

http://localhost:4200/LatestArticles













PVA

Performance

Accessibility

Best Practices **SEO**

PWA



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

First Contentful Paint

5.7 s

Time to Interactive

7.9 s

Speed Index

5.7 s

Total Blocking Time

100 ms

Largest Contentful Paint

7.8 s

Cumulative Layout Shift

0





















Expand view

Show audits relevant to: All <u>FCP TBT LCP CLS</u>

OPPORTUNITIES

Opportunity Estimated Savings

▲ Reduce unused JavaScript

3.04 s 🔨

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

✓ Show 3rd-party resources (1)

URL	Transfer Size	Potential Savings
/vendor.js (localhost)	5,039.9 KiB	2,392.3 KiB
/scripts.js (localhost)	1,066.9 KiB	680.2 KiB
datatables.net\js\jquery.dataTables.js	443.1 KiB	225.6 KiB
jquery\dist\jquery.js	279.9 KiB	200.3 KiB
bootstrap\dist\js\bootstrap.js	144.4 KiB	97.0 KiB
datatables.net\js\jquery.dataTables.min.js	88.2 KiB	73.4 KiB
jquery\dist\jquery.min.js	87.4 KiB	63.7 KiB
/main.js (localhost)	679.6 KiB	300.1 KiB
src/app/Shared Pages/register/register.component.html	18.4 KiB	18.4 KiB
src/app/User Pages/homepage/homepage.component.html	12.8 KiB	12.8 KiB
src/app/User Pages/create-article-page/create-article-page.component.html	10.6 KiB	10.6 KiB
src/app/User Pages/my-articles/my-articles.component.html	9.4 KiB	9.4 KiB
src/app/User Pages/update-article-page/update-article-page.component.html	9.2 KiB	9.2 KiB
/styles.js (localhost)	174.1 KiB	167.2 KiB
/node_modules/html-entities/lib/named-references.js	68.4 KiB	68.4 KiB
/node_modules/webpack-dev-server/client/modules/logger/index.js	26.8 KiB	26.8 KiB
/node_modules/events/events.js	15.1 KiB	15.1 KiB
/node_modules/webpack-dev-server/client/index.js	8.3 KiB	8.3 KiB
/node_modules/html-entities/lib/index.js	8.0 KiB	8.0 KiB
standard/ckeditor.js (cdn.ckeditor.com)	190.8 KiB	165.8 KiB
/polyfills.js (localhost)	297.3 KiB	66.2 KiB
node_modules/zone.js/fesm2015/zone.js	124.9 KiB	26.8 KiB
node_modules/events/events.js	14.8 KiB	11.5 KiB
node_modules/webpack-dev-server/client/modules/logger/index.js	26.3 KiB	7.7 KiB
node_modules/html-entities/lib/index.js	7.8 KiB	5.5 KiB

URL	Transfer Size	Potential Savings
node_modules/webpack-dev-server/client/overlay.js	6.7 KiB	5.2 KiB

▲ Enable text compression

1.89 s ^

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

URL	Transfer Size	Potential Savings
/scripts.js (localhost)	1,066.6 KiB	776.5 KiB
/main.js (localhost)	679.3 KiB	573.4 KiB
/styles.css (localhost)	357.9 KiB	306.8 KiB
/polyfills.js (localhost)	297.0 KiB	223.6 KiB
/Article/GetLatestArticles (localhost)	727.1 KiB	218.2 KiB
/styles.js (localhost)	173.8 KiB	126.1 KiB
/Article/GetTrendi?Range=0 (localhost)	112.4 KiB	39.7 KiB
/runtime.js (localhost)	6.5 KiB	4.8 KiB

Eliminate render-blocking resources

0.58 s ^

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

✓ Show 3rd-party resources (2)

URL	Transfer Size	Potential Savings
css/font-awesome.min.css (cdnjs.cloudflare.com)	6.2 KiB	210 ms
/styles.css (localhost)	358.2 KiB	1,440 ms
standard/ckeditor.js (cdn.ckeditor.com)	190.8 KiB	1,000 ms

