Results for: http://localhost:8000/
Apr 4, 2018, 2:16 PM GMT+1 • ▶ Runtime settings
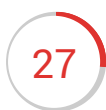
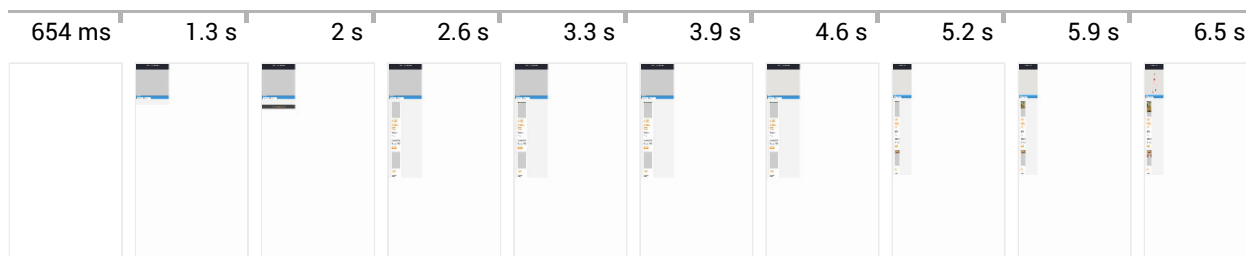| 81	27	56	75	67
Performance	Progressive Web App	Accessibility	Best Practices	SEO

Performance
These encapsulate your web app's current performance and opportunities to improve it.

81

Metrics
These metrics encapsulate your web app's performance across a number of dimensions.

654 ms	1.3 s	2 s	2.6 s	3.3 s	3.9 s	4.6 s	5.2 s	5.9 s	6.5 s

▼ First meaningful paint   2,240 ms
First meaningful paint measures when the primary content of a page is visible. Learn more.

▼ First Interactive (beta)   5,410 ms
First Interactive marks the time at which the page is minimally interactive. Learn more.

▼ Consistently Interactive (beta)   5,410 ms
Consistently Interactive marks the time at which the page is fully interactive. Learn more.

▼ Perceptual Speed Index: 4,863   57
Speed Index shows how quickly the contents of a page are visibly populated. Learn more.

▼ Estimated Input Latency: 16 ms   100
The score above is an estimate of how long your app takes to respond to user input, in
milliseconds. There is a 90% probability that a user encounters this amount of latency, or less.
10% of the time a user can expect additional latency. If your latency is higher than 50 ms,
users may perceive your app as laggy. Learn more.

Opportunities
These are opportunities to speed up your application by optimizing the following resources.

▼ Offscreen images   2,490 ms
                                                                                            452 KB

Consider lazy-loading offscreen and hidden images to improve page load speed and time to interactive. Learn more.

▼ View Details

	URL	Original	Potential Savings
	/img/6.jpg (localhost)	147 KB	147 KB (100%)
	/img/4.jpg (localhost)	110 KB	110 KB (100%)
	/img/3.jpg (localhost)	99 KB	99 KB (100%)
	/img/5.jpg (localhost)	95 KB	95 KB (100%)

▼ Serve images in next-gen formats ▬▬▬▬▬▬▬▬▬▬▬▬▬ 2,060 ms
375 KB

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. Learn more.

▼ View Details

	URL	Original	Potential Savings
	/img/3.jpg (localhost)	99 KB	29 KB (30%)
	/img/7.jpg (localhost)	91 KB	27 KB (30%)
	/img/1.jpg (localhost)	104 KB	27 KB (26%)
	/img/5.jpg (localhost)	95 KB	27 KB (28%)
	/img/8.jpg (localhost)	125 KB	26 KB (21%)
	/img/9.jpg (localhost)	72 KB	25 KB (35%)
	/maps/vt?pb=… (maps.googleapis.com)	61 KB	22 KB (36%)
	/maps/vt?pb=… (maps.googleapis.com)	60 KB	22 KB (36%)
	/img/6.jpg (localhost)	147 KB	22 KB (15%)
	/img/4.jpg (localhost)	110 KB	21 KB (19%)
	/img/10.jpg (localhost)	94 KB	20 KB (22%)

