



## Performance

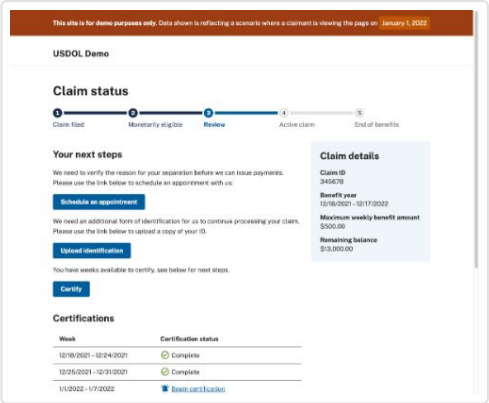
Values are estimated and may vary. The [performance score is calculated](#) directly from these metrics. [See calculator.](#)

▲

0–49

50–89

90–100



### METRICS

[Expand view](#)

First Contentful Paint

0.3 s

Time to Interactive

0.4 s

Speed Index

0.3 s

Total Blocking Time

0 ms

Largest Contentful Paint

0.7 s

Cumulative Layout Shift

0.001

[View Original Trace](#)[View Treemap](#)

Show audits relevant to: All [FCP](#) [TBT](#) [LCP](#) [CLS](#)

### DIAGNOSTICS

User Timing marks and measures — 4 user timings

Consider instrumenting your app with the User Timing API to measure your app's real-world performance during key user experiences. [Learn more.](#)

 Consider using `Next.js Analytics` to measure your app's real-world performance. [Learn more.](#)

Name	Type	Start Time	Duration
Next.js-before-hydration	Measure	0 ms	68.4 ms
Next.js-hydration	Measure	68.4 ms	10.11 ms

Name	Type	Start Time	Duration
beforeRender	Mark	68.41 ms	
afterHydrate	Mark	78.52 ms	

Keep request counts low and transfer sizes small — 12 requests • 298 KiB

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

Resource Type	Requests	Transfer Size
Total	12	298.1 KiB
Script	7	175.6 KiB
Font	2	64.0 KiB
Stylesheet	1	55.2 KiB
Document	1	2.4 KiB
Other	1	0.8 KiB
Image	0	0.0 KiB
Media	0	0.0 KiB
Third-party	0	0.0 KiB

Largest Contentful Paint element — 1 element found

This is the largest contentful element painted within the viewport. [Learn More](#)

LCP

Element
<div><div></div><div>div.bg-primary-lightest.padding-3.measure-5</div></div>

Avoid large layout shifts — 2 elements found

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

CLS

Element	CLS Contribution
---------	------------------

Element	CLS Contribution
<div>div.usa-nav-container</div>	0
<div>div.usa-alert</div>	0

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

PASSED AUDITS (36)

Hide

Eliminate render-blocking resources

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

NEXT

 Use the `next/script` component to defer loading of non-critical third-party scripts. [Learn more.](#)

Properly size images

Serve images that are appropriately-sized to save cellular data and improve load time. [Learn more.](#)

NEXT

 Use the `next/image` component to set the appropriate `sizes`. [Learn more.](#)

Defer offscreen images

Consider lazy-loading offscreen and hidden images after all critical resources have finished loading to lower time to interactive. [Learn more.](#)

NEXT

 Use the `next/image` component instead of `` to automatically lazy-load images. [Learn more.](#)

Minify CSS

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

Minify JavaScript

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

Reduce unused CSS — Potential savings of 54 KiB

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

NEXT

 Consider setting up `PurgeCSS` in `Next.js` configuration to remove unused rules from stylesheets. [Learn more.](#)

URL	Transfer Size	Potential Savings
-----	---------------	-------------------

URL	Transfer Size	Potential Savings
...css/84259f27dbf9c8a9.css (localhost)	55.2 KiB	54.0 KiB

Reduce unused JavaScript — Potential savings of 70 KiB

Reduce unused JavaScript and defer loading scripts until they are required to decrease bytes consumed by network activity. [Learn more.](#) LCP

Next Use `Webpack Bundle Analyzer` to detect unused JavaScript code. [Learn more](#)

URL	Transfer Size	Potential Savings
...pages/_app-106...cabbe.js (localhost)	90.8 KiB	70.0 KiB

Efficiently encode images

Optimized images load faster and consume less cellular data. [Learn more.](#)