Minify JavaScript 0.56 s ^

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

URL	Transfer Size	Potential Savings
/scripts.js (localhost)	1,066.9 KiB	508.6 KiB
/polyfills.js (localhost)	297.3 KiB	98.8 KiB
/main.js (localhost)	679.6 KiB	74.7 KiB
/styles.js (localhost)	174.1 KiB	36.4 KiB
/runtime.js (localhost)	6.8 KiB	3.8 KiB

Reduce unused CSS 0.4 s ^

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

URL	Transfer Size	Potential Savings
/styles.css (localhost)	358.2 KiB	346.7 KiB

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

DIAGNOSTICS

A	Avoid enormous network payloads — Total size was 8,765 KiB	^
	Large network payloads cost users real money and are highly correlated with long load ti	mes. <u>Learn more</u> . <u>LCP</u>
		✓ Show 3rd-party resources (2)
	URL	Transfer Size
	/vendor.js (localhost)	5,039.9 KiB
	/scripts.js (localhost)	1,066.9 KiB

URL	Transfer Size
/Article/GetLatestArticles (localhost)	728.9 KiB
/main.js (localhost)	679.6 KiB
/styles.css (localhost)	358.2 KiB
/polyfills.js (localhost)	297.3 KiB
standard/ckeditor.js (cdn.ckeditor.com)	190.8 KiB
/styles.js (localhost)	174.1 KiB
/Article/GetTrendi?Range=0 (localhost)	112.8 KiB
fonts/fontawesome-webfont.woff2?v=4.7.0 (cdnjs.cloudflare.com)	76.1 KiB

▲ Serve static assets with an efficient cache policy — 9 resources found

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

✓ Show 3rd-party resources (1)

URL	Cache TTL	Transfer Size
/vendor.js (localhost)	None	5,040 KiB
/scripts.js (localhost)	None	1,067 KiB
/main.js (localhost)	None	680 KiB
/styles.css (localhost)	None	358 KiB
/polyfills.js (localhost)	None	297 KiB
/styles.js (localhost)	None	174 KiB
/assets/Logo.png (localhost)	None	24 KiB
/runtime.js (localhost)	None	7 KiB
standard/ckeditor.js (cdn.ckeditor.com)	7 d	191 KiB

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

URL Potential Savings

...fonts/fontawesome-webfont.woff2?v=4.7.0 (cdnjs.cloudflare.com) 60 ms

O Avoid chaining critical requests — 8 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. <u>Learn more</u>. (FCP) (LCP)

Maximum critical path latency: 1,130 ms

Initial Navigation

/LatestArticles (localhost)

- ...css/bootstrap.min.css (localhost) 10 ms, 0.00 KiB
- ...css/font-awesome.min.css (cdnjs.cloudflare.com)
 - ...fonts/fontawesome-webfont.woff2?v=4.7.0 (cdnjs.cloudflare.com) 60 ms, 76.09 KiB

/styles.css (localhost) - 20 ms, 358.22 KiB

...standard/ckeditor.js (cdn.ckeditor.com) - 140 ms, 190.83 KiB

/runtime.js (localhost) - 10 ms, 6.82 KiB

/polyfills.js (localhost) - 30 ms, 297.30 KiB

/vendor.js (localhost) - 80 ms, 5,039.86 KiB

/main.js (localhost) - 50 ms, 679.56 KiB

User Timing marks and measures — 34 user timings

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

Name	Туре	Start Time	Duration
Zone	Measure	695.45 ms	0.45 ms
Zone:ZoneAwarePromise	Measure	695.98 ms	2.92 ms
Zone:toString	Measure	699 ms	0.11 ms
Zone:util	Measure	699.21 ms	0.39 ms

