

http://54.204.209.146:3000/











Performance

Accessibility

Best Practices

SEO

PWA



# Performance

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

0-49

50-89

90-100



METRICS Expand view

▲ First Contentful Paint

15.8 s

▲ Speed Index

26.7 s

▲ Largest Contentful Paint

22.9 s

▲ Time to Interactive

33.1 s

▲ Total Blocking Time

10,030 ms

**Cumulative Layout Shift** 

0.008

View Original Trace





















Show audits relevant to: All FCP TBT LCP CLS

#### **OPPORTUNITIES**

Opportunity Estimated Savings

▲ Enable text compression

17.54 ^

s

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

URL	Transfer Size	Potential Savings
/vendor.js (54.204.209.146)	2,395.0 KiB	1,889.3 KiB
2010-05-01/2020-05-01 (54.204.209.146)	839.8 KiB	809.9 KiB
/polyfills.js (54.204.209.146)	294.8 KiB	222.2 KiB
/styles.css (54.204.209.146)	199.3 KiB	173.7 KiB
/styles.js (54.204.209.146)	172.9 KiB	125.2 KiB
/scripts.js (54.204.209.146)	145.4 KiB	117.3 KiB
/main.js (54.204.209.146)	21.9 KiB	17.7 KiB
/runtime.js (54.204.209.146)	6.5 KiB	4.8 KiB

▲ Minify JavaScript 7.35 s ヘ

Minifying JavaScript files can reduce payload sizes and script parse time. Learn more. FCP [LCP]

URL	Transfer Size	Potential Savings
/vendor.js (54.204.209.146)	2,395.3 KiB	1,265.1 KiB
/polyfills.js (54.204.209.146)	295.1 KiB	96.7 KiB
/scripts.js (54.204.209.146)	145.7 KiB	54.5 KiB

URL	Transfer Size	Potential Savings
/styles.js (54.204.209.146)	173.2 KiB	36.3 KiB
/main.js (54.204.209.146)	22.2 KiB	4.0 KiB
/runtime.js (54.204.209.146)	6.8 KiB	3.8 KiB

## ▲ Reduce unused JavaScript

6.15 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 (54.204.209.146)         2,395.3 KiB         894.4 KiB          @angular/core/fesm2015/core.mjs         1,129.3 KiB         372.9 KiB          @angular/forms/fesm2015/forms.mjs         278.2 KiB         85.5 KiB          @angular/common/fesm2015/common.mjs         222.4 KiB         83.8 KiB          @angular/router/fesm2015/router.mjs         232.6 KiB         75.6 KiB          html-entities/lib/named-references.js         65.7 KiB         65.7 KiB           /styles.js (54.204.209.146)         173.2 KiB         167.2 KiB
<pre>@angular/core/fesm2015/core.mjs</pre>
<pre>@angular/forms/fesm2015/forms.mjs 278.2 KiB 85.5 KiB@angular/common/fesm2015/common.mjs 222.4 KiB 83.8 KiB@angular/router/fesm2015/router.mjs 232.6 KiB 75.6 KiBhtml-entities/lib/named-references.js 65.7 KiB 65.7 KiB</pre>
<pre>@angular/common/fesm2015/common.mjs 222.4 KiB 83.8 KiB@angular/router/fesm2015/router.mjs 232.6 KiB 75.6 KiBhtml-entities/lib/named-references.js 65.7 KiB 65.7 KiB</pre>
@angular/router/fesm2015/router.mjs 232.6 KiB 75.6 KiBhtml-entities/lib/named-references.js 65.7 KiB 65.7 KiB
html-entities/lib/named-references.js 65.7 KiB 65.7 KiB
/styles.is (54.204.209.146) 173.2 KiB 167.2 KiB
/node_modules/html-entities/lib/named-references.js 68.4 KiB 68.4 KiB
/node_modules/webpack-dev-server/client/modules/logger/index.js 26.8 KiB 26.8 KiB
/node_modules/events/events.js 15.1 KiB 15.1 KiB
/node_modules/webpack-dev-server/client/index.js 8.3 KiB 8.3 KiB
/node_modules/html-entities/lib/index.js 8.0 KiB 8.0 KiB
/scripts.js (54.204.209.146) 145.7 KiB 98.1 KiB
144.6 KiB 97.4 KiB
/polyfills.js (54.204.209.146) 295.1 KiB 66.0 KiB
node_modules/zone.js/fesm2015/zone.js 122.7 KiB 26.5 KiB
node_modules/events.js 14.8 KiB 11.5 KiB
node_modules/webpack-dev-server/client/modules/logger/index.js 26.3 KiB 7.7 KiB