Next Use the `next/image` component instead of `` to adjust image quality. [Learn more.](#)

Serve images in next-gen formats

Image formats like WebP and AVIF often provide better compression than PNG or JPEG, which means faster downloads and less data consumption. [Learn more.](#)

Next Use the `next/image` component instead of `` to automatically optimize image format. [Learn more.](#)

Enable text compression

Text-based resources should be served with compression (gzip, deflate or brotli) to minimize total network bytes. [Learn more.](#) FCP LCP

Next Enable compression on your Next.js server. [Learn more.](#)

Preconnect to required origins

Consider adding `preconnect` or `dns-prefetch` resource hints to establish early connections to important third-party origins. [Learn more.](#) FCP LCP

Initial server response time was short — Root document took 10 ms

Keep the server response time for the main document short because all other requests depend on it. [Learn more.](#) FCP LCP

URL	Time Spent
http://localhost:3000	10 ms

Avoid multiple page redirects

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

Preload key requests

Consider using `<link rel=preload>` to prioritize fetching resources that are currently requested later in page load. [Learn more.](#) FCP LCP

Use HTTP/2

HTTP/2 offers many benefits over HTTP/1.1, including binary headers and multiplexing. [Learn more.](#)

Use video formats for animated content

Large GIFs are inefficient for delivering animated content. Consider using MPEG4/WebM videos for animations and PNG/WebP for static images instead of GIF to save network bytes. [Learn more](#) LCP

Remove duplicate modules in JavaScript bundles

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

Avoid serving legacy JavaScript to modern browsers — Potential savings of 0 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. [Learn More](#) TBT

URL	Potential Savings
...chunks/main-b50a0d46309b6bbf.js (localhost)	0.0 KiB
main-b50a0d46309b6bbf.js:1 @babel/plugin-transform-classes	
...pages/_app-106...cabbe.js (localhost)	0.0 KiB
_app-10621803388cabbe.js:1 @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

NEXT.js

Use the `next/image` component and set "priority" to true to preload LCP image. [Learn more.](#)

Avoids enormous network payloads — Total size was 298 KiB

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

URL	Transfer Size
...pages/_app-106...cabbe.js (localhost)	90.8 KiB
...css/84259f27dbf9c8a9.css (localhost)	55.2 KiB
...chunks/framework-4556c45dd113b893.js (localhost)	44.7 KiB

about:blank

5/15

URL	Transfer Size
...public-sans/PublicSans-Regular.woff2 (localhost)	32.1 KiB
...public-sans/PublicSans-Bold.woff2 (localhost)	31.9 KiB
...chunks/main-b50a0d46309b6bbf.js (localhost)	30.2 KiB
...pages/index-049...e776ce.js (localhost)	7.0 KiB
http://localhost:3000	2.4 KiB
...chunks/webpack-5c6a38d4092136a7.js (localhost)	1.9 KiB
/json/scenarioThree.json (localhost)	0.8 KiB

Uses efficient cache policy on static assets — 0 resources found ^

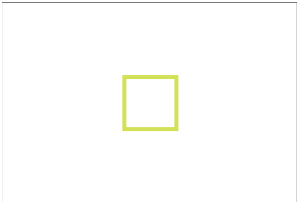
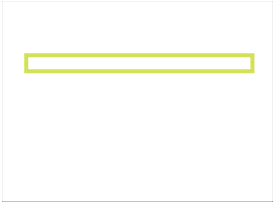
A long cache lifetime can speed up repeat visits to your page. [Learn more.](#)

**NEXT** Configure caching for immutable assets and `Server-side Rendered` (SSR) pages. [Learn more.](#)

Avoids an excessive DOM size — 155 elements ^

A large DOM will increase memory usage, cause longer [style calculations](#), and produce costly [layout reflows](#). [Learn more.](#)

TBT

Statistic	Element	Value
Total DOM Elements		155
Maximum DOM Depth	 path	15
Maximum Child Elements	 ol.usa-step-indicator__segments	5

☐ Avoid chaining critical requests ^

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: 10 ms

Initial Navigation

http://localhost:3000 - 10 ms, 2.41 KiB

JavaScript execution time ^

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

Minimizes main-thread work — 0.1 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	31 ms
Other	17 ms
Script Parsing & Compilation	9 ms
Parse HTML & CSS	7 ms
Style & Layout	5 ms
Rendering	1 ms
Garbage Collection	1 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](#). FCP LCP

Minimize third-party usage

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

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. [Learn more](#). TBT

Largest Contentful Paint image was not lazily loaded

Above-the-fold images that are lazily loaded render later in the page lifecycle, which can delay the largest contentful paint. [Learn more](#).