Name	Туре	Start Time	Duration
Zone:legacy	Measure	699.64 ms	0.07 ms
Zone:timers	Measure	699.89 ms	0.31 ms
Zone:blocking	Measure	700.26 ms	0.04 ms
Zone:EventTarget	Measure	700.34 ms	0.66 ms
Zone:MutationObserver	Measure	701.03 ms	0.17 ms
Zone:IntersectionObserver	Measure	701.18 ms	0.12 ms
Zone:FileReader	Measure	701.27 ms	0.13 ms
Zone:on_property	Measure	701.35 ms	16.95 ms
Zone:customElements	Measure	718.3 ms	0.3 ms
Zone:XHR	Measure	718.58 ms	0.43 ms
Zone:geolocation	Measure	718.96 ms	0.14 ms
Zone:PromiseRejectionEvent	Measure	719.11 ms	0.09 ms
Zone	Mark	695.48 ms	
Zone:ZoneAwarePromise	Mark	695.99 ms	
Zone:toString	Mark	699.02 ms	
Zone:util	Mark	699.21 ms	
Zone:legacy	Mark	699.65 ms	
Zone:queueMicrotask	Mark	699.82 ms	
Zone:timers	Mark	699.89 ms	
Zone:requestAnimationFrame	Mark	700.21 ms	
Zone:blocking	Mark	700.27 ms	
Zone:EventTarget	Mark	700.34 ms	

Name	Туре	Start Time	Duration
Zone:MutationObserver	Mark	701.03 ms	
Zone:IntersectionObserver	Mark	701.18 ms	
Zone:FileReader	Mark	701.28 ms	
Zone:on_property	Mark	701.35 ms	
Zone:customElements	Mark	718.31 ms	
Zone:XHR	Mark	718.58 ms	
Zone:geolocation	Mark	718.96 ms	
Zone:PromiseRejectionEvent	Mark	719.12 ms	

 $\,\,\,\,\,\,\,\,\,\,\,\,\,$ Keep request counts low and transfer sizes small $\,\,-\,$ 17 requests • 8,763 KiB

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

Resource Type	Requests	Transfer Size
Total	17	8,763.4 KiB
Script	7	7,455.3 KiB
Other	4	841.6 KiB
Stylesheet	3	364.4 KiB
Font	1	76.1 KiB
Image	1	24.5 KiB
Document	1	1.4 KiB
Media	0	0.0 KiB
Third-party	3	273.1 KiB

O Largest Contentful Paint element — 1 element found

This is the largest contentful element painted within the viewport. Learn More [LCP]

Element	
	img

O Avoid long main-thread tasks — 5 long tasks found

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

URL	Start Time	Duration
/styles.js (localhost)	7,093 ms	121 ms
/polyfills.js (localhost)	7,854 ms	106 ms
Unattributable	189 ms	70 ms
/runtime.js (localhost)	964 ms	58 ms
/LatestArticles (localhost)	307 ms	50 ms

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

PASSED A	UDITS (27)		Hide
Prope	erly size images — Potential savings of 48 KiB		^
Serve ir	mages that are appropriately-sized to save cellular data and improve load ti	me. <u>Learn more</u> .	
		✓ Show 3rd-party	resources (1)
	URL	Resource Size	Potential Savings

	URL	Resource Size	Potentia Savings
	img data:image/jpg;base64,/9j/2wCEAAMCA	62.7 KiB	24.9 KiE
	img. Log olm /assets/Logo.png (localhost) g	24.2 KiB	23.5 KiE
Defer offscreen images Consider lazy-loading offscree interactive. Learn more.	en and hidden images after all critical resources have finish	ed loading to lower ti	me to
Minify CSS — Potential sa Minifying CSS files can reduce	e network payload sizes. <u>Learn more</u> . FCP LCP		
		Transfer Size	
Minifying CSS files can reduc	e network payload sizes. <u>Learn more</u> . FCP (LCP)		Potentia Savings 2.5 KiE
Minifying CSS files can reduce	e network payload sizes. <u>Learn more</u> . FCP (LCP)	Size	Savings
Minifying CSS files can reduce URL @keyframes down-btn { 0% { Efficiently encode images	e network payload sizes. <u>Learn more</u> . FCP (LCP)	Size	Savings
Minifying CSS files can reduce URL @keyframes down-btn { 0% { Efficiently encode images Optimized images load faster	e network payload sizes. Learn more. FCP LCP bottom: 20px }	Size	Savings
URL @keyframes down-btn { 0% { Efficiently encode images Optimized images load faster Serve images in next-gen for	e network payload sizes. Learn more. FCP LCP bottom: 20px } and consume less cellular data. Learn more. bormats — Potential savings of 13 KiB AVIF often provide better compression than PNG or JPEG	Size 3.5 KiB	Savings 2.5 KiE

