







# Performance

Metrics			=
First Contentful Paint	0.9 s	▲ First Meaningful Paint	58.4 s
Speed Index	0.9 s	▲ First CPU Idle	58.4 s
▲ Time to Interactive	58.4 s	▲ Max Potential First Input Delay	790 ms
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			

#### View Trace

Values are estimated and may vary. The performance score is based only on these metrics.



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

Ор	pportunity	Estimated Savings		
<b>A</b>	Properly size images	2.1 s /		
	Serve images that are appropriately-sized to save cellular data and	improve load time. <u>Learn more</u> .		
		Show 3rd-party resources (0)		

URL Size Potential Savings



URL	Size	Potential Savings
/images/consulting.png (localhost)	145 KB	102 KB
/images/education.png (localhost)	140 KB	94 KB
/images/heart-logo.png (localhost)	74 KB	63 KB

### ▲ Serve images in next-gen formats

2.1 s ^

Image formats like JPEG 2000, JPEG XR, and WebP often provide better compression than PNG or JPEG, which means faster downloads and less data consumption. <u>Learn more</u>.

Show	3rd	party	resources	(0)

URL	Size	Potential Savings
<pre>/images/learn-more.png (localhost)</pre>	204 KB	160 KB
<pre>/images/consulting.png (localhost)</pre>	145 KB	113 KB
<pre>/images/education.png (localhost)</pre>	140 KB	109 KB
<pre>/images/heart-logo.png (localhost)</pre>	74 KB	46 KB

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

## ▲ Avoid enormous network payloads — Total size was 12,044 KB

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Large network payloads cost users real money and are highly correlated with long load times.  $\underline{\text{Learn}}$   $\underline{\text{more}}$ .

	Show 3rd-party resources (0)
URL	Size
<pre>/fonts/NotoSerifSC-Medium.otf (localhost)</pre>	11,075 KB
<pre>/fonts/NotoSerif-Regular.ttf (localhost)</pre>	323 KB
<pre>/images/learn-more.png (localhost)</pre>	204 KB
<pre>/images/consulting.png (localhost)</pre>	145 KB
<pre>/images/education.png (localhost)</pre>	140 KB
/images/heart-logo.png (localhost)	74 KB

```
URL
                                                                                                      Size
 /fonts/Gotham-Bold.otf (localhost)
                                                                                                     30 KB
 /css/all.css (localhost)
                                                                                                    25 KB
 /images/ocf-hosted-penguin.svg (localhost)
                                                                                                      8 KB
 http://localhost:8080
                                                                                                      7 KB
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.

Show 3rd-party resources (0)

```
Potential
URL
                                                                                                    Savings
 /fonts/Gotham-Bold.otf (localhost)
                                                                                                     10 ms
 /fonts/NotoSerif-Regular.ttf (localhost)
                                                                                                     10 ms
 /fonts/NotoSerifSC-Medium.otf (localhost)
                                                                                                    110 ms
```

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.

Maximum critical path latency: 210 ms

Initial Navigation

http://localhost:8080