URL		Original	Potential Savings
	/img/2.jpg (localhost)	148 KB	15 KB (10%)
	/maps/vt?pb=… (maps.googleapis.com)	50 KB	15 KB (30%)
	/maps/vt?pb=… (maps.googleapis.com)	45 KB	15 KB (33%)
	/maps/vt?pb=… (maps.googleapis.com)	55 KB	14 KB (26%)
	/maps/vt?pb=… (maps.googleapis.com)	52 KB	14 KB (27%)
	/maps/vt?pb=… (maps.googleapis.com)	43 KB	12 KB (28%)
	/maps/vt?pb=… (maps.googleapis.com)	44 KB	12 KB (27%)
	/maps/vt?pb=… (maps.googleapis.com)	42 KB	10 KB (24%)

▼ Reduce render-blocking stylesheets   ▬▬▬ 640 ms

External stylesheets are blocking the first paint of your page. Consider delivering critical CSS via `<style>` tags and deferring non-critical styles. Learn more.

▼ View Details

URL	Size (KB)	Delayed Paint By (ms)
/css/styles.css (localhost)	5.53 KB	640 ms

▼ Properly size images   ▬ 230 ms
                                                          42 KB

Serve images that are appropriately-sized to save cellular data and improve load time. Learn more.

▼ View Details

URL		Original	Potential Savings
	/img/2.jpg (localhost)	148 KB	6 KB (4%)
	/img/6.jpg (localhost)	147 KB	6 KB (4%)
	/img/8.jpg (localhost)	125 KB	5 KB (4%)
	/img/4.jpg (localhost)	110 KB	4 KB (4%)
	/img/1.jpg (localhost)	104 KB	4 KB (4%)

URL	Original	Potential Savings
/img/3.jpg (localhost)	99 KB	4 KB (4%)
/img/5.jpg (localhost)	95 KB	4 KB (4%)
/img/10.jpg (localhost)	94 KB	4 KB (4%)
/img/7.jpg (localhost)	91 KB	4 KB (4%)
/img/9.jpg (localhost)	72 KB	3 KB (4%)

▼ Enable text compression   ▬ 140 ms
                                                                        25 KB

Text-based responses should be served with compression (gzip, deflate or brotli) to minimize total network bytes. Learn more.

▼ View Details

Uncompressed resource URL	Original	GZIP Savings
/data/restaurants.json (localhost)	20 KB	14 KB (67%)
/js/dbhelper.js (localhost)	5 KB	4 KB (77%)
/css/styles.css (localhost)	5 KB	4 KB (72%)
/js/main.js (localhost)	4 KB	3 KB (73%)

▼ Unused CSS rules   ▬ 70 ms
                                                                        13 KB

Remove unused rules from stylesheets to reduce unnecessary bytes consumed by network activity. Learn more

▼ View Details

URL	Original	Potential Savings
html body{border:0;margin:0;padding:0} ...	10 KB	10 KB (100%)
/css/styles.css (localhost)	6 KB	3 KB (52%)

▼ Minify JavaScript   ▎ 10 ms
                                                                        3 KB

Minifying JavaScript files can reduce payload sizes and script parse time. Learn more.

▼ View Details

URL	Original	Potential Savings

URL	Original	Potential Savings
/js/dbhelper.js (localhost)	5 KB	3 KB (51%)

Diagnostics
More information about the performance of your application.

▼ **Uses inefficient cache policy on static assets: 14 assets found**   **40**
A long cache lifetime can speed up repeat visits to your page. Learn more.