	URL	Resource Size	Potential Savings
	img. Log olm /assets/Logo.png (localhost) g	24.2 KiB	13.0 KiB
Preconnect to required original	ns — Potential savings of 80 ms		
Consider adding `preconnect` <u>Learn more</u> . [FCP] [LCP]	or `dns-prefetch` resource hints to establish early o	connections to important third	l-party origir
URL		Poten	itial Savings
https://cdnjs.cloudflare.com			80 ms
URL			Time Spen
/LatestArticles (localhost)			0 ms
Avoid multiple page redirect	s		
Redirects introduce additional	delays before the page can be loaded. Learn more	. FCP LCP	
Preload key requests			
Consider using ` <link rel="prelo</td"/> <td>oad>` to prioritize fetching resources that are currer</td> <td>ntly requested later in page lo</td> <td>ad. <u>Learn</u></td>	oad>` to prioritize fetching resources that are currer	ntly requested later in page lo	ad. <u>Learn</u>
	pad>` to prioritize fetching resources that are currer	ntly requested later in page lo	ad. <u>Learn</u>
Consider using ` <link 2<="" fcp="" http="" lcp="" rel="prelomore." td="" use=""/> <td>oad>` to prioritize fetching resources that are curren</td> <td></td> <td>ad. <u>Learn</u></td>	oad>` to prioritize fetching resources that are curren		ad. <u>Learn</u>

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

Remove duplicate modules in JavaScript bundles — Potential savings of 158 KiB

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

Source	Transfer Size	Potential Savings
node_modules/html-entities		76.90 KiB
/polyfills.js (localhost)	75.50 KiB	
/styles.js (localhost)	76.90 KiB	
node_modules/webpack-dev-server		60.70 KiB
/polyfills.js (localhost)	59.60 KiB	
/styles.js (localhost)	60.70 KiB	
node_modules/events		15.10 KiB
/polyfills.js (localhost)	14.85 KiB	
/styles.js (localhost)	15.10 KiB	
node_modules/ansi-html-community		4.30 KiB
/polyfills.js (localhost)	4.25 KiB	
/styles.js (localhost)	4.30 KiB	
node_modules/webpack		1.40 KiB
/polyfills.js (localhost)	1.35 KiB	
/styles.js (localhost)	1.40 KiB	

Avoid serving legacy JavaScript to modern browsers — Potential savings of 26 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. <u>Learn More (TBT)</u>

URL	Potential Savings
/scripts.js (localhost)	26.1 KiB
scripts.js:117	Array.isArray
scripts.js:117	Array.prototype.includes

URL		Potential Savings
scripts.js:31709	@babel/plugin-transform-classes	
/styles.js (localhost)		0.2 KiB
styles.js:944	@babel/plugin-transform-classes	
/polyfills.js (localhost)		0.2 KiB
polyfills.js:1054	@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]

Avoids an excessive DOM size — 123 elements

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

Statistic	Element		Value
Total DOM Elements			123
		span.show-for-sr	
Maximum DOM Depth			14
	body		
Maximum Child Elements			7

JavaScript execution time $\,--\,$ 0.3 s

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

URL	Total CPU Time	Script Evaluation	Script Parse
/LatestArticles (localhost)	318 ms	38 ms	1 ms

URL	Total CPU Time	Script Evaluation	Script Parse
/styles.js (localhost)	190 ms	175 ms	2 ms
Unattributable	163 ms	4 ms	0 ms
/polyfills.js (localhost)	123 ms	85 ms	0 ms

Minimizes main-thread work — 0.9 s

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

Category	Time Spent
Script Evaluation	342 ms
Other	222 ms
Style & Layout	177 ms
Parse HTML & CSS	54 ms
Script Parsing & Compilation	39 ms
Rendering	33 ms
Garbage Collection	11 ms

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

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

Third-Party	Transfer Size	Main-Thread Blocking Time
Cloudflare CDN	82 KiB	0 ms
fonts/fontawesome-webfont.woff2?v=4.7.0 (cdnjs.cloudflare.com)	76 KiB	0 ms
css/font-awesome.min.css (cdnjs.cloudflare.com)	6 KiB	0 ms

O 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. 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 Element img Avoid large layout shifts These DOM elements contribute most to the CLS of the page. [CLS] Uses passive listeners to improve scrolling performance Consider marking your touch and wheel event listeners as 'passive' to improve your page's scroll performance. 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 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 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