URL	Transfer Size	Potential Savings
node_modules/html-entities/lib/index.js	7.8 KiB	5.5 KiB
node_modules/webpack-dev-server/client/overlay.js	6.7 KiB	5.2 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.  $(\overline{TBT})$ 

Source	Transfer Size	Potential Savings
node_modules/html-entities		150.85 KiB
/polyfills.js (54.204.209.146)	75.50 KiB	
/styles.js (54.204.209.146)	76.90 KiB	
/vendor.js (54.204.209.146)	73.95 KiB	
node_modules/webpack-dev-server		119.10 KiB
/polyfills.js (54.204.209.146)	59.60 KiB	
/styles.js (54.204.209.146)	60.75 KiB	
/vendor.js (54.204.209.146)	58.35 KiB	
node_modules/events		29.65 KiB
/polyfills.js (54.204.209.146)	14.85 KiB	
/styles.js (54.204.209.146)	15.10 KiB	
/vendor.js (54.204.209.146)	14.50 KiB	
node_modules/ansi-html-community		8.45 KiB
/polyfills.js (54.204.209.146)	4.25 KiB	
/styles.js (54.204.209.146)	4.30 KiB	
/vendor.js (54.204.209.146)	4.15 KiB	
node_modules/webpack		2.75 KiB
/polyfills.js (54.204.209.146)	1.35 KiB	
/styles.js (54.204.209.146)	1.40 KiB	
/vendor.js (54.204.209.146)	1.35 KiB	

▲ Reduce unused CSS

1.2 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)

URL	Transfer Size	Potential Savings
/styles.css (54.204.209.146)	199.6 KiB	193.5 KiB

▲ Eliminate render-blocking resources

1.08 s ^

Resources are blocking the first paint of your page. Consider delivering critical JS/CSS inline and deferring all non-critical JS/styles. <u>Learn more</u>. FCP [LCP]

URL	Transfer Size	Potential Savings
/styles.css (54.204.209.146)	199.6 KiB	1,230 ms

Minify CSS 0.3 s ^

Minifying CSS files can reduce network payload sizes. Learn more. FCP [LCP]

URL	Transfer Size	Potential Savings
/styles.css (54.204.209.146)	199.6 KiB	38.1 KiB

Preconnect to required origins

0.15 s ^

Consider adding `preconnect` or `dns-prefetch` resource hints to establish early connections to important third-party origins.

<u>Learn more</u>. (FCP) (LCP)

URL Potential Savings
http://54.204.209.146:4000 150 ms

#### DIAGNOSTICS

▲ Serve static assets with an efficient cache policy — 7 resources found

A long cache lifetime can speed up repeat visits to your page. <u>Learn more</u>.

URL	Cache TTL	Transfer Size
/vendor.js (54.204.209.146)	None	2,395 KiB
/polyfills.js (54.204.209.146)	None	295 KiB
/styles.css (54.204.209.146)	None	200 KiB
/styles.js (54.204.209.146)	None	173 KiB
/scripts.js (54.204.209.146)	None	146 KiB
/main.js (54.204.209.146)	None	22 KiB
/runtime.js (54.204.209.146)	None	7 KiB

▲ Avoid an excessive DOM size — 27,260 elements

A large DOM will increase memory usage, cause longer  $\underline{\text{style calculations}}$ , and produce costly  $\underline{\text{layout reflows}}$ .  $\underline{\text{Learn more}}$ .

Statistic	Element		Value
Total DOM Elements			27,260
Maximum DOM Depth		input.form-control.ng- untouched.ng-pristine.ng-valid	9

Statistic	Element	Value
	tbody	
Maximum Child Elements		3,403

▲ Reduce JavaScript execution time — 48.1 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)

URL	Total CPU Time	Script Evaluation	Script Parse
/polyfills.js (54.204.209.146)	72,492 ms	47,898 ms	3 ms
http://54.204.209.146:3000	3,224 ms	24 ms	22 ms
Unattributable	618 ms	32 ms	1 ms
/styles.js (54.204.209.146)	148 ms	132 ms	7 ms
/vendor.js (54.204.209.146)	89 ms	0 ms	11 ms

