (localhost) /runtime.js.map (localhost)

Warning: missing 3 items in `.sourcesContent`

/vendor.js (localhost) /vendor.js.map (localhost)

/styles.js (localhost) /styles.js.map (localhost)

/scripts.js (localhost) /scripts.js.map (localhost)

/polyfills.js (localhost) /polyfills.js.map (localhost)

/main.js (localhost) /main.js.map (localhost)

NOT APPLICABLE (1) Hide

Fonts with font-display: optional are preloaded

Preload 'optional' fonts so first-time visitors may use them. Learn more

^



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 <a href="Core Web Vitals">Core Web Vitals</a>. Learn more.

#### CONTENT BEST PRACTICES

▲ Document does not have a meta description	^
Meta descriptions may be included in search results to concisely summarize page content. <u>Learn more</u> .	
▲ Image elements do not have [alt] attributes	^
Informative elements should aim for short, descriptive alternate text. Decorative elements can be ignored with an empty a attribute. <u>Learn more</u> .	ılt
Failing Elements  img	
img	
img	

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

# CRAWLING AND INDEXING



/17/22, 9:16 AM 	I
Search engines may use 'href' attributes on links to crawl websites. Ensure that the 'href' attribute of anchor elements of an appropriate destination, so more pages of the site can be discovered. Learn More	ments links
Uncrawlable Link	
a.text-white	
a.text-white	
To appear in search results, crawlers need access to your app.	
ADDITIONAL ITEMS TO MANUALLY CHECK (1)	Hide
Structured data is valid	^
Run the <u>Structured Data Testing Tool</u> and the <u>Structured Data Linter</u> to validate structured data. <u>Learn more</u> .	
Run these additional validators on your site to check additional SEO best practices.	
PASSED AUDITS (9)	Hide

Has a <meta name="viewport"/> tag with width or initial-scale	^
A ` <meta name="viewport"/> ` not only optimizes your app for mobile screen sizes, but also prevents <u>a 300 millisecond de to user input</u> . <u>Learn more</u> . <u>(TBT)</u>	<u>lay</u>
Document has a <title> element&lt;/td&gt;&lt;td&gt;^&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;The title gives screen reader users an overview of the page, and search engine users rely on it heavily to determine if a page is relevant to their search. &lt;u&gt;Learn more&lt;/u&gt;.&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Page has successful HTTP status code&lt;/td&gt;&lt;td&gt;^&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Pages with unsuccessful HTTP status codes may not be indexed properly. &lt;u&gt;Learn more&lt;/u&gt;.&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Links have descriptive text&lt;/td&gt;&lt;td&gt;^&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Descriptive link text helps search engines understand your content. Learn more.&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Page isn't blocked from indexing&lt;/td&gt;&lt;td&gt;^&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Search engines are unable to include your pages in search results if they don't have permission to crawl them. &lt;u&gt;Learn mo&lt;/u&gt;&lt;/td&gt;&lt;td&gt;&lt;u&gt;re&lt;/u&gt;.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</title>	

Document has a valid hreflang

hreflang links tell search engines what version of a page they should list in search results for a given language or region. <u>Learn more</u>.

Document uses legible font sizes — 100% legible text

Font sizes less than 12px are too small to be legible and require mobile visitors to "pinch to zoom" in order to read. Strive to have >60% of page text ≥12px. <u>Learn more</u>.

Source	Selector	% of Page Text	Font Size
Legible text		100.00%	≥ 12px

Document avoids plugins

Search engines can't index plugin content, and many devices restrict plugins or don't support them. Learn more.

Tap targets are sized appropriately — 100% appropriately sized tap targets

Interactive elements like buttons and links should be large enough (48x48px), and have enough space around them, to be easy enough to tap without overlapping onto other elements. <u>Learn more</u>.

NOT APPLICABLE (2) Hide

o robots.txt is valid

If your robots.txt file is malformed, crawlers may not be able to understand how you want your website to be crawled or indexed. <u>Learn more</u>.

Document has a valid rel=canonical

Canonical links suggest which URL to show in search results. Learn more.



#### PMA

These checks validate the aspects of a Progressive Web App. Learn more.

^

#### **INSTALLABLE**

Web app manifest or service worker do not meet the installability requirements — 1 reason Service worker is the technology that enables your app to use many Progressive Web App features, such as offline, add to homescreen, and push notifications. With proper service worker and manifest implementations, browsers can proactively prompt users to add your app to their homescreen, which can lead to higher engagement. Learn more. Failure reason Page has no manifest <link> URL PWA OPTIMIZED Does not register a service worker that controls page and start\_url The service worker is the technology that enables your app to use many Progressive Web App features, such as offline, add to homescreen, and push notifications. Learn more. Is not configured for a custom splash screen Failures: No manifest was fetched. A themed splash screen ensures a high-quality experience when users launch your app from their homescreens. Learn more. Does not set a theme color for the address bar. Failures: No manifest was fetched, No `<meta name="theme-color">` tag found. The browser address bar can be themed to match your site. Learn more. Content is sized correctly for the viewport If the width of your app's content doesn't match the width of the viewport, your app might not be optimized for mobile screens. Learn more. Has a <meta name="viewport"> tag with width or initial-scale A `<meta name="viewport">` not only optimizes your app for mobile screen sizes, but also prevents a 300 millisecond delay to user input. Learn more. TBT

For ideal appearance on iOS when users add a progressive web app to the home screen, define an 'apple-touch-icon'. It must point to a non-transparent 192px (or 180px) square PNG. Learn More.

Does not provide a valid apple-touch-icon

Manifest doesn't have a maskable icon No manifest was fetched

A maskable icon ensures that the image fills the entire shape without being letterboxed when installing the app on a device. Learn more

#### ADDITIONAL ITEMS TO MANUALLY CHECK (3)

Hide

Site works cross-browser

To reach the most number of users, sites should work across every major browser. Learn more.

Page transitions don't feel like they block on the network

Transitions should feel snappy as you tap around, even on a slow network. This experience is key to a user's perception of performance. Learn more.

Each page has a URL

Ensure individual pages are deep linkable via URL and that URLs are unique for the purpose of shareability on social media. Learn more.

These checks are required by the baseline PWA Checklist but are not automatically checked by Lighthouse. They do not affect your score but it's important that you verify them manually.

Captured at Jul 17, 2022, 9:13

AM GMT+5:30 Initial page load Emulated Moto G4 with Lighthouse 9.6.1

Slow 4G throttling

Single page load

Using Chromium 103.0.0.0

with devtools

Generated by Lighthouse 9.6.1 | File an issue