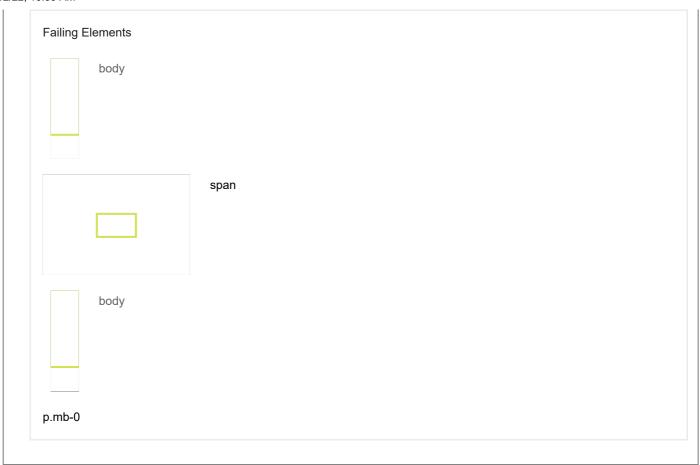


Accessibility

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.

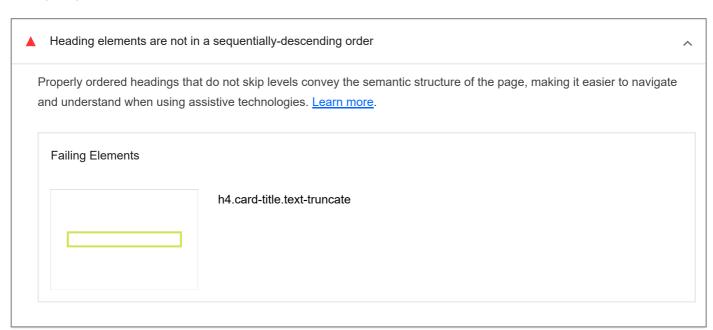
CONTRAST

▲ Background and foreground colors do not have a sufficient contrast ratio.		
Low-contrast text is difficult or impossible for many users to read. <u>Learn more</u> .		
Failing Elements		
h1.Title.p-3		
nav.navbar.navbar-expand-lg.bg-white.navbar-light.shadow-sm.px-5.py-3.py-lg-0		
button.custom-btn.btn-1.labeltextclick		
span		



These are opportunities to improve the legibility of your content.

NAVIGATION



These are opportunities to improve keyboard navigation in your application.

ADDITIONAL ITEMS TO MANUALLY CHECK (10)

The page has a logical tab order

Hide

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

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. 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 A Usern more. HTML5 landmark elements are used to improve navigation A Landmark elements (<main>, <nay>, etc.) are used to improve the keyboard navigation of the page for assistive technology. Learn more.</nay></main>	Interactive controls are keyboard focusable	^
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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 A Offscreen content is hidden with display: none or aria-hidden=true. Learn more. HTML5 landmark elements are used to improve navigation A Landmark elements (<main>, <nav>, etc.) are used to improve the keyboard navigation of the page for assistive technology.</nav></main>	A user can tab into and out of any control or region without accidentally trapping their focus. <u>Learn more</u> .	
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	HTML5 landmark elements are used to improve navigation	^
		logy.

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

PASSED AUDITS (16) Hide

Each ARIA `role` supports a specific subset of `aria-*` attributes. Mismatching these invalidates the `aria-*` attributes. Learn more. [aria-hidden="true"] is not present on the document <body> Assistive technologies, like screen readers, work inconsistently when `aria-hidden="true"` is set on the document `<body>`. 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. Buttons 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. Image elements have [alt] attributes ^ Informative elements should aim for short, descriptive alternate text. Decorative elements can be ignored with an empty alt attribute. Learn more. Form elements have associated labels Labels ensure that form controls are announced properly by assistive technologies, like screen readers. Learn more. [user-scalable="no"] is not used in the <meta name="viewport"> element and the [maximum-scale] attribute is not less than 5. Disabling zooming is problematic for users with low vision who rely on screen magnification to properly see the contents of a web page. Learn more. The page contains a heading, skip link, or landmark region Adding ways to bypass repetitive content lets keyboard users navigate the page more efficiently. Learn more. Document has a <title> element The title gives screen reader users an overview of the page, and search engine users rely on it heavily to determine if a page is relevant to their search. Learn more.