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 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](#).

Avoid long main-thread tasks

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

☐ Avoid non-composited animations

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

~~NEXT.~~ Use the ``next/image`` component to make sure images are always sized appropriately. [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

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. [Learn more](#)



## 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.

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. [Learn more](#).

☐ Interactive controls are keyboard focusable

Custom interactive controls are keyboard focusable and display a focus indicator. [Learn more](#).

☐ Interactive elements indicate their purpose and state

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

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

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](#).



<div><div></div><div>Custom controls have associated labels</div><div></div></div>
Custom interactive controls have associated labels, provided by aria-label or aria-labelledby. <a href="#">Learn more.</a>
<div><div></div><div>Custom controls have ARIA roles</div><div></div></div>
Custom interactive controls have appropriate ARIA roles. <a href="#">Learn more.</a>
<div><div></div><div>Visual order on the page follows DOM order</div><div></div></div>
DOM order matches the visual order, improving navigation for assistive technology. <a href="#">Learn more.</a>
<div><div></div><div>Offscreen content is hidden from assistive technology</div><div></div></div>
Offscreen content is hidden with display: none or aria-hidden=true. <a href="#">Learn more.</a>
<div><div></div><div>HTML5 landmark elements are used to improve navigation</div><div></div></div>
Landmark elements (<main>, <nav>, etc.) are used to improve the keyboard navigation of the page for assistive technology. <a href="#">Learn more.</a>

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

PASSED AUDITS (19)

Hide

<div><div>[aria-*] attributes match their roles</div><div></div></div>
Each ARIA `role` supports a specific subset of `aria-*` attributes. Mismatching these invalidates the `aria-*` attributes. <a href="#">Learn more.</a>
<div><div>[aria-hidden="true"] is not present on the document &lt;body&gt;</div><div></div></div>
Assistive technologies, like screen readers, work inconsistently when `aria-hidden="true"` is set on the document `<body>`. <a href="#">Learn more.</a>
<div><div>[role]s have all required [aria-*] attributes</div><div></div></div>
Some ARIA roles have required attributes that describe the state of the element to screen readers. <a href="#">Learn more.</a>
<div><div>[role] values are valid</div><div></div></div>
ARIA roles must have valid values in order to perform their intended accessibility functions. <a href="#">Learn more.</a>
<div><div>[aria-*] attributes have valid values</div><div></div></div>
Assistive technologies, like screen readers, can't interpret ARIA attributes with invalid values. <a href="#">Learn more.</a>
<div><div>[aria-*] attributes are valid and not misspelled</div><div></div></div>
Assistive technologies, like screen readers, can't interpret ARIA attributes with invalid names. <a href="#">Learn more.</a>
<div><div>[user-scalable="no"] is not used in the &lt;meta name="viewport"&gt; element and the [maximum-scale] attribute is not</div><div></div></div>