```
/css/all.css (localhost) - 0 ms, 24.78 KB
/scripts/all.js (localhost) - 10 ms, 2.12 KB
/fonts/Gotham-Bold.otf (localhost) - 10 ms, 29.58 KB
/fonts/NotoSerif-Regular.ttf (localhost) - 10 ms, 322.54 KB
/fonts/NotoSerifSC-Medium.otf (localhost) - 110 ms, 11,075.45 KB
```

Keep request counts low and transfer sizes small − 15 requests • 12,044 KB

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

Resource Type	Requests	Transfer Size
Total	15	12,044 KB
Font	3	11,428 KB
Image	9	583 KB

Resource Type	Requests	Tr	ansfer Siz
Stylesheet	1		25 KE
Document	1		7 KI
Script	1		2 KI
Media	0		0 KI
Other	0		0 KI
Third-party	0		0 K
ssed audits (18)			
Eliminate render-blocking resources –	Potential savings of 20 ms		
Resources are blocking the first paint deferring all non-critical JS/styles.		tical JS/CSS in	line and
	Sho	<del>ow 3rd-party res</del>	<del>ources</del> (0
URL		Size	Potenti Savin
/css/all.css (localhost)		25 KB	300 m
Defer offscreen images			
Consider lazy-loading offscreen and hid to lower time to interactive. <u>Learn mon</u>		es have finishe	d loading
Minify CSS — Potential savings of 7 KB	,		
Minifying CSS files can reduce network	payload sizes. <u>Learn more</u> .		
	☐ She	<del>w 3rd-party res</del>	<del>ources</del> (0
URL		Size	Potenti Savin
/css/all.css (localhost)		25 KB	7 K
Minify JavaScript			
Minifying JavaScript files can reduce p	payload sizes and script parse time. <u>L</u>	<u>earn more</u> .	
Remove unused CSS — Potential savings	of 14 KB		
Remove dead rules from stylesheets and to reduce unnecessary bytes consumed by		above-the-fold	content
, , , , , , , , , , , , , , , , , , , ,			

URL	Size	Potential Savings
/css/all.css (localhost)	25 KB	14 KB
Efficiently encode images		^
Optimized images load faster and consume less cellular data. <u>Learn more</u> .		
Enable text compression — Potential savings of 58 KB		^
Text-based resources should be served with compression (gzip, deflate or be network bytes. <u>Learn more</u> .	orotli) to minimiz	e total
	Show 3rd party res	<del>ources</del> (0)
URL	Size	Potential Savings
/css/all.css (localhost)	49 KB	45 KB
http://localhost:8080	13 KB	11 KB
/scripts/all.js (localhost)	2 KB	2 KB
Preconnect to required origins		^
Consider adding `preconnect` or `dns-prefetch` resource hints to establish important third-party origins. $\underline{\text{Learn more}}.$	ı early connection	s to
Server response times are low (TTFB) — Root document took 10 ms		^
Time To First Byte identifies the time at which your server sends a respon	ise. <u>Learn more</u> .	
Avoid multiple page redirects		^
Redirects introduce additional delays before the page can be loaded. Learn	ı more.	
Preload key requests		^
Consider using ` <link rel="preload"/> ` to prioritize fetching resources that later in page load. <u>Learn more</u> .	are currently req	uested
Use video formats for animated content		^
Large GIFs are inefficient for delivering animated content. Consider using animations and PNG/WebP for static images instead of GIF to save network be		s for
Uses efficient cache policy on static assets - 0 resources found		^
A long cache lifetime can speed up repeat visits to your page. Learn more.		
Avoids an excessive DOM size — 85 elements		^
A large DOM will increase memory usage, cause longer <u>style calculations</u> , a <u>reflows</u> . <u>Learn more</u> .	and produce costly	<u>layout</u>

Statistic	Element		Value
	ETelliett		
Total DOM Elements	dan and Udan and Complete and Table		85
Maximum DOM Depth	<pre><img link<="" pre="" src="/images/facebook.png"/></pre>	<-name="Facebook">	7
Maximum Child Elements	<nav></nav>		6
User Timing marks and measur	es		^
Consider instrumenting your performance during key user	app with the User Timing API to mea experiences. <u>Learn more</u> .	sure your app's real-wor	ld
JavaScript execution time -	0.0 s		^
Consider reducing the time s	pent parsing, compiling, and execut th this. <u>Learn more</u> .	ing JS. You may find del	ivering
		Show 3rd party	<del>resources</del> (0)
URL	Total CPU Time	Script Evaluation	Script Parse
Other	1,564 ms	25 ms	3 ms
Minimizes main-thread work	- 1.6 s		^
Consider reducing the time s smaller JS payloads helps wi	pent parsing, compiling and executi th this. <u>Learn more</u>	ng JS. You may find deli	vering
Category			Time Spent
Other			1,180 ms
Style & Layout			256 ms
Rendering			67 ms
Script Evaluation			51 ms
Parse HTML & CSS			33 ms
Script Parsing & Compilatio	n		27 ms
Minimize third-party usage			^
	cantly impact load performance. Lim		

<u>Learn more</u>.

# Accessibility

These checks highlight opportunities to <a href="improve the">improve the</a>
<a href="accessibility">accessibility of your web app</a>. Only a subset of
<a href="accessibility">accessibility issues can be automatically detected so manual testing is also encouraged.</a>

Names and labels — 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.

<b>A</b>	Buttons do not have an accessible name	^
	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. <u>Learn more</u> .	
	Failing Elements	
	button.hamburger.hamburgerelastic	
<b>A</b>	Image elements do not have [alt] attributes	^
	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	
<u> </u>	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	
	a	

а

а

Contrast — These are opportunities to improve the legibility of your content.

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

- a.btn.pink-back