<html> element has a [lang] attribute If a page doesn't specify a lang attribute, a screen reader assumes that the page is in the default language that the user chose when setting up the screen reader. If the page isn't actually in the default language, then the screen reader might not announce the page's text correctly. Learn more. <html> element has a valid value for its [lang] attribute Specifying a valid BCP 47 language helps screen readers announce text properly. Learn more. Links have a discernible name Link text (and alternate text for images, when used as links) that is discernible, unique, and focusable improves the navigation experience for screen reader users. Learn more. 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. 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. NOT APPLICABLE (26) Hide [accesskey] values are unique

Focusable descendents within an `[aria-hidden="true"]` element prevent those interactive elements from being available to users of assistive technologies like screen readers. Learn more.
O ARIA input fields have accessible names
When an input field doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. <u>Learn more</u> .
O ARIA meter elements have accessible names
When an element doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. <u>Learn more</u> .
ARIA progressbar elements have accessible names
When a `progressbar` element doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. <u>Learn more</u> .
O [role]s have all required [aria-*] attributes
Some ARIA roles have required attributes that describe the state of the element to screen readers. <u>Learn more</u> .
Elements with an ARIA [role] that require children to contain a specific [role] have all required children.
Some ARIA parent roles must contain specific child roles to perform their intended accessibility functions. 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. <u>Learn more</u> .
O [role] values are valid
ARIA roles must have valid values in order to perform their intended accessibility functions. <u>Learn more</u> .
ARIA toggle fields have accessible names
When a toggle field doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. <u>Learn more</u> .
ARIA tooltip elements have accessible names
When an element doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. <u>Learn more</u> .

0	ARIA treeitem elements have accessible names	^
	When an element doesn't have an accessible name, screen readers announce it with a generic name, making it unusab for users who rely on screen readers. <u>Learn more</u> .	le
0	<pre><dl>'s contain only properly-ordered <dt> and <dd> groups, <script>, <template> or <div> elements.</pre></td><td>^</td></tr><tr><td></td><td>When definition lists are not properly marked up, screen readers may produce confusing or inaccurate output. <u>Learn mo</u></td><td><u>re</u>.</td></tr><tr><td>0</td><td>Definition list items are wrapped in <dl> elements</td><td>^</td></tr><tr><td></td><td>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.</td><td></td></tr><tr><td>0</td><td>[id] attributes on active, focusable elements are unique</td><td>^</td></tr><tr><td></td><td>All focusable elements must have a unique `id` to ensure that they're visible to assistive technologies. Learn more.</td><td></td></tr><tr><td>0</td><td>ARIA IDs are unique</td><td>^</td></tr><tr><td></td><td>The value of an ARIA ID must be unique to prevent other instances from being overlooked by assistive technologies. <u>Le</u> <u>more</u>.</td><td><u>arn</u></td></tr><tr><td>0</td><td>No form fields have multiple labels</td><td>^</td></tr><tr><td></td><td>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. <u>Learn more</u>.</td><td></td></tr><tr><td>0</td><td><pre><frame> Or <iframe> elements have a title</pre></td><td>^</td></tr><tr><td></td><td>Screen reader users rely on frame titles to describe the contents of frames. <u>Learn more</u>.</td><td></td></tr><tr><td>0</td><td><pre><input type="image"> elements have [alt] text</pre></td><td>^</td></tr><tr><td></td><td>When an image is being used as an `<input>` button, providing alternative text can help screen reader users understand the purpose of the button. <u>Learn more</u>.</td><td>I</td></tr><tr><td>0</td><td>The document does not use <meta http-equiv="refresh"></td><td>^</td></tr><tr><td></td><td>Users do not expect a page to refresh automatically, and doing so will move focus back to the top of the page. This may create a frustrating or confusing experience. <u>Learn more</u>.</td><td></td></tr><tr><td>0</td><td><object> elements have alternate text</td><td>^</td></tr><tr><td></td><td></td><td></td></tr></tbody></table></script></dd></dt></dl></pre>	

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

O 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>.