▲ Minimize main-thread work — 76.6 s

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

Category	Time Spent
Script Evaluation	48,097 ms
Parse HTML & CSS	24,158 ms
Style & Layout	2,762 ms
Other	791 ms

Category	Time Spent
Garbage Collection	442 ms
Rendering	338 ms
Script Parsing & Compilation	51 ms

### ▲ Avoid enormous network payloads — Total size was 4,080 KiB

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

URL	Transfer Size
/vendor.js (54.204.209.146)	2,395.3 KiB
2010-05-01/2020-05-01 (54.204.209.146)	840.1 KiB
/polyfills.js (54.204.209.146)	295.1 KiB
/styles.css (54.204.209.146)	199.6 KiB
/styles.js (54.204.209.146)	173.2 KiB
/scripts.js (54.204.209.146)	145.7 KiB
/main.js (54.204.209.146)	22.2 KiB
/runtime.js (54.204.209.146)	6.8 KiB
/favicon.ico (54.204.209.146)	1.2 KiB
http://54.204.209.146:3000	0.9 KiB

# O Avoid chaining critical requests — 5 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: 930 ms

Initial Navigation

http://54.204.209.146:3000

/styles.css (54.204.209.146) - 390 ms, 199.60 KiB

/runtime.js (54.204.209.146) - 60 ms, 6.80 KiB

/polyfills.js (54.204.209.146) - 520 ms, 295.09 KiB

/vendor.js (54.204.209.146) - 770 ms, 2,395.27 KiB

/main.js (54.204.209.146) - 170 ms, 22.24 KiB

User Timing marks and measures — 36 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	704.84 ms	0.36 ms
Zone:ZoneAwarePromise	Measure	705.26 ms	0.74 ms
Zone:toString	Measure	705.95 ms	0.05 ms
Zone:util	Measure	706.09 ms	0.51 ms
Zone:legacy	Measure	706.52 ms	0.08 ms
Zone:queueMicrotask	Measure	706.58 ms	0.12 ms
Zone:timers	Measure	706.66 ms	0.25 ms
Zone:requestAnimationFrame	Measure	706.91 ms	0.09 ms
Zone:blocking	Measure	706.97 ms	0.13 ms
Zone:EventTarget	Measure	707.06 ms	0.84 ms
Zone:MutationObserver	Measure	707.9 ms	0.2 ms
Zone:IntersectionObserver	Measure	708.08 ms	0.22 ms
Zone:FileReader	Measure	708.22 ms	0.08 ms

Name	Туре	Start Time	Duration
Zone:on_property	Measure	708.35 ms	14.75 ms
Zone:customElements	Measure	723.01 ms	0.19 ms
Zone:XHR	Measure	723.2 ms	0.3 ms
Zone:geolocation	Measure	723.53 ms	0.17 ms
Zone:PromiseRejectionEvent	Measure	723.68 ms	0.12 ms
Zone	Mark	704.86 ms	
Zone:ZoneAwarePromise	Mark	705.26 ms	
Zone:toString	Mark	705.96 ms	
Zone:util	Mark	706.1 ms	
Zone:legacy	Mark	706.53 ms	
Zone:queueMicrotask	Mark	706.58 ms	
Zone:timers	Mark	706.66 ms	
Zone:requestAnimationFrame	Mark	706.91 ms	
Zone:blocking	Mark	706.98 ms	
Zone:EventTarget	Mark	707.06 ms	
Zone:MutationObserver	Mark	707.91 ms	
Zone:IntersectionObserver	Mark	708.09 ms	
Zone:FileReader	Mark	708.23 ms	
Zone:on_property	Mark	708.35 ms	
Zone:customElements	Mark	723.02 ms	
Zone:XHR	Mark	723.2 ms	

Name	Туре	Start Time Duration	
Zone:geolocation	Mark	723.54 ms	
Zone:PromiseRejectionEvent	Mark	723.68 ms	

○ Keep request counts low and transfer sizes small — 9 requests • 4,079 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	9	4,078.9 KiB
Script	6	3,038.3 KiB
Other	1	840.1 KiB
Stylesheet	1	199.6 KiB
Document	1	0.9 KiB
Image	0	0.0 KiB
Media	0	0.0 KiB
Font	0	0.0 KiB
Third-party	0	0.0 KiB