▼ View Details

URL	Cache TTL	Size (KB)
/img/2.jpg (localhost)	None	148 KB
/img/6.jpg (localhost)	None	147 KB
/img/8.jpg (localhost)	None	125 KB
/img/4.jpg (localhost)	None	111 KB
/img/1.jpg (localhost)	None	104 KB
/img/3.jpg (localhost)	None	100 KB
/img/5.jpg (localhost)	None	96 KB
/img/10.jpg (localhost)	None	94 KB
/img/7.jpg (localhost)	None	91 KB
/img/9.jpg (localhost)	None	73 KB
/css/styles.css (localhost)	None	6 KB
/js/dbhelper.js (localhost)	None	5 KB
/js/main.js (localhost)	None	5 KB
…api/js?key=… (maps.googleapis.com)	30 m	26 KB

▼ Critical Request Chains: 3
The Critical Request Chains below show you what resources are issued 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.
Longest chain: **1,259.2ms** over **2** requests, totalling **4.59 KB**

▼ View critical network waterfall:

Initial Navigation
    / (localhost)
        /css/styles.css (localhost) **- 640.1ms, 5.53 KB**
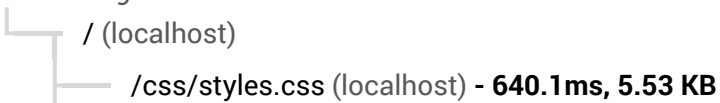
```
    ├──  /js/dbhelper.js (localhost) - 647.6ms, 5.2 KB
    │
    └──  /js/main.js (localhost) - 654.8ms, 4.59 KB
```

▼ 12 Passed Audits

▼ Reduce render-blocking scripts
Script elements are blocking the first paint of your page. Consider inlining critical scripts and deferring non-critical ones. Learn more.

▼ Minify CSS
Minifying CSS files can reduce network payload sizes. Learn more.

▼ Optimize images
Optimized images load faster and consume less cellular data. Learn more.

▼ Keep server response times low (TTFB): 560 ms
Time To First Byte identifies the time at which your server sends a response. Learn more.

▼ Avoids page redirects: 0 ms   ✓
Redirects introduce additional delays before the page can be loaded. Learn more.

▼ Preload key requests: 0 ms   100
Consider using <link rel=preload> to prioritize fetching late-discovered resources sooner Learn more.

▼ Avoids enormous network payloads: Total size was 1,767 KB   100
Large network payloads cost users real money and are highly correlated with long load times. Learn more.

▼ View Details

URL	Total Size	Transfer Time
/img/2.jpg (localhost)	148 KB	810 ms
/img/6.jpg (localhost)	147 KB	810 ms
/img/8.jpg (localhost)	125 KB	690 ms
/img/4.jpg (localhost)	111 KB	610 ms
/img/1.jpg (localhost)	104 KB	570 ms
/img/3.jpg (localhost)	100 KB	550 ms
/img/5.jpg (localhost)	96 KB	520 ms
/img/10.jpg (localhost)	94 KB	520 ms
/img/7.jpg (localhost)	91 KB	500 ms
/img/9.jpg (localhost)	73 KB	400 ms

▼ Avoids an excessive DOM size: 122 nodes   100

Browser engineers recommend pages contain fewer than ~1,500 DOM nodes. The sweet spot is a tree depth < 32 elements and fewer than 60 children/parent element. A large DOM can increase memory usage, cause longer style calculations, and produce costly layout reflows. Learn more.

▼ View details

Total DOM Nodes	DOM Depth	Maximum Children
122	**10**	**13**
target: < 1,500 nodes	target: < 32	target: < 60 nodes

▼ User Timing marks and measures: 0
Consider instrumenting your app with the User Timing API to create custom, real-world measurements of key user experiences. Learn more.

▼ JavaScript boot-up time: 1,300 ms
Consider reducing the time spent parsing, compiling, and executing JS. You may find delivering smaller JS payloads helps with this. Learn more.