O [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.



Best Practices

GENERAL

▲ Browser errors were logged to the console

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

Source Description

Latest
Article s:1

Article type ('text/html') is not a supported stylesheet MIME type, and strict MIME checking is enabled.

Source	Description
Latest Article s:1	Refused to apply style from 'http://localhost:4200/bootstrap/css/bootstrap.min.css' because its MIME type ('text/html') is not a supported stylesheet MIME type, and strict MIME checking is enabled.

Detected JavaScript libraries

All front-end JavaScript libraries detected on the page. Learn more.

Name	Version
Bootstrap	5.1.3
jQuery	3.6.0
Angular	13.3.11

▲ Missing source maps for large first-party JavaScript

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

✓ Show 3rd-party resources (1)

URL	Map URL
standard/ckeditor.js (cdn.ckeditor.com)	
Large JavaScript file is missing a source map	
/runtime.js (localhost)	/runtime.js.map (localhost)
Warning: missing 3 items in `.sourcesContent`	
/vendor.js (localhost)	/vendor.js.map (localhost)
/styles.js (localhost)	/styles.js.map (localhost)
/scripts.js (localhost)	/scripts.js.map (localhost)
/polyfills.js (localhost)	/polyfills.js.map (localhost)
/main.js (localhost)	/main.js.map (localhost)

TRUST AND SAFETY

0	Ensure CSP is effective against XSS attacks		^
	A strong Content Security Policy (CSP) significantly reduces the risk of cross-site scripting (XSS) attacks.	<u>Learn more</u>	
	Description Directive Sev	erity	
	No CSP found in enforcement mode High	1	
PAS	SSED AUDITS (11)		Hide
	Uses HTTPS		^
	All sites should be protected with HTTPS, even ones that don't handle sensitive data. This includes avoid where some resources are loaded over HTTP despite the initial request being served over HTTPS. HTTP intruders from tampering with or passively listening in on the communications between your app and your prerequisite for HTTP/2 and many new web platform APIs. <u>Learn more</u> .	S prevents	
	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 action instead. <u>Learn more</u> .	request to a us	ser
	Avoids requesting the notification permission on page load		^
	Users are mistrustful of or confused by sites that request to send notifications without context. Consider ty user gestures instead. <u>Learn more</u> .	ring the request	t to
	Avoids front-end JavaScript libraries with known security vulnerabilities		^
	Some third-party scripts may contain known security vulnerabilities that are easily identified and exploited Learn more .	by attackers.	
	Allows users to paste into password fields		^
	Preventing password pasting undermines good security policy. <u>Learn more</u> .		
	Displays images with correct aspect ratio		^
	Image display dimensions should match natural aspect ratio. <u>Learn more</u> .		
	Serves images with appropriate resolution		^

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

Page has the HTML doctype

^

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

Properly defines charset

.

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

Avoids deprecated APIs

^

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

No issues in the Issues panel in Chrome Devtools

^

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

NOT APPLICABLE (1)

Hide

Fonts with font-display: optional are preloaded

^

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



SEO

These checks ensure that your page is following basic search engine optimization advice. There are many additional factors Lighthouse does not score here that may affect your search ranking, including performance on Core Web Vitals. Learn more.

CONTENT BEST PRACTICES

 \blacktriangle

Document does not have a meta description

^

Meta descriptions may be included in search results to concisely summarize page content. Learn more.

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

CRAWLING AND INDEXING

▲ Links are not crawlable

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

Uncrawlable Link

a.dropdown-toggle.dropbtn

a.dropdown

a.text-white.border-bottom

a.text-white

a.text-white

a.text-white

a.text-white

To appear in search results, crawlers need access to your app.

ADDITIONAL ITEMS TO MANUALLY CHECK (1)

Hide

Structured data is valid

.

Run the <u>Structured Data Testing Tool</u> and the <u>Structured Data Linter</u> to validate structured data. <u>Learn more</u>.

Run these additional validators on your site to check additional SEO best practices.