O Largest Contentful Paint element — 1 element found

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

Element td

O Avoid large layout shifts — 4 elements found

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

Element		CLS Contribution
	th	0.003
	th	0.003
	th	0.002
th		0

O Avoid long main-thread tasks — 9 long tasks found

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

URL	Start Time	Duration
/polyfills.js (54.204.209.146)	23,507 ms	10,000 ms
http://54.204.209.146:3000	998 ms	1,453 ms
/styles.js (54.204.209.146)	20,640 ms	162 ms
/polyfills.js (54.204.209.146)	16,650 ms	148 ms
/vendor.js (54.204.209.146)	805 ms	89 ms
Unattributable	894 ms	80 ms

Avoid multiple page redirects

URL	Start Time	Duration
http://54.204.209.146:3000	730 ms	75 ms
http://54.204.209.146:3000	630 ms	58 ms
Unattributable	2,451 ms	51 ms

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

SSED AUDITS (21)	Hic
Properly size images	^
Serve images that are appropriately-sized to save cellular data and improve load time. <u>Learn more</u> .	
Defer offscreen images	^
Consider lazy-loading offscreen and hidden images after all critical resources have finished loading to lower interactive. <u>Learn more</u> .	r time to
Efficiently encode images	^
Optimized images load faster and consume less cellular data. <u>Learn more</u> .	
Serve images in next-gen formats	^
Image formats like WebP and AVIF often provide better compression than PNG or JPEG, which means fast and less data consumption. <u>Learn more</u> .	ter downloads
Initial server response time was short — Root document took 60 ms	^
Keep the server response time for the main document short because all other requests depend on it. Learn LCP	more. (FCP)
URL	Time Spent
http://54.204.209.146:3000	60 ms

Redirects introduce additional delays before the page can be loaded. Learn more. FCP [LCP]

#### Preload key requests

Consider using `k rel=preload>` to prioritize fetching resources that are currently requested later in page load. <u>Learn more</u>. FCP (LCP)

Use HTTP/2 — 9 requests not served via HTTP/2

HTTP/2 offers many benefits over HTTP/1.1, including binary headers and multiplexing. Learn more.

URL	Protocol
http://54.204.209.146:3000	http/1.1
/styles.css (54.204.209.146)	http/1.1
/runtime.js (54.204.209.146)	http/1.1
/polyfills.js (54.204.209.146)	http/1.1
/styles.js (54.204.209.146)	http/1.1
/scripts.js (54.204.209.146)	http/1.1
/vendor.js (54.204.209.146)	http/1.1
/main.js (54.204.209.146)	http/1.1
/favicon.ico (54.204.209.146)	http/1.1

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. <u>Learn more</u> [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">Learn</a> More (TBT)

URL		Potential Savings
/styles.js (54.204.209.146)		0.2 KiB
styles.js:944	@babel/plugin-transform-classes	
/polyfills.js (54.204.209.146)		0.2 KiB
polyfills.js:1006	@babel/plugin-transform-classes	
/vendor.js (54.204.209.146)		0.2 KiB
vendor.js:4101	@babel/plugin-transform-classes	

Preload Largest Contentful Paint image	^
Preload the image used by the LCP element in order to improve your LCP time. Learn more. LCP	
All text remains visible during webfont loads	^
Leverage the font-display CSS feature to ensure text is user-visible while webfonts are loading. Learn more. FCP [LCF	)
Minimize third-party usage	^
Third-party code can significantly impact load performance. Limit the number of redundant third-party providers and try load third-party code after your page has primarily finished loading. Learn more. (TBT)	to
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 TBT</u>	<u>2</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 pa Learn more.	int.
Uses passive listeners to improve scrolling performance	^
Consider marking your touch and wheel event listeners as `passive` to improve your page's scroll performance. Learn r	nore.
Avoids document.write()	^

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

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

Image elements have explicit width and height

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

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)

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.

#### CONTRAST

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

Low-contrast text is difficult or impossible for many users to read. Learn more.

Failing Elements

Failing Elements		
	input.btn.btn-outline-info	
body		

These are opportunities to improve the legibility of your content.