▼ View Details

URL	Script Evaluation	Script Parsing & Compi
…5.7.0.0_0/chext_driver.js ()	150 ms	93 m
…en_gb/common.js (maps.googleapis.com)	207 ms	2 m
/assets/viewer.js (gbmdgpbipfallnflgajpaliibnhdgobh)	36 ms	54 m
/ext/common.js (cfhdojbkjhnklbpkdaibdccddilifddb)	87 ms	1 m
/content_script_compiled.js (noondiphcddnnabmjcihcjfbhfklnnep)	77 ms	4 m
…api/js?key=… (maps.googleapis.com)	65 ms	12 m
/include.preload.js (cfhdojbkjhnklbpkdaibdccddilifddb)	40 ms	5 m
/data/restaurants.json (localhost)	40 ms	0 m
/chext_loader.js (mclkkofklkfljcocdinagocijmpgbhab)	9 ms	24 m
…en_gb/util.js (maps.googleapis.com)	31 ms	2 m
…en_gb/stats.js (maps.googleapis.com)	26 ms	2 m
…en_gb/onion.js (maps.googleapis.com)	25 ms	1 m
/js/iframe.js (gppongmhjkpfnbhagpmjfkannfbllamg)	21 ms	5 m
…js/Authentic….Authenticate?… (maps.googleapis.com)	22 ms	1 m
…js/ViewportI….GetViewportInfo?… (maps.googleapis.com)	17 ms	4 m
…dist/browser-polyfill.js (gppongmhjkpfnbhagpmjfkannfbllamg)	14 ms	3 m

URL	Script Evaluation	Script Parsing & Compi
/scripts/content-script.js (epejoicbhllgiimigokgjdoijnpaphdp)	10 ms	6 m
/js/content.js (gppongmhjkpfnbhagpmjfkannfbllamg)	9 ms	1 m

▼ Main thread work breakdown: 1,770 ms
Consider reducing the time spent parsing, compiling and executing JS.You may find delivering smaller JS payloads helps with this.

　　▼ View Details

Category	Work	Time spent
Script Evaluation	Evaluate Script	798 ms
Script Evaluation	Run Microtasks	102 ms
Script Evaluation	Animation Frame Fired	68 ms
Script Evaluation	XHR Load	40 ms
Script Evaluation	XHR Ready State Change	0 ms
Script Parsing & Compile	Compile Script	245 ms
Parsing HTML & CSS	Parse HTML	189 ms
Parsing HTML & CSS	Parse Stylesheet	2 ms
Garbage collection	Minor GC	68 ms
Garbage collection	Major GC	45 ms
Garbage collection	DOM GC	25 ms
Style & Layout	Recalculate Style	49 ms
Style & Layout	Layout	35 ms
Compositing	Update Layer Tree	56 ms
Compositing	Composite Layers	14 ms
Compositing	Hit Test	2 ms
Paint	Paint	32 ms

▼ 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.

Progressive Web App

These checks validate the aspects of a Progressive Web App, as specified by the baseline PWA Checklist.

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8 Failed Audits

▼ **Does not register a service worker**   ✕
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.

▼ **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.

▼ **Does not redirect HTTP traffic to HTTPS**   ✕
If you've already set up HTTPS, make sure that you redirect all HTTP traffic to HTTPS. Learn more.

▼ **User will not be prompted to Install the Web App**   ✕
Browsers can proactively prompt users to add your app to their homescreen, which can lead to higher engagement. Learn more.
Failures: No manifest was fetched, Site does not register a service worker, Service worker does not successfully serve the manifest's start_url, No usable web app manifest found on page.

▼ **Is not configured for a custom splash screen**   ✕
A themed splash screen ensures a high-quality experience when users launch your app from their homescreens. Learn more.
Failures: No manifest was fetched.

▼ **Address bar does not match brand colors**   ✕
The browser address bar can be themed to match your site. Learn more.
Failures: No manifest was fetched, No `<meta name="theme-color">` tag found.