- a.btn.green-back
- a.btn.purple-back

**Internationalization and localization** — These are opportunities to improve the interpretation of your content by users in different locales.

<html> element does not have 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. <u>Learn more</u>.

Failing Elements

html

Additional items to manually check (11) — These items address areas which an automated testing tool cannot cover. Learn more in our guide on <u>conducting an accessibility review</u>.

The page has a logical tab order

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. <u>Learn more</u>.

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

more. 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. Custom controls have associated labels Custom interactive controls have associated labels, provided by aria-label or aria-labelledby. Learn more. Custom controls have ARIA roles Custom interactive controls have appropriate ARIA roles. Learn more. Visual order on the page follows DOM order DOM order matches the visual order, improving navigation for assistive technology. Learn more. Offscreen content is hidden from assistive technology Offscreen content is hidden with display: none or aria-hidden=true. Learn more. Headings don't skip levels Headings are used to create an outline for the page and heading levels are not skipped. Learn more. 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. Learn more. Passed audits (3) 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. [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.

Not applicable (27)

If new content, such as a dialog, is added to the page, the user's focus is directed to it. Learn

[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. [aria-\*] attributes match their roles Each ARIA `role` supports a specific subset of `aria-\*` attributes. Mismatching these invalidates the `aria-\*` attributes. <a href="Learn more"><u>Learn more</u></a>. [role]s have all required [aria-\*] attributes Some ARIA roles have required attributes that describe the state of the element to screen readers. Learn more. Elements with an ARIA [role] that require children to contain a specific [role] have all required Some ARIA parent roles must contain specific child roles to perform their intended accessibility functions. Learn more. [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. Learn more. [role] values are valid ARIA roles must have valid values in order to perform their intended accessibility functions. Learn more. [aria-\*] attributes have valid values Assistive technologies, like screen readers, can't interpret ARIA attributes with invalid values. Learn more. [aria-\*] attributes are valid and not misspelled Assistive technologies, like screen readers, can't interpret ARIA attributes with invalid names. Learn more. <audio> elements contain a <track> element with [kind="captions"] Captions make audio elements usable for deaf or hearing-impaired users, providing critical information such as who is talking, what they're saying, and other non-speech information. Learn more. <dl>'s contain only properly-ordered <dt> and <dd> groups, <script> or <template> elements. When definition lists are not properly marked up, screen readers may produce confusing or inaccurate output. Learn more. Definition list items are wrapped in <dl> elements

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.

[id] attributes on the page are unique The value of an id attribute must be unique to prevent other instances from being overlooked by assistive technologies. Learn more. <frame> or <iframe> elements have a title Screen reader users rely on frame titles to describe the contents of frames. 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. <input type="image"> elements have [alt] text 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. Form elements have associated labels Labels ensure that form controls are announced properly by assistive technologies, like screen readers. Learn more. Presentational elements avoid using , <caption> or the [summary] attribute. A table being used for layout purposes should not include data elements, such as the th or caption elements or the summary attribute, because this can create a confusing experience for screen reader users. Learn more. Lists contain only elements and script supporting elements (<script> and <template>). Screen readers have a specific way of announcing lists. Ensuring proper list structure aids screen reader output. Learn more. List items () are contained within or parent elements Screen readers require list items (``) to be contained within a parent `` or `` to be announced properly. Learn more. The document does not use <meta http-equiv="refresh"> 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. Learn more. <object> elements have [alt] text Screen readers cannot translate non-text content. Adding alt 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. 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. <u>Learn more</u>.

elements 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. <u>Learn more</u>.

[lang] attributes have a valid value

Specifying a valid <u>BCP 47 language</u> on elements helps ensure that text is pronounced correctly by a screen reader. <u>Learn more</u>.

<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.

<video> elements contain a <track> element with [kind="description"]