# ADDITIONAL ITEMS TO MANUALLY CHECK (10)

Hide

The page has a logical tab order	^
Tabbing through the page follows the visual layout. Users cannot focus elements that are offscreen. <u>Learn more</u> .	
Interactive controls are keyboard focusable	^
Custom interactive controls are keyboard focusable and display a focus indicator. <u>Learn more</u> .	
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. <u>Learn more</u> .	
The user's focus is directed to new content added to the page	^
If new content, such as a dialog, is added to the page, the user's focus is directed to it. <u>Learn more</u> .	
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. <u>Learn more</u> .	
Custom controls have associated labels	^
Custom interactive controls have associated labels, provided by aria-label or aria-labelledby. <u>Learn more</u> .	

Custom controls have ARIA roles	^
Custom interactive controls have appropriate ARIA roles. <u>Learn more</u> .	
Visual order on the page follows DOM order	^
DOM order matches the visual order, improving navigation for assistive technology. <u>Learn more</u> .	
Offscreen content is hidden from assistive technology	^
Offscreen content is hidden with display: none or aria-hidden=true. <u>Learn more</u> .	
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 technol <a href="Learn more"><u>Learn more</u></a>.</nav></main>	ogy.

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

PASSED AUDITS (16) Hide

[aria-*] attributes match their roles	^
Each ARIA `role` supports a specific subset of `aria-*` attributes. Mismatching these invalidates the `aria-*` attributes. Leamore.	<u>ırn</u>
[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 ` <body> <u>Learn more</u>.</body>	»`.
[aria-*] attributes have valid values	^
Assistive technologies, like screen readers, can't interpret ARIA attributes with invalid values. <u>Learn more</u> .	
[aria-*] attributes are valid and not misspelled	^
Assistive technologies, like screen readers, can't interpret ARIA attributes with invalid names. <u>Learn more</u> .	

When a button doesn't have an accessible name, screen readers announce it as "button", making it unusable for users who rely on screen readers. Learn more. ARIA IDs are unique The value of an ARIA ID must be unique to prevent other instances from being overlooked by assistive technologies. Learn more. Form elements have associated labels Labels ensure that form controls are announced properly by assistive technologies, like screen readers. Learn more. [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 contents of a web page. 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. 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. <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 BCP 47 language helps screen readers announce text properly. Learn more. Links 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. Learn more.

Cells in a element that use the [headers] attribute refer to table cells within the same table.

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.

Learn more.

\*\*Coreen readers and elements with [role="columnheader"/"rowheader"] have data cells they describe.

\*\*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. Learn more.

\*\*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 (27)	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 n	nore.
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> .	ole
O [aria-hidden="true"] elements do not contain focusable descendents	^
Focusable descendents within an `[aria-hidden="true"]` element prevent those interactive elements from being available users of assistive technologies like screen readers. <u>Learn more</u> .	to:
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 unusa for users who rely on screen readers. <u>Learn more</u> .	able
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. Learn more.	ole

ARIA progressbar elements have accessible names	^
When a `progressbar` element doesn't have an accessible name, screen readers announce it with a generic name, it unusable for users who rely on screen readers. <u>Learn more</u> .	making
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. Learn more	<u>re</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 fun Learn more.	nctions.
O [role] values are valid	^
ARIA roles must have valid values in order to perform their intended accessibility functions. Learn more.	
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 ur for users who rely on screen readers. <u>Learn more</u> .	nusable
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 unufor users who rely on screen readers. <u>Learn more</u> .	ısable
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 unu for users who rely on screen readers. <u>Learn more</u> .	ısable
	^
When definition lists are not properly marked up, screen readers may produce confusing or inaccurate output. <u>Learn</u>	ı more.
<ul> <li>Definition list items are wrapped in <d1> elements</d1></li> </ul>	

Definition list items (` <dt>` and `<dd>`) must be wrapped in a parent `<dl>` element to ensure that screen readers can properly announce them. Learn more.</dl></dd></dt>	
O [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. <u>Learn more</u> .	
No form fields have multiple labels	^
Form fields with multiple labels can be confusingly announced by assistive technologies like screen readers which use ei the first, the last, or all of the labels. <u>Learn more</u> .	ther
O <frame/> or <iframe> elements have a title</iframe>	^
Screen reader users rely on frame titles to describe the contents of frames. <u>Learn more</u> .	
Image elements 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> .	alt
<pre><input type="image"/> elements have [alt] text</pre>	^
When an image is being used as an ` <input/> ` button, providing alternative text can help screen reader users understand purpose of the button. <u>Learn more</u> .	the
<ul> <li>Lists contain only <li>elements and script supporting elements (<script> and <template>).</li> </ul></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>List items (<1i>) 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. <u>Learn more</u>.</td><td></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></tbody></table></script></li></li></ul>	

Screen readers cannot translate non-text content. Adding alternate text to `<object>` elements helps screen readers convey meaning to users. Learn more.