▼ **Does not have a `<meta name="viewport">` tag with `width` or `initial-scale`**   ✕
Add a viewport meta tag to optimize your app for mobile screens. Learn more.
No viewport meta tag found

▼ **Content is not 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.
The viewport size is 981px, whereas the window size is 412px.

▼ 3 Passed Audits

▼ **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. Learn more.

▼ **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. Learn more.

▼   Page load is fast enough on 3G   ✓
        A fast page load over a 3G network ensures a good mobile user experience. Learn more.

▼   Additional items to manually check
        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.

    ▼   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, a key to perceived
            performance. Learn more.

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

Accessibility   56
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.

Elements Use Attributes Correctly
These are opportunities to improve the configuration of your HTML elements.

▼   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. Learn more.

    ▼ View failing elements

```
<img src="https://maps.gstatic.com/mapfiles/api-
3/images/icon_error.png" draggable="false" style="user-select:
none;">
<img class="restaurant-img" src="/img/1.jpg">
<img class="restaurant-img" src="/img/2.jpg">
<img class="restaurant-img" src="/img/3.jpg">
<img class="restaurant-img" src="/img/4.jpg">
<img class="restaurant-img" src="/img/5.jpg">
<img class="restaurant-img" src="/img/6.jpg">
<img class="restaurant-img" src="/img/7.jpg">
<img class="restaurant-img" src="/img/8.jpg">
<img class="restaurant-img" src="/img/9.jpg">
<img class="restaurant-img" src="/img/10.jpg">
```

Elements Describe Contents Well
These are opportunities to make your content easier to understand for a user of assistive technology, like a
screen reader.

▼   Form elements do not have associated labels   ✗

Labels ensure that form controls are announced properly by assistive technologies, like screen readers. Learn more.

▼ View failing elements

```
<select id="neighborhoods-select" name="neighborhoods"
onchange="updateRestaurants()">
<select id="cuisines-select" name="cuisines"
onchange="updateRestaurants()">
```

Color Contrast Is Satisfactory
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.

▼ View failing elements

```
<div class="gm-err-message">
<h2>
<h1>
<a href="./restaurant.html?id=1">
<h1>
<a href="./restaurant.html?id=2">
<h1>
<a href="./restaurant.html?id=3">
<h1>
<a href="./restaurant.html?id=4">
<h1>
<a href="./restaurant.html?id=5">
<h1>
<a href="./restaurant.html?id=6">
<h1>
<a href="./restaurant.html?id=7">
<h1>
<a href="./restaurant.html?id=8">
<h1>
<a href="./restaurant.html?id=9">
<h1>
<a href="./restaurant.html?id=10">
<footer id="footer">
```

Page Specifies Valid Language
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. Learn more.

▼ View failing elements

```
<html>
```

▼
6 Passed Audits

▼ Elements Have Discernible Names
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.

▼ 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.

▼ Elements Describe Contents Well
These are opportunities to make your content easier to understand for a user of assistive technology, like a screen reader.

▼ 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.

▼ Elements Are Well Structured
These are opportunities to make sure your HTML is appropriately structured.

▼ `[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.

▼ Lists contain only `<li>` 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 (`<li>`) are contained within `<ul>` or `<ol>` parent elements   ✓
Screen readers require list items (`<li>`) to be contained within a parent `<ul>` or `<ol>` to be announced properly. Learn more.

▼ 25 Not Applicable Audits

▼ Elements Use Attributes Correctly
These are opportunities to improve the configuration of your HTML elements.

▼ `[accesskey]` values are not unique
Access keys let users quickly focus a part of the page. For proper navigation, each access key must be unique. Learn more.

▼ `<audio>` elements are missing 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.

▼ `<input type="image">` elements do not 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](#).

▼ Some elements have 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 `<table>` element that use the `[headers]` attribute refers to other cells of that same table.
Screen readers have features to make navigating tables easier. Ensuring `<td>` cells using the `[headers]` attribute only refer to other cells in the same table may improve the experience for screen reader users. [Learn more](#).