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. <a href="#">Learn more</a> .	
<code>[aria-hidden="true"]</code> elements do not contain focusable descendents	^
Focusable descendents within an <code>[aria-hidden="true"]</code> element prevent those interactive elements from being available to users of assistive technologies like screen readers. <a href="#">Learn more</a> .	
The page contains a heading, skip link, or landmark region	^
Adding ways to bypass repetitive content lets keyboard users navigate the page more efficiently. <a href="#">Learn more</a> .	
Background and foreground colors have a sufficient contrast ratio	^
Low-contrast text is difficult or impossible for many users to read. <a href="#">Learn more</a> .	
Document has a <code>&lt;title&gt;</code> 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. <a href="#">Learn more</a> .	
<code>&lt;html&gt;</code> element has a <code>[lang]</code> 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. <a href="#">Learn more</a> .	
<code>&lt;html&gt;</code> element has a valid value for its <code>[lang]</code> attribute	^
Specifying a valid <a href="#">BCP 47 language</a> helps screen readers announce text properly. <a href="#">Learn more</a> .	
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. <a href="#">Learn more</a> .	
Lists contain only <code>&lt;li&gt;</code> elements and script supporting elements ( <code>&lt;script&gt;</code> and <code>&lt;template&gt;</code> ).	^
Screen readers have a specific way of announcing lists. Ensuring proper list structure aids screen reader output. <a href="#">Learn more</a> .	
List items ( <code>&lt;li&gt;</code> ) are contained within <code>&lt;ul&gt;</code> or <code>&lt;ol&gt;</code> parent elements	^
Screen readers require list items ( <code>&lt;li&gt;</code> ) to be contained within a parent <code>&lt;ul&gt;</code> or <code>&lt;ol&gt;</code> to be announced properly. <a href="#">Learn more</a> .	
Cells in a <code>&lt;table&gt;</code> element that use the <code>[headers]</code> attribute refer to table cells within the same table.	^
Screen readers have features to make navigating tables easier. Ensuring <code>&lt;td&gt;</code> cells using the <code>[headers]</code> attribute only refer to other cells in the same table may improve the experience for screen reader users. <a href="#">Learn more</a> .	
<code>&lt;th&gt;</code> elements and elements with <code>[role="columnheader"/"rowheader"]</code> 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. <a href="#">Learn more.</a>
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. <a href="#">Learn more.</a>

NOT APPLICABLE (25)

Hide

<input type="radio"/> <a href="#">[accesskey]</a> values are unique ^
Access keys let users quickly focus a part of the page. For proper navigation, each access key must be unique. <a href="#">Learn more.</a>
<input type="radio"/> <a href="#">button</a> , <a href="#">link</a> , and <a href="#">menuitem</a> 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. <a href="#">Learn more.</a>
<input type="radio"/> ARIA input fields have accessible names ^
When an input field doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. <a href="#">Learn more.</a>
<input type="radio"/> ARIA <a href="#">meter</a> 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. <a href="#">Learn more.</a>
<input type="radio"/> ARIA <a href="#">progressbar</a> elements have accessible names ^
When a `progressbar` element doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. <a href="#">Learn more.</a>
<input type="radio"/> Elements with an ARIA <a href="#">[role]</a> that require children to contain a specific <a href="#">[role]</a> have all required children. ^
Some ARIA parent roles must contain specific child roles to perform their intended accessibility functions. <a href="#">Learn more.</a>
<input type="radio"/> <a href="#">[role]</a> 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. <a href="#">Learn more.</a>
<input type="radio"/> ARIA toggle fields have accessible names ^
When a toggle field doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. <a href="#">Learn more.</a>
<input type="radio"/> ARIA <a href="#">tooltip</a> 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. <a href="#">Learn more.</a>

<div><div><div></div><div>ARIA <code>treeitem</code> elements have accessible names</div><div></div></div></div>	
<div><div></div><div>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. <a href="#">Learn more.</a></div><div></div></div>	
<div><div><div></div><div>Buttons have an accessible name</div><div></div></div></div>	
<div><div></div><div>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. <a href="#">Learn more.</a></div><div></div></div>	
<div><div><div></div><div><code>&lt;dl&gt;</code>'s contain only properly-ordered <code>&lt;dt&gt;</code> and <code>&lt;dd&gt;</code> groups, <code>&lt;script&gt;</code>, <code>&lt;template&gt;</code> or <code>&lt;div&gt;</code> elements.</div><div></div></div></div>	
<div><div></div><div>When definition lists are not properly marked up, screen readers may produce confusing or inaccurate output. <a href="#">Learn more.</a></div><div></div></div>	
<div><div><div></div><div>Definition list items are wrapped in <code>&lt;dl&gt;</code> elements</div><div></div></div></div>	
<div><div></div><div>Definition list items (<code>&lt;dt&gt;</code> and <code>&lt;dd&gt;</code>) must be wrapped in a parent <code>&lt;dl&gt;</code> element to ensure that screen readers can properly announce them. <a href="#">Learn more.</a></div><div></div></div>	
<div><div><div></div><div><code>[id]</code> attributes on active, focusable elements are unique</div><div></div></div></div>	
<div><div></div><div>All focusable elements must have a unique <code>id</code> to ensure that they're visible to assistive technologies. <a href="#">Learn more.</a></div><div></div></div>	
<div><div><div></div><div>ARIA IDs are unique</div><div></div></div></div>	
<div><div></div><div>The value of an ARIA ID must be unique to prevent other instances from being overlooked by assistive technologies. <a href="#">Learn more.</a></div><div></div></div>	
<div><div><div></div><div>No form fields have multiple labels</div><div></div></div></div>	
<div><div></div><div>Form fields with multiple labels can be confusingly announced by assistive technologies like screen readers which use either the first, the last, or all of the labels. <a href="#">Learn more.</a></div><div></div></div>	
<div><div><div></div><div><code>&lt;frame&gt;</code> or <code>&lt;iframe&gt;</code> elements have a title</div><div></div></div></div>	
<div><div></div><div>Screen reader users rely on frame titles to describe the contents of frames. <a href="#">Learn more.</a></div><div></div></div>	
<div><div><div></div><div>Image elements have <code>[alt]</code> attributes</div><div></div></div></div>	
<div><div></div><div>Informative elements should aim for short, descriptive alternate text. Decorative elements can be ignored with an empty alt attribute. <a href="#">Learn more.</a></div><div></div></div>	
<div><div><div></div><div><code>&lt;input type="image"&gt;</code> elements have <code>[alt]</code> text</div><div></div></div></div>	
<div><div></div><div>When an image is being used as an <code>&lt;input&gt;</code> button, providing alternative text can help screen reader users understand the purpose of the button. <a href="#">Learn more.</a></div><div></div></div>	
<div><div><div></div><div>Form elements have associated labels</div><div></div></div></div>	
<div><div></div><div>Labels ensure that form controls are announced properly by assistive technologies, like screen readers. <a href="#">Learn more.</a></div><div></div></div>	
<div><div><div></div><div>The document does not use <code>&lt;meta http-equiv="refresh"&gt;</code></div><div></div></div></div>	

<object> elements have alternate text

^

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

Ensure CSP is effective against XSS attacks

^

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

Description	Directive	Severity
No CSP found in enforcement mode		High

### GENERAL

Detected JavaScript libraries

^

All front-end JavaScript libraries detected on the page. [Learn more.](#)

Name	Version
Next.js	12.3.1

Uses HTTPS	^
<p>All sites should be protected with HTTPS, even ones that don't handle sensitive data. This includes avoiding <a href="#">mixed content</a>, 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. <a href="#">Learn more</a>.</p>	
Avoids requesting the geolocation permission on page load	^
<p>Users are mistrustful of or confused by sites that request their location without context. Consider tying the request to a user action instead. <a href="#">Learn more</a>.</p>	
Avoids requesting the notification permission on page load	^
<p>Users are mistrustful of or confused by sites that request to send notifications without context. Consider tying the request to user gestures instead. <a href="#">Learn more</a>.</p>	
Avoids front-end JavaScript libraries with known security vulnerabilities	^
<p>Some third-party scripts may contain known security vulnerabilities that are easily identified and exploited by attackers. <a href="#">Learn more</a>.</p>	
Allows users to paste into password fields	^
<p>Preventing password pasting undermines good security policy. <a href="#">Learn more</a>.</p>	
Displays images with correct aspect ratio	^
<p>Image display dimensions should match natural aspect ratio. <a href="#">Learn more</a>.</p>	
Serves images with appropriate resolution	^
<p>Image natural dimensions should be proportional to the display size and the pixel ratio to maximize image clarity. <a href="#">Learn more</a>.</p>	
Page has the HTML doctype	^
<p>Specifying a doctype prevents the browser from switching to quirks-mode. <a href="#">Learn more</a>.</p>	
Properly defines charset	^
<p>A character encoding declaration is required. It can be done with a <code>&lt;meta&gt;</code> tag in the first 1024 bytes of the HTML or in the Content-Type HTTP response header. <a href="#">Learn more</a>.</p>	
Avoids deprecated APIs	^
<p>Deprecated APIs will eventually be removed from the browser. <a href="#">Learn more</a>.</p>	
No browser errors logged to the console	^
<p>Errors logged to the console indicate unresolved problems. They can come from network request failures and other browser concerns. <a href="#">Learn more</a></p>	
No issues in the <a href="#">Issues</a> 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. [Learn more](#).

NOT APPLICABLE (1)

Hide

○ Fonts with `font-display: optional` are preloaded

Preload `optional` fonts so first-time visitors may use them. [Learn more](#)