Audio descriptions provide relevant information for videos that dialogue cannot, such as facial expressions and scenes. <u>Learn more</u>.



## Best Practices

▲ Does not use HTTP/2 for all of its resources — 15 requests not served via HTTP/2

HTTP/2 offers many benefits over HTTP/1.1, including binary headers, multiplexing, and server push. <a href="Learn more"><u>Learn more</u></a>.

Show 3rd-party resources (0)

URL	Protocol
http://localhost:8080	http/1.1
/css/all.css (localhost)	http/1.1
<pre>/images/heart-logo.png (localhost)</pre>	http/1.1
<pre>/images/learn-more.png (localhost)</pre>	http/1.1
<pre>/images/education.png (localhost)</pre>	http/1.1
<pre>/images/consulting.png (localhost)</pre>	http/1.1
/images/ocf-hosted-penguin.svg (localhost)	http/1.1

URL	Protocol
/images/facebook.png (localhost)	http/1.1
/images/instagram.png (localhost)	http/1.1
<pre>/images/linkedin.png (localhost)</pre>	http/1.1
<pre>/images/github.png (localhost)</pre>	http/1.1
/scripts/all.js (localhost)	http/1.1
<pre>/fonts/Gotham-Bold.otf (localhost)</pre>	http/1.1
<pre>/fonts/NotoSerif-Regular.ttf (localhost)</pre>	http/1.1
<pre>/fonts/NotoSerifSC-Medium.otf (localhost)</pre>	http/1.1
Links to cross-origin destinations are unsafe	^
Add `rel="noopener"` or `rel="noreferrer"` to any external links to security vulnerabilities. <u>Learn more</u> .	o improve performance and prevent
	Show 3rd-party resources (1)
URL	Target Rel
/datagoodberkeley/ (www.facebook.com)	_blank
/datagoodberkeley/ (www.facebook.com)  assed audits (13)  Avoids Application Cache	_blank
assed audits (13)	
Avoids Application Cache	
Avoids Application Cache  Application Cache is deprecated. <u>Learn more</u> .	dle sensitive data. HTTPS prevents nunications between your app and
Avoids Application Cache Application Cache is deprecated. Learn more.  Uses HTTPS  All sites should be protected with HTTPS, even ones that don't hand intruders from tampering with or passively listening in on the comm	dle sensitive data. HTTPS prevents munications between your app and form APIs. <u>Learn more</u> .
Avoids Application Cache  Application Cache is deprecated. Learn more.  Uses HTTPS  All sites should be protected with HTTPS, even ones that don't hand intruders from tampering with or passively listening in on the comm your users, and is a prerequisite for HTTP/2 and many new web platf	dle sensitive data. HTTPS prevents nunications between your app and form APIs. <u>Learn more</u> .
Avoids Application Cache  Application Cache is deprecated. Learn more.  Uses HTTPS  All sites should be protected with HTTPS, even ones that don't hand intruders from tampering with or passively listening in on the comm your users, and is a prerequisite for HTTP/2 and many new web platf  Uses passive listeners to improve scrolling performance  Consider marking your touch and wheel event listeners as `passive`	dle sensitive data. HTTPS prevents nunications between your app and form APIs. <u>Learn more</u> .  to improve your page's scroll
Avoids Application Cache  Application Cache is deprecated. Learn more.  Uses HTTPS  All sites should be protected with HTTPS, even ones that don't hand intruders from tampering with or passively listening in on the comm your users, and is a prerequisite for HTTP/2 and many new web platf  Uses passive listeners to improve scrolling performance  Consider marking your touch and wheel event listeners as `passive` performance. Learn more.	dle sensitive data. HTTPS prevents nunications between your app and form APIs. <u>Learn more</u> .  to improve your page's scroll
Avoids Application Cache  Application Cache is deprecated. Learn more.  Uses HTTPS  All sites should be protected with HTTPS, even ones that don't hand intruders from tampering with or passively listening in on the comm your users, and is a prerequisite for HTTP/2 and many new web platf  Uses passive listeners to improve scrolling performance  Consider marking your touch and wheel event listeners as `passive` performance. Learn more.  Avoids document.write()  For users on slow connections, external scripts dynamically injected.	dle sensitive data. HTTPS prevents nunications between your app and form APIs. <u>Learn more</u> .  to improve your page's scroll

Page has the HTML doctype	^
Specifying a doctype prevents the browser from switching to quirks-mode. 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. <u>Learn more</u> .	
Detected JavaScript libraries	^
All front-end JavaScript libraries detected on the page. <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 deprecated APIs	^
Deprecated APIs will eventually be removed from the browser. Learn more.	
Allows users to paste into password fields	^
Preventing password pasting undermines good security policy. <u>Learn more</u> .	
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>	
Displays images with correct aspect ratio	^
Image display dimensions should match natural aspect ratio. <u>Learn more</u> .	



# SE0

These checks ensure that your page is optimized for search engine results ranking. There are additional factors Lighthouse does not check that may affect your search ranking. <a href="Learn more">Learn more</a>.

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

▲ Links do not have descriptive text - 1 link found

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

	Link destination	Link Text	
	/about (localhost)	Learn More	