▼ `<th>` elements and elements with `[role="columnheader"/"rowheader"]` do not 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](#).

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

▼ `[aria-*]` attributes do not match their roles
Each ARIA `role` supports a specific subset of `aria-*` attributes. Mismatching these invalidates the `aria-*` attributes. [Learn more](#).

▼ `[role]`s do not 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 `[role]` that require specific children `[role]`s, are missing.
Some ARIA parent roles must contain specific child roles to perform their intended accessibility functions. [Learn more](#).

▼ `[role]`s are not 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 not valid
ARIA roles must have valid values in order to perform their intended accessibility functions. [Learn more](#).

▼ `[aria-*]` attributes do not have valid values
Assistive technologies, like screen readers, can't interpret ARIA attributes with invalid values. [Learn more](#).

▼ `[aria-*]` attributes are not valid or misspelled
Assistive technologies, like screen readers, can't interpret ARIA attributes with invalid names. [Learn more](#).

▼ Elements Have Discernible Names

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.

▼ 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. Learn more.

▼ Elements Describe Contents Well
These are opportunities to make your content easier to understand for a user of assistive technology, like a screen reader.

▼ `<frame>` or `<iframe>` elements do not have a title
Screen reader users rely on frame titles to describe the contents of frames. Learn more.

▼ Presentational `<table>` elements do not avoid using `<th>`, `<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.

▼ `<object>` elements do not 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.

▼ `<video>` elements do not 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 do not contain a `<track>` element with `[kind="description"]`.
Audio descriptions provide relevant information for videos that dialogue cannot, such as facial expressions and scenes. Learn more.

▼ Elements Are Well Structured
These are opportunities to make sure your HTML is appropriately structured.

▼ `<dl>`'s do not 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 not 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.

▼ Page Specifies Valid Language
These are opportunities to improve the interpretation of your content by users in different locales.

▼ `<html>` element does not have a valid value for its `[lang]` attribute.
Specifying a valid BCP 47 language helps screen readers announce text properly. Learn more.

▼ `[lang]` attributes do not 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](#).

▼ Meta Tags Used Properly
These are opportunities to improve the user experience of your site.

   ▼ The document uses `<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](#).

   ▼ `[user-scalable="no"]` is used in the `<meta name="viewport">` element or the `[maximum-scale]` attribute is 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](#).

▼ Additional items to manually check
These items address areas which an automated testing tool cannot cover. Learn more in our guide on [conducting an accessibility review](#).

   ▼ 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](#).

   ▼ 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. [Learn 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.

Best Practices

We've compiled some recommendations for modernizing your web app and avoiding performance pitfalls.

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4 Failed Audits

▼ Does not use HTTP/2 for all of its resources: 17 requests were not handled over HTTP/2   ✕
HTTP/2 offers many benefits over HTTP/1.1, including binary headers, multiplexing, and server push. Learn more.

▼ View Details

URL	Protocol
/ (localhost)	http/1.0
/css/styles.css (localhost)	http/1.0
/js/dbhelper.js (localhost)	http/1.0
/js/main.js (localhost)	http/1.0
/data/restaurants.json (localhost)	http/1.0
/data/restaurants.json (localhost)	http/1.0
/data/restaurants.json (localhost)	http/1.0
/img/1.jpg (localhost)	http/1.0
/img/2.jpg (localhost)	http/1.0
/img/3.jpg (localhost)	http/1.0
/img/4.jpg (localhost)	http/1.0
/img/5.jpg (localhost)	http/1.0
/img/6.jpg (localhost)	http/1.0
/img/7.jpg (localhost)	http/1.0
/img/8.jpg (localhost)	http/1.0
/img/9.jpg (localhost)	http/1.0
/img/10.jpg (localhost)	http/1.0

▼ Does not use passive listeners to improve scrolling performance   ✕

Consider marking your touch and wheel event listeners as `passive` to improve your page's scroll performance. [Learn more](.).