No element has a [tabindex] value greater than 0

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. Learn more.

[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

All sites should be protected with HTTPS, even ones that don't handle sensitive data. This includes avoiding mixed content, 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. Learn more.

Insecure URL

Request Resolution

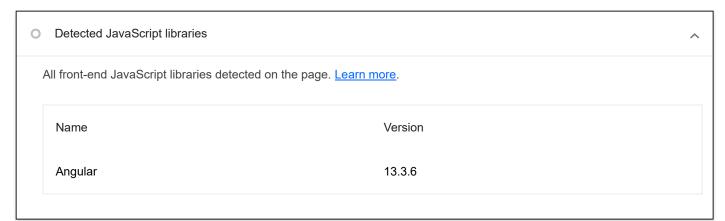
http://54.204.209.146:3000

Allowed

/styles.css (54.204.209.146)

Insecure URL	Reques	t Resolution
/runtime.js (54.204.209.146)	Allowed	I
/polyfills.js (54.204.209.146)	Allowed	I
/styles.js (54.204.209.146)	Allowed	I
/scripts.js (54.204.209.146)	Allowed	I
/vendor.js (54.204.209.146)	Allowed	I
/main.js (54.204.209.146)	Allowed	I
2010-05-01/2020-05-01 (54.204.209.146)	Allowed	I
/favicon.ico (54.204.209.146)	Allowed	I
Ensure CSP is effective against XSS attacks		
A strong Content Security Policy (CSP) significantly redu	ces the risk of cross-site scripting ()	XSS) attacks. <u>Learn more</u>
Description	Directive	Severity

## GENERAL



PASSED AUDITS (12) Hide

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. Learn more. 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. Learn more. 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. Learn 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. Learn more. Avoids deprecated APIs 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. Learn more

#### 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 (54.204.209.146) /runtime.js.map (54.204.209.146)

Warning: missing 3 items in `.sourcesContent`

/vendor.js (54.204.209.146) /vendor.js.map (54.204.209.146)

/styles.js (54.204.209.146) /styles.js.map (54.204.209.146)

/scripts.js (54.204.209.146) /scripts.js.map (54.204.209.146)

/polyfills.js (54.204.209.146) /polyfills.js.map (54.204.209.146)

/main.js (54.204.209.146) /main.js.map (54.204.209.146)

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

Core Web Vitals. Learn more.

#### CONTENT BEST PRACTICES

Structured data is valid

▲ Document does not have a meta description	^
Meta descriptions may be included in search results to concisely summarize page content. <u>Learn more</u> .	

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

#### ADDITIONAL ITEMS TO MANUALLY CHECK (1)

Hide

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 (10)

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

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.

Page has successful HTTP status code

Pages with unsuccessful HTTP status codes may not be indexed properly. Learn more.

Links have descriptive text

Descriptive link text helps search engines understand your content. Learn more.

Links are crawlable

Search engines may use `href` attributes on links to crawl websites. Ensure that the `href` attribute of anchor elements links to an appropriate destination, so more pages of the site can be discovered. <u>Learn More</u>

Page isn't blocked from indexing

Search engines are unable to include your pages in search results if they don't have permission to crawl them. Learn more.

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. Learn more.

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 (3)

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>.

Image elements have [alt] attributes

Informative elements should aim for short, descriptive alternate text. Decorative elements can be ignored with an empty alt attribute. Learn more.

Document has a valid rel=canonical

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



## **PWA**

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. <u>Learn more</u>.

Failure reason

No manifest was fetched

#### 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. <u>Learn more</u>.

▲ 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. <u>Learn</u> <u>more</u>.

performance. Learn more.

Each page has a URL

5/17/22, 8:01 PM 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 not sized correctly for the viewport The viewport size of 770px does not match the window size of 360px. 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 Does not provide a valid apple-touch-icon 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. 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

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

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

### 5/17/22, 8:01 PM

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

Captured at May 17, 2022,
7:57 PM EDT
Lighthouse 9.5.0
Initial page load
Slow 4G throttling
Using Chromium
101.0.4951.54 with devtools

Generated by Lighthouse 9.5.0 | File an issue