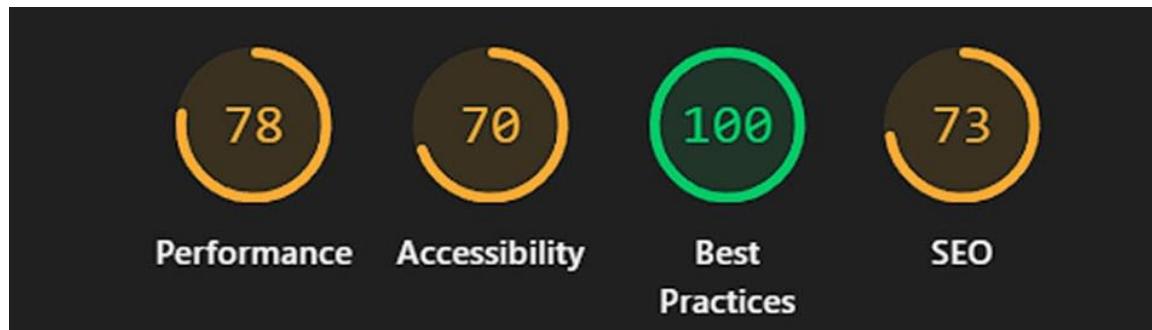


## Rapport d'optimisation

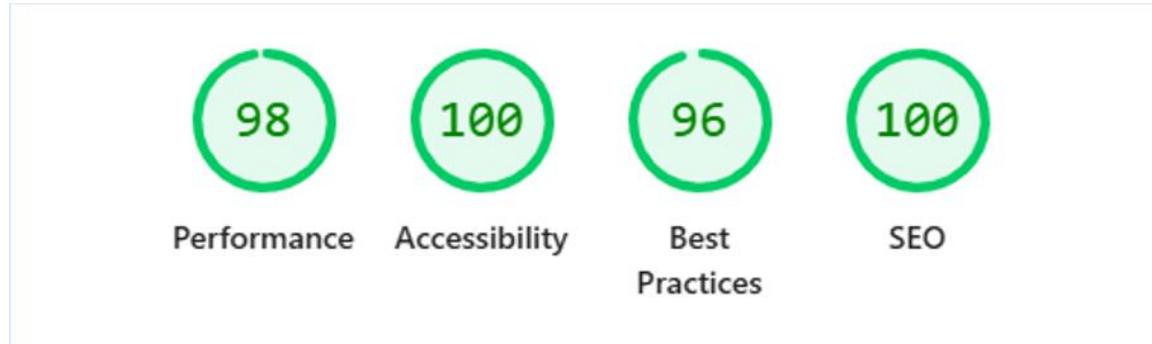
Client : Nina Carducci

### I - Comparatif avant et après optimisation

Score Lighthouse **avant** optimisation :



Score Lighthouse **après** optimisation



### II - Détails des optimisations effectuées

#### 1 - Les images

Le projet comportait initialement 15 images pour un poids total de 29,4 Mo.

Afin d'optimiser la vitesse de chargement du site, les actions suivantes ont été réalisées :

- Conversion de toutes les images au format .WebP, un format moderne plus léger.
- Réduction de la résolution des images pour l'adapter à la taille des conteneurs d'affichage sur le site.
- Légère compression de la qualité des images pour diminuer davantage leur poids sans perte perceptible de qualité.

- Ajout de l'attribut loading="lazy" pour différer le chargement des images non visibles immédiatement.
- Définition explicite des dimensions (width et height) pour éviter les décalages visuels (CLS).

👉 Après ces optimisations, le poids total des images est désormais de 5 Mo, soit une réduction de ~83%, contribuant significativement à l'amélioration des performances de chargement.

## 2 - Référencement local

### 📍 1. Ajout de données structurées (Schema.org)

Un bloc de données structurées au format JSON-LD a été intégré dans le code HTML, basé sur le standard Schema.org, avec le type LocalBusiness.

Ce script permet aux moteurs de recherche d'interpréter facilement des informations importantes sur l'entreprise :

- Nom de l'entreprise
- Adresse physique
- Numéro de téléphone
- Horaires d'ouverture
- Image (portrait de Nina)
- Gamme de prix (PriceRange)
- Lien vers le site web

#### ✓ Avantages constatés ou attendus :

- Meilleure indexation du site dans les recherches locales.
- Affichage enrichi (rich snippets) dans Google.
- Augmentation du trafic local ciblé.
- Renforcement de la crédibilité du site et de sa présentation dans les SERP.

### 📍 2. Optimisation des balises meta et des données de partage

Des balises essentielles ont été ajoutées ou corrigées pour optimiser le référencement local et améliorer la présence du site sur les réseaux sociaux :

- <title> : Titre unique et optimisé pour le SEO
- <meta name="description"> : Résumé clair et engageant
- Balises Open Graph (Facebook, LinkedIn...)
- Twitter Card pour un affichage optimisé sur Twitter

### Résultats attendus :

- Meilleur classement local sur les mots-clés ciblés
- Taux de clic (CTR) plus élevé dans les résultats de recherche
- Affichage attrayant et professionnel lors du partage sur les réseaux sociaux
- Renforcement de l'image de Nina Carducci auprès de son audience

### Capture d'écran du test de compatibilité avec les résultats enrichis

Le test effectué via Google Rich Results Test confirme que les données structurées intégrées au site sont valides et reconnues par Google.

### Résultat :

Le site est éligible à l'affichage de résultats enrichis (rich snippets) dans les moteurs de recherche.

Les informations locales (nom, adresse, téléphone, image, horaires, etc.) sont correctement interprétées.

Cela démontre que l'intégration du balisage Schema.org de type LocalBusiness a été réalisée avec succès.

## 3 - Autres modifications techniques et correctives

### Minification du code CSS et JavaScript

Le code source a été compressé à l'aide de l'outil en ligne [minifier.org](https://minifier.org).

Cette opération permet :

- de réduire la taille des fichiers CSS et JS,
- de supprimer les espaces inutiles, les retours à la ligne et les commentaires,
- et ainsi d'accélérer le chargement des pages.

## Test results

 SHARE



### 2 valid items detected

Valid items are eligible for Google Search's rich results. [Learn more](#)

[VIEW TESTED PAGE](#)

[PREVIEW RESULTS](#)

Detected structured data



Local businesses

1 valid item detected

• Non-critical issues detected



Organization

1 valid item detected



Additional resources

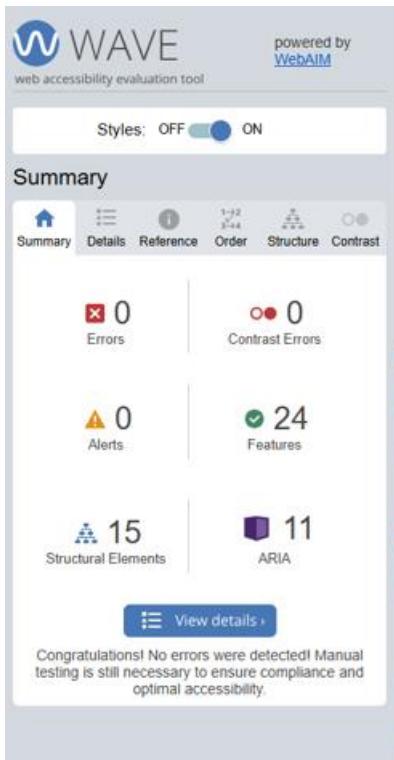


Monitor Rich Results for your entire site

[GO TO SEARCH CONSOLE](#)

[Privacy](#) [Terms](#)

### III - Accessibilité du site



Des actions ont été entreprises pour améliorer l'accessibilité du site, en s'appuyant sur les recommandations de l'outil **WAVE**. Voici la liste des modifications apportées :

- Ajout d'attributs alt à toutes les images pour garantir une lecture correcte par les lecteurs d'écran.
- Correction du contraste des couleurs dans le menu de navigation et dans les filtres de la galerie photo (ex. : changement du texte sélectionné de blanc à noir).
- Vérification des éléments invisibles (utilisation de la classe visually-hidden) pour s'assurer qu'ils restent détectables par les technologies d'assistance.
- Amélioration de la structure sémantique avec une hiérarchie correcte des balises de titre (h1, h2, etc.) afin d'offrir une navigation plus claire.

### IV - Détails de réalisation additionnelles à la demande du client

Suite à la prise de contact avec la cliente Nina Carducci, un appel téléphonique a permis de définir plus précisément le périmètre de la mission. Voici les demandes spécifiques formulées :

- Optimisation globale du site : amélioration des performances, réduction du poids des images, minification du code.
- Mise en place du référencement local : intégration des données structurées (Schema.org / LocalBusiness)

Adresse : 68 avenue Alsace-Lorraine, 33200 Bordeaux

Téléphone : 05 56 67 78 89

Horaires : du lundi au vendredi, de 10h à 19h

- Ajout des métadonnées pour les réseaux sociaux : Open Graph, Twitter Card, meta title et description.

## Annexe

 Rapport complet de l'audit Lighthouse

Le rapport complet de l'audit de performance a été généré à l'aide de l'outil Lighthouse de Google Chrome.

**Voir fichier joint :** *audit-lighthouse-ninacarducci.html*



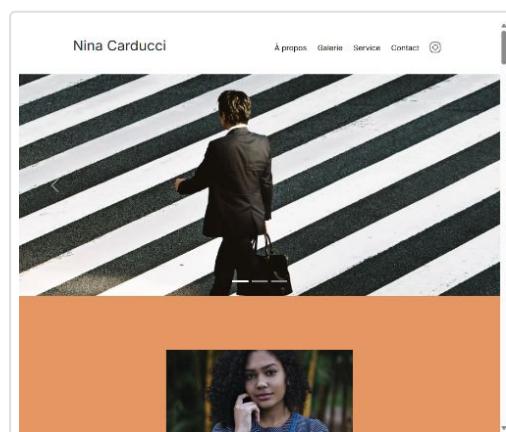
## Performance

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

0.8 s

Largest Contentful Paint

1.0 s

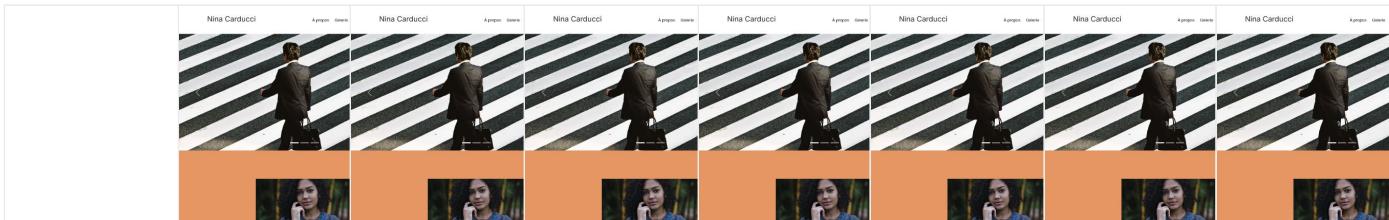
Total Blocking Time

**0 ms**

Cumulative Layout Shift

**0**

Speed Index

**0.8 s**[View Treemap](#)

📢 Later this year, insights will replace performance audits. [Learn more and provide feedback here.](#)

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

## DIAGNOSTICS

⚠ Enable text compression — Potential savings of 353 KiB



Text-based resources should be served with compression (gzip, deflate or brotli) to minimise total network bytes.

[Learn more about text compression.](#) [FCP](#) [LCP](#)

URL	Transfer size	Potential savings
127.0.0.1 <a href="#">First Party</a>	<b>428.7 KiB</b>	<b>352.8 KiB</b>
...bootstrap/bootstrap.css (127.0.0.1)	200.7 KiB	174.9 KiB
...bootstrap/bootstrap.bundle.js (127.0.0.1)	204.8 KiB	162.3 KiB
/index.html (127.0.0.1)	12.9 KiB	8.2 KiB
/assets/maugallery.js (127.0.0.1)	6.2 KiB	4.6 KiB

URL	Transfer size	Potential savings
/assets/style.css (127.0.0.1)	4.1 KiB	2.8 KiB

▲ Minify JavaScript — Potential savings of 170 KiB ^

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

URL	Transfer size	Potential savings
Unattributable	<b>130.8 KiB</b>	<b>93.7 KiB</b>
chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/vendor/@eyeo/webext-ad-filtering-solution/content.js	92.2 KiB	75.0 KiB
chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/polyfill.js	10.6 KiB	5.7 KiB
chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/bypass.preload.js	11.0 KiB	5.6 KiB
chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/cookie-banner-detection.preload.js	9.9 KiB	5.3 KiB
chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/composer.preload.js	7.2 KiB	2.1 KiB
127.0.0.1 <span style="border: 1px solid #007bff; padding: 2px 5px;">First Party</span>	<b>204.8 KiB</b>	<b>76.0 KiB</b>
...bootstrap/bootstrap.bundle.js (127.0.0.1)	204.8 KiB	76.0 KiB

▲ Eliminate render-blocking resources — Potential savings of 430 ms ^

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

Show 3rd-party resources (2)

URL	Transfer size	Potential savings
127.0.0.1 <span style="border: 1px solid #007bff; padding: 2px 5px;">First Party</span>	<b>418.5 KiB</b>	<b>1,550 ms</b>

URL	Transfer size	Potential savings
...bootstrap/bootstrap.bundle.js (127.0.0.1)	205.2 KiB	600 ms
/assets/maugallery.js (127.0.0.1)	6.6 KiB	120 ms
/assets/scripts.js (127.0.0.1)	1.3 KiB	120 ms
...bootstrap/bootstrap.css (127.0.0.1)	201.0 KiB	600 ms
/assets/style.css (127.0.0.1)	4.4 KiB	120 ms
jQuery CDN <span>Cdn</span>	<b>30.3 KiB</b>	<b>460 ms</b>
/jquery-3.4.1.min.js (code.jquery.com)	30.3 KiB	460 ms
Google Fonts <span>Cdn</span>	<b>1.4 KiB</b>	<b>330 ms</b>
/css2?family=... (fonts.googleapis.com)	1.4 KiB	330 ms

▲ Reduce unused JavaScript — Potential savings of 187 KiB ^

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

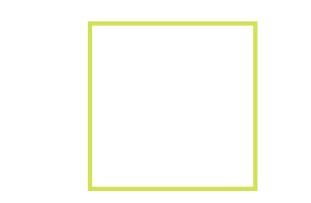
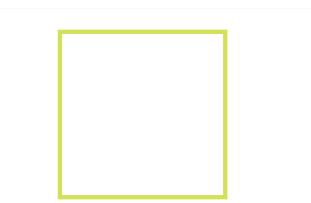
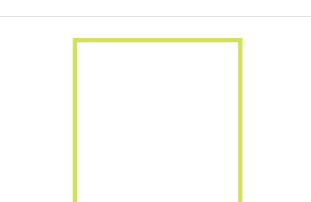
URL	Transfer size	Potential savings
127.0.0.1 <span>First Party</span>	<b>204.8 KiB</b>	<b>144.0 KiB</b>
...bootstrap/bootstrap.bundle.js (127.0.0.1)	204.8 KiB	144.0 KiB
...js/src/tooltip.js	18.4 KiB	15.0 KiB
...js/src/dropdown.js	13.5 KiB	9.8 KiB
...js/src/carousel.js	15.7 KiB	8.7 KiB
...js/src/modal.js	10.9 KiB	8.1 KiB
...js/src/collapse.js	8.6 KiB	6.3 KiB
Unattributable	<b>47.1 KiB</b>	<b>42.7 KiB</b>

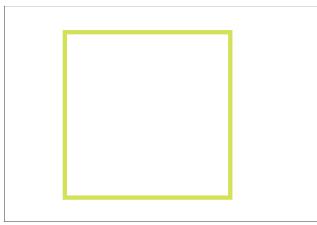
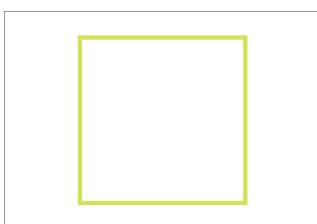
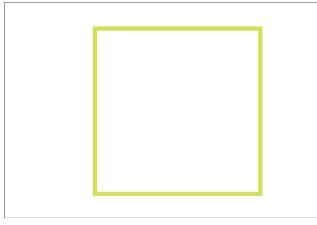
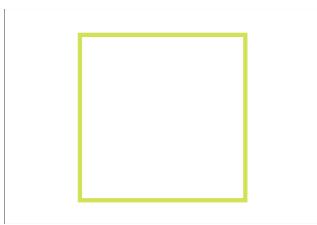
URL	Transfer size	Potential savings
chrome-extension://fmkadmapgofadopljbjfkapdkoenihi/build/installHook.js	47.1 KiB	42.7 KiB
../../../../react-devtools-shared/src/backend/fiber/renderer.js	16.5 KiB	16.4 KiB
../../../../build/oss-experimental/react-debug-tools/cjs/react-debug-tools.production.js	4.1 KiB	3.7 KiB
../../../../react-devtools-shared/src/backend/legacy/renderer.js	3.6 KiB	3.6 KiB
../../../../react-devtools-shared/src/backend/profilingHooks.js	2.9 KiB	2.7 KiB
../../../../react-devtools-shared/src/utils.js	2.7 KiB	2.6 KiB

▲ Properly size images — Potential savings of 1,373 KiB ^

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

FCP LCP

URL	Resource size	Potential savings
127.0.0.1 <span style="border: 1px solid #007bff; padding: 2px 5px;">First Party</span>	1,410.9 KiB	1,373.4 KiB
	...mariage/jakob-owens-SiniLJkXhMcunsplash.webp (127.0.0.1)	300.9 KiB
	...concerts/aaron-pau....webp (127.0.0.1)	226.5 KiB
	...portraits/ade-tunji-rVkhWWZFAAtQunsplash.webp (127.0.0.1)	188.0 KiB
img.gallery-item.img-fluid		298.8 KiB
img.gallery-item.img-fluid		225.1 KiB
img.gallery-item.img-fluid		186.7 KiB

URL	Resource size	Potential savings
 ...mariage/hannah-bu....webp (127.0.0.1)	158.7 KiB	158.2 KiB
img.gallery-item.img-fluid		
 ...images/nina.jpg (127.0.0.1)	150.4 KiB	141.9 KiB
img		
img	148.8 KiB	125.8 KiB
 ...slider/ryoji-iwa....webp (127.0.0.1)	119.8 KiB	119.3 KiB
img.gallery-item.img-fluid		
 ...entreprise/jason-goo....webp (127.0.0.1)	117.8 KiB	117.5 KiB
img.gallery-item.img-fluid		

▲ Reduce unused CSS — Potential savings of 193 KiB ^

Reduce unused rules from stylesheets and defer CSS not used for above-the-fold content to decrease bytes consumed by network activity. [Learn how to reduce unused CSS.](#) FCP LCP

URL	Transfer size	Potential savings
127.0.0.1 <span style="border: 1px solid blue; padding: 2px;">First Party</span>	200.7 KiB	192.8 KiB

URL	Transfer size	Potential savings
...bootstrap/bootstrap.css (127.0.0.1)	200.7 KiB	192.8 KiB

### ▲ Minify CSS — Potential savings of 39 KiB

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

URL	Transfer size	Potential savings
127.0.0.1 <span>First Party</span>	<b>201.0 KiB</b>	<b>39.1 KiB</b>
...bootstrap/bootstrap.css (127.0.0.1)	201.0 KiB	39.1 KiB

### ▲ Page prevented back-forward cache restoration — 1 failure reason

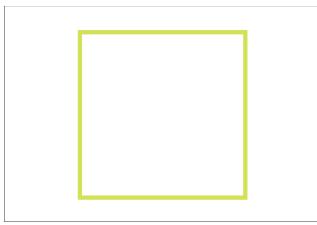
Many navigations are performed by going back to a previous page, or forwards again. The back-forward cache (bfocache) can speed up these return navigations. [Learn more about the bfocache](#)

Reason for failure	Failure type
Pages with WebSocket cannot enter back-forward cache. /index.html (127.0.0.1)	Pending browser support

### Serve images in next-gen formats — Potential savings of 41 KiB

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

URL	Resource size	Potential savings
127.0.0.1 <span>First Party</span>	<b>150.4 KiB</b>	<b>41.0 KiB</b>

URL	Resource size	Potential savings
 ...images/nina.jpg (127.0.0.1)	150.4 KiB	41.0 KiB

img

### Remove duplicate modules in JavaScript bundles — Potential savings of 21 KiB

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

Source	Transfer size	Potential savings
node_modules/webextension-polyfill		20 KiB
chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/polyfill.js	10 KiB	
chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/bypass.preload.js	10 KiB	
chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/cookie-banner-detection.preload.js	10 KiB	
chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/onpage-dialog-ui.preload.js	10 KiB	

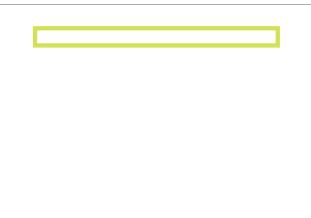
### ⌚ User Timing marks and measures — 2 user timings

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

Name	Type	Start Time	Duration
_v3	Mark	0.00 ms	
clearMarks	Mark	159.30 ms	

### ⌚ Avoid large layout shifts — One layout shift found

These are the largest layout shifts observed on the page. Each table item represents a single layout shift, and shows the element that shifted the most. Below each item are possible root causes that led to the layout shift. Some of these layout shifts may not be included in the CLS metric value due to [windowing](#). [Learn how to improve CLS](#)

Element	Layout shift score
	nav.nav
	0.000
img	Media element lacking an explicit size
...v19/UcCO3FwrK....woff2 (fonts.gstatic.com)	Web font loaded
...v14/rnCu-xNNw....woff2 (fonts.gstatic.com)	Web font loaded
...v14/rnCr-xNNw....woff2 (fonts.gstatic.com)	Web font loaded

## ⌚ Avoid chaining critical requests — 10 chains found ▲

The critical request chains below show you what resources are loaded with a high priority. Consider reducing the length of chains, reducing the download size of resources or deferring the download of unnecessary resources to improve page load. [Learn how to avoid chaining critical requests](#).

Maximum critical path latency: **497.522 ms**

### *Initial Navigation*

```
/index.html (127.0.0.1)
  /css2?family=... (fonts.googleapis.com)
    ...v19/UcCO3FwrK....woff2 (fonts.gstatic.com) - 57.814 ms, 23.27 KiB
    ...v14/rnCu-xNNw....woff2 (fonts.gstatic.com) - 57.152 ms, 14.65 KiB
    ...v14/rnCu-xNNw....woff2 (fonts.gstatic.com) - 55.4 ms, 15.38 KiB
    ...v14/rnCr-xNNw....woff2 (fonts.gstatic.com) - 57.049 ms, 13.73 KiB
  ...bootstrap/bootstrap.css (127.0.0.1) - 58.191 ms, 201.01 KiB
  /assets/style.css (127.0.0.1) - 47.708 ms, 4.43 KiB
  ...bootstrap/bootstrap.bundle.js (127.0.0.1) - 276.489 ms, 205.16 KiB
  /jquery-3.4.1.min.js (code.jquery.com) - 148.081 ms, 30.25 KiB
  /assets/maugallery.js (127.0.0.1) - 103.505 ms, 6.60 KiB
  /assets/scripts.js (127.0.0.1) - 101.118 ms, 1.33 KiB
```

○ Minimise 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. [Learn how to minimise third-party impact](#). TBT

Third-party	Transfer size	Main-thread blocking time
Google Fonts <span style="border: 1px solid black; padding: 2px;">Cdn</span>	<b>68 KiB</b>	<b>0 ms</b>
...v19/UcCO3FwrK....woff2 (fonts.gstatic.com)	23 KiB	0 ms
...v14/rnCu-xNNw....woff2 (fonts.gstatic.com)	15 KiB	0 ms
...v14/rnCu-xNNw....woff2 (fonts.gstatic.com)	15 KiB	0 ms
...v14/rnCr-xNNw....woff2 (fonts.gstatic.com)	14 KiB	0 ms
/css2?family=... (fonts.googleapis.com)	1 KiB	0 ms
jQuery CDN <span style="border: 1px solid black; padding: 2px;">Cdn</span>	<b>30 KiB</b>	<b>0 ms</b>
/jquery-3.4.1.min.js (code.jquery.com)	30 KiB	0 ms

○ Largest contentful paint element — 960 ms ^

This is the largest contentful element painted within the viewport. [Learn more about the Largest Contentful Paint element](#). LCP

Element
img

Phase	% of LCP	Timing
TTFB	16%	150 ms
Load delay	0%	0 ms
Load time	10%	100 ms
Render delay	74%	710 ms

○ Avoid long main-thread tasks — 1 long task found ^

Lists the longest tasks on the main thread – useful for identifying worst contributors to input delay. [Learn how to avoid long main-thread tasks](#) TBT

URL	Start Time	Duration
127.0.0.1 <small>First Party</small>		<b>92 ms</b>
/index.html (127.0.0.1)	216 ms	92 ms

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

PASSED AUDITS (22) Hide

Defer off-screen images ^

Consider lazy loading offscreen and hidden images after all critical resources have finished loading to lower Time to Interactive. [Learn how to defer offscreen images](#). FCP LCP

Efficiently encode images ^

Optimised images load faster and consume less mobile data. [Learn how to efficiently encode images](#). FCP LCP

Pre-connect to required origins ^

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

Initial server response time was short — Root document took 40 ms ^

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

URL	Time Spent
127.0.0.1 <small>First Party</small>	<b>40 ms</b>

URL

Time Spent

/index.html (127.0.0.1)

40 ms

Avoid multiple page redirects ^

Redirects introduce additional delays before the page can be loaded. [Learn how to avoid page redirects.](#) LCP FCP

Use HTTP/2 ^

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

LCP FCPUse 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 about efficient video formats](#)

LCPAvoid serving legacy JavaScript to modern browsers ^

Polyfills and transforms enable legacy browsers to use new JavaScript features. However, many aren't necessary for modern browsers. Consider modifying your JavaScript build process to not transpile [Baseline](#) features, unless you know you must support legacy browsers. [Learn why most sites can deploy ES6+ code without transpiling](#)

LCPPreload largest contentful paint image ^

If the LCP element is dynamically added to the page, you should preload the image in order to improve LCP. [Learn more about preloading LCP elements.](#) LCP

Avoids enormous network payloads — Total size was 1,946 KiB ^

Large network payloads cost users real money and are highly correlated with long load times. [Learn how to reduce payload sizes.](#)

URL

Transfer size

127.0.0.1 First Party

1,819.8 KiB

...mariage/jakob-owens-SiniLJkXhMc-unsplash.webp (127.0.0.1)

301.2 KiB

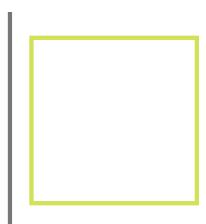
URL	Transfer size
...concerts/aaron-pau....webp (127.0.0.1)	226.9 KiB
...bootstrap/bootstrap.bundle.js (127.0.0.1)	205.2 KiB
...bootstrap/bootstrap.css (127.0.0.1)	201.0 KiB
...portraits/ade-tunji-rVkhWWZFAAtQ-unsplash.webp (127.0.0.1)	188.4 KiB
...mariage/hannah-bu....webp (127.0.0.1)	159.1 KiB
...images/nina.jpg (127.0.0.1)	150.7 KiB
...slider/ryoji-iwa....webp (127.0.0.1)	149.1 KiB
...entreprise/jason-goo....webp (127.0.0.1)	120.2 KiB
...entreprise/ali-morsh....webp (127.0.0.1)	118.1 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 about efficient cache policies.](#)

Avoids an excessive DOM size — 126 elements ^

A large DOM will increase memory usage, cause longer [style calculations](#) and produce costly [layout reflows](#). [Learn how to avoid an excessive DOM size.](#) TBT

Statistic	Element	Value
Total DOM Elements		126
Maximum DOM Depth	div.mg-prev	10
Maximum Child Elements	 div.gallery-items-row.row	9

JavaScript execution time — 0.1 s



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

Show 3rd-party resources (1)

URL	Total CPU Time	Script Evaluation	Script Parse
127.0.0.1 <small>First Party</small>	<b>251 ms</b>	<b>30 ms</b>	<b>61 ms</b>
/index.html (127.0.0.1)	251 ms	30 ms	61 ms
jQuery CDN <small>Cdn</small>	<b>106 ms</b>	<b>36 ms</b>	<b>2 ms</b>
/jquery-3.4.1.min.js (code.jquery.com)	106 ms	36 ms	2 ms
Unattributable	<b>80 ms</b>	<b>5 ms</b>	<b>0 ms</b>
Unattributable	80 ms	5 ms	0 ms

Minimises main-thread work — 0.5 s



Consider reducing the time spent parsing, compiling and executing JS. You may find delivering smaller JS payloads helps with this. [Learn how to minimise main-thread work.](#) TBT

Category	Time Spent
Other	190 ms
Style & Layout	93 ms
Script Evaluation	87 ms
Script Parsing & Compilation	70 ms
Parse HTML & CSS	27 ms
Rendering	8 ms

All text remains visible during webfont loads

Leverage the `font-display` CSS feature to ensure that text is user-visible while webfonts are loading. [Learn more about `font-display`](#).

#### ○ 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 how to defer third-parties with a facade](#). [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 about optimal lazy loading](#). [LCP]

Element

img

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 about adopting passive event listeners](#).

Avoids `document.write()`

For users on slow connections, external scripts dynamically injected via `document.write()` can delay page load by tens of seconds. [Learn how to avoid `document.write\(\)`](#).

#### ○ Avoid non-composited animations

Animations that are not composited can be poor, slow and increase CLS. [Learn how to avoid non-composited animations](#) [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 how to set image dimensions](#) [CLS]

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

A <meta name="viewport"> not only optimises your app for mobile screen sizes, but also prevents [a 300 millisecond delay to user input](#). [Learn more about using the viewport meta tag](#).



## Accessibility

These checks highlight opportunities to [improve the accessibility of your web app](#). Automatic detection can only detect a subset of issues and does not guarantee the accessibility of your web app, so [manual testing](#) is also encouraged.

### ADDITIONAL ITEMS TO MANUALLY CHECK (10)

Hide

- Interactive controls are keyboard focusable



Custom interactive controls are keyboard focusable and display a focus indicator. [Learn how to make custom controls focusable](#).

- 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 how to decorate interactive elements with affordance hints](#).

- The page has a logical tab order



Tabbing through the page follows the visual layout. Users cannot focus elements that are offscreen. [Learn more about logical tab ordering](#).

- Visual order on the page follows DOM order



DOM order matches the visual order, improving navigation for assistive technology. [Learn more about DOM and visual ordering](#).

- 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 how to avoid focus traps](#).

- 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 how to direct focus to new content.](#)

○ 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 about landmark elements.](#)

○ Offscreen content is hidden from assistive technology ^

Offscreen content is hidden with `display: none` or `aria-hidden=true`. [Learn how to properly hide offscreen content.](#)

○ Custom controls have associated labels ^

Custom interactive controls have associated labels, provided by `aria-label` or `aria-labelledby`. [Learn more about custom controls and labels.](#)

○ Custom controls have ARIA roles ^

Custom interactive controls have appropriate ARIA roles. [Learn how to add roles to custom controls.](#)

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

PASSED AUDITS (26) Hide

[\[