▼ View Details

URL	Location
…en_gb/util.js (maps.googleapis.com)	line: 34
…en_gb/util.js (maps.googleapis.com)	line: 34

▼ Manifest's `short_name` will be truncated when displayed on homescreen   ✕
Make your app's `short_name` fewer than 12 characters to ensure that it's not truncated on homescreens. [Learn more](.).

▼ Displays images with incorrect aspect ratio   ✕
Image display dimensions should match natural aspect ratio.

▼ View Details

URL	Aspect Ratio (Displayed)	Aspect Ratio (Actual)
/img/1.jpg (localhost)	270 x 248 (1.09)	800 x 600 (1.33)
/img/2.jpg (localhost)	270 x 248 (1.09)	800 x 600 (1.33)
/img/3.jpg (localhost)	270 x 248 (1.09)	800 x 600 (1.33)
/img/4.jpg (localhost)	270 x 248 (1.09)	800 x 600 (1.33)
/img/5.jpg (localhost)	270 x 248 (1.09)	800 x 600 (1.33)
/img/6.jpg (localhost)	270 x 248 (1.09)	800 x 600 (1.33)
/img/7.jpg (localhost)	270 x 248 (1.09)	800 x 600 (1.33)
/img/8.jpg (localhost)	270 x 248 (1.09)	800 x 600 (1.33)
/img/9.jpg (localhost)	270 x 248 (1.09)	800 x 600 (1.33)
/img/10.jpg (localhost)	270 x 248 (1.09)	800 x 600 (1.33)

▼ 12 Passed Audits

▼ Avoids Application Cache   ✓
Application Cache is deprecated. [Learn more](.).

▼ Avoids WebSQL DB   ✓
Web SQL is deprecated. Consider using IndexedDB instead. [Learn more](.).

▼ 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. Learn more.

▼ Avoids Mutation Events in its own scripts ✓
Mutation Events are deprecated and harm performance. Consider using Mutation Observers instead. Learn more.

▼ 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.

▼ Opens external anchors using `rel="noopener"` ✓
Open new tabs using `rel="noopener"` to improve performance and prevent security vulnerabilities. Learn more.

▼ 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 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.

▼ 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 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. 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.

SEO
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. Learn more.

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Mobile Friendly
Make sure your pages are mobile friendly so users don't have to pinch or zoom in order to read the content pages. Learn more.

▼ Does not have a `<meta name="viewport">` tag with `width` or `initial-scale` ✗
Add a viewport meta tag to optimize your app for mobile screens. Learn more.
No viewport meta tag found

▼ Document doesn't use 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.
   Text is illegible because of a missing viewport config

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

▼ Document does not have a meta description   ✗
   Meta descriptions may be included in search results to concisely summarize page content.
   Learn more.

▼ 6 Passed Audits

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

      ▼ 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.

      ▼ Links have descriptive text   ✓
         Descriptive link text helps search engines understand your content. Learn more.

      ▼ Document has a valid `hreflang`   ✓
         hreflang allows crawlers to discover alternate translations of the page content. Learn
         more.

      ▼ Document avoids plugins   ✓
         Most mobile devices do not support plugins, and many desktop browsers restrict them.

   ▼ Crawling and Indexing
      To appear in search results, crawlers need access to your app.

      ▼ 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
         permission to crawl them. Learn more.

▼ 1 Not Applicable Audits

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

      ▼ Document has a valid `rel=canonical`
         Canonical links suggest which URL to show in search results. Learn more.

▼ Additional items to manually check
   Run these additional validators on your site to check additional SEO best practices.

▼ Page is mobile friendly
Take the [Mobile-Friendly Test](#) to check for audits not covered by Lighthouse, like sizing tap targets appropriately. [Learn more](#).

▼ Structured data is valid
Run the [Structured Data Testing Tool](#) and the [Structured Data Linter](#) to validate structured data. [Learn more](#).

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