<u> </u>	Image elements do not have [alt] attributes		^
	Informative elements should aim for short, descriptive alternate text. Decoration ignored with an empty alt attribute. <u>Learn more</u> .	ive elements can be	
	Failing Elements		
	img		
	ditional items to manually check (1) — Run these additional validators on your ditional SEO best practices.	site to check	^
	Structured data is valid		^
	Run the <u>Structured Data Testing Tool</u> and the <u>Structured Data Linter</u> to validat <u>Learn more</u> .	e structured data.	
Pas	ssed audits (7)		^
	Has a <meta name="viewport"/> tag with width or initial-scale		^
	Add a ` <meta name="viewport"/> ` tag to optimize your app for mobile screens. Le	<u>arn more</u> .	
	Document has a <title> element&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;^&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;td&gt;The title gives screen reader users an overview of the page, and search engine 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;users rely on it&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;td&gt;Document has a meta description&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;^&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;td&gt;Meta descriptions may be included in search results to concisely summarize pag&lt;/td&gt;&lt;td&gt;e content. &lt;u&gt;Learn more&lt;/u&gt;&lt;/td&gt;&lt;td&gt;•&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</title>		

Show 3rd-party resources (0)

Page has successful HTTP status code	^
Pages with unsuccessful HTTP status codes may not be indexed properly. Learn more.	
Page isn't blocked from indexing	^
Search engines are unable to include your pages in search results if they don't have permiss crawl them. <u>Learn more</u> .	ion to
Document has a valid hreflang	^
hreflang links tell search engines what version of a page they should list in search results given language or region. <u>Learn more</u> .	for a
Document avoids plugins	^
Search engines can't index plugin content, and many devices restrict plugins or don't supported the supported to the support of the support o	t them.
Not applicable (4)	^
robots.txt is valid	^
If your robots.txt file is malformed, crawlers may not be able to understand how you want you	ur
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.	
Document uses legible font sizes	^

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. Learn more.

Tap targets are sized appropriately

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. Learn more.



# Progressive Web App

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

Fast and reliable

Page load is not fast enough on mobile networks

▲ Your page loads too slowly and is not interactive within 10 seconds. Look at the opportunities and diagnostics in the "Performance" section to learn how to improve.

- Interactive at 58.4 s

A fast page load over a cellular network ensures a good mobile user experience. Learn more.

▲ Current page does not respond with a 200 when offline

If you're building a Progressive Web App, consider using a service worker so that your app can work offline. Learn more.

lacktriangle start\_url does not respond with a 200 when offline No usable web app manifest found on page.

A service worker enables your web app to be reliable in unpredictable network conditions. <u>Learn</u> more.

#### **Installable**

Uses HTTPS

All sites should be protected with HTTPS, even ones that don't handle sensitive data. 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>.

▲ 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.

▲ Web app manifest does not meet the installability requirements Failures: No manifest was fetched.

Browsers can proactively prompt users to add your app to their homescreen, which can lead to higher engagement. <u>Learn more</u>.

### **PWA Optimized**

▲ Does not redirect HTTP traffic to HTTPS

If you've already set up HTTPS, make sure that you redirect all HTTP traffic to HTTPS in order to enable secure web features for all your users. <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. 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. <u>Learn more</u>.

Has a <meta name="viewport"> tag with width or initial-scale

Add a `<meta name="viewport">` tag to optimize your app for mobile screens. Learn more.

Contains some content when JavaScript is not available

Your app should display some content when JavaScript is disabled, even if it's just a warning to the user that JavaScript is required to use the app. <u>Learn more</u>.

^

^

^

▲ 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.

Additional items to manually check (3) — 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.

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. <u>Learn more</u>.

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.

Runtime Settings

URL http://localhost:8080/

Fetch time Jul 15, 2020, 6:01 PM PDT

**Device** Emulated Desktop

Network throttling 150 ms TCP RTT, 1,638.4 Kbps throughput (Simulated)

CPU throttling 4x slowdown (Simulated)

User agent (host) Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36

(KHTML, like Gecko) Chrome/83.0.4103.116 Safari/537.36

User agent (network) Mozilla/5.0 (Macintosh; Intel Mac OS X 10\_13\_6) AppleWebKit/537.36

(KHTML, like Gecko) Chrome/74.0.3694.0 Safari/537.36 Chrome-

Lighthouse

CPU/Memory Power 1376

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