PASSED AUDITS (8)

Hide

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

^

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

	Document has a <title> element</th><th>^</th></tr><tr><td></td><td>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. <u>Learn more</u>.</td><td></td></tr><tr><td></td><td>Page has successful HTTP status code</td><td>^</td></tr><tr><td></td><td>Pages with unsuccessful HTTP status codes may not be indexed properly. Learn more.</td><td></td></tr><tr><td></td><td>Links have descriptive text</td><td>^</td></tr><tr><td></td><td>Descriptive link text helps search engines understand your content. <u>Learn more</u>.</td><td></td></tr><tr><td></td><td>Page isn't blocked from indexing</td><td>^</td></tr><tr><td>,</td><td>Search engines are unable to include your pages in search results if they don't have permission to crawl them. <u>Learn m</u></td><td>ore.</td></tr><tr><td></td><td>Image elements have [alt] attributes</td><td>^</td></tr><tr><td></td><td>Informative elements should aim for short, descriptive alternate text. Decorative elements can be ignored with an empty attribute. <u>Learn more</u>.</td><td>alt</td></tr><tr><td></td><td>Document has a valid hreflang</td><td>^</td></tr><tr><td></td><td>hreflang links tell search engines what version of a page they should list in search results for a given language or regior Learn more.</td><td>1.</td></tr><tr><td></td><td>Document avoids plugins</td><td>^</td></tr><tr><td>,</td><td>Search engines can't index plugin content, and many devices restrict plugins or don't support them. <u>Learn more</u>.</td><td></td></tr><tr><td>NOT</td><td>APPLICABLE (4)</td><td>Hide</td></tr><tr><td>0</td><td>robots.txt is valid</td><td>^</td></tr><tr><td></td><td>If your robots.txt file is malformed, crawlers may not be able to understand how you want your website to be crawled or indexed. <u>Learn more</u>.</td><td></td></tr><tr><td>0</td><td>Document has a valid rel=canonical</td><td>^</td></tr><tr><td></td><td>Canonical links suggest which URL to show in search results. <u>Learn more</u>.</td><td></td></tr><tr><td>0</td><td>Document uses legible font sizes</td><td>^</td></tr></tbody></table></title>
--	---

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

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. <u>Learn more</u>.



PWA

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

INSTALLABLE

▲ Web app manifest or service worker do not meet the installability requirements — 1 reason

Service worker is the technology that enables your app to use many Progressive Web App features, such as offline, add to homescreen, and push notifications. With proper service worker and manifest implementations, browsers can proactively prompt users to add your app to their homescreen, which can lead to higher engagement. Learn more.

Failure reason

Page has no manifest <link> URL

PWA OPTIMIZED

Does not register a service worker that controls page and start_url

The service worker is the technology that enables your app to use many Progressive Web App features, such as offline, add to homescreen, and push notifications. <u>Learn more</u>.

▲ Is not configured for a custom splash screen Failures: No manifest was fetched.

A themed splash screen ensures a high-quality experience when users launch your app from their homescreens. <u>Learn</u> 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. <u>Learn more</u> .	
0	Content is sized correctly for the viewport	^
	If the width of your app's content doesn't match the width of the viewport, your app might not be optimized for mobile screens. Learn more.	
	Has a <meta name="viewport"/> tag with width or initial-scale	^
	A ` <meta name="viewport"/> ` not only optimizes your app for mobile screen sizes, but also prevents <u>a 300 millisecond de to user input</u> . <u>Learn more</u> . <u>TBT</u>	<u> </u>
A	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'. must point to a non-transparent 192px (or 180px) square PNG. <u>Learn More</u> .	lt
A	Manifest doesn't have a maskable icon No manifest was fetched	^
	A maskable icon ensures that the image fills the entire shape without being letterboxed when installing the app on a devine Learn more.	ice.
ADD	DITIONAL ITEMS TO MANUALLY CHECK (3)	Hide
0	Site works cross-browser	^
	To reach the most number of users, sites should work across every major browser. <u>Learn more</u> .	
0	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 performance. <u>Learn more</u> .	of
0	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. <u>Learn more</u> .	
	se checks are required by the baseline <u>PWA Checklist</u> but are not automatically checked by Lighthouse. They do not affe score but it's important that you verify them manually.	ct

Initial page load <u>Custom throttling</u>

Using Chromium 103.0.0.0 with devtools

Generated by **Lighthouse** 9.6.1 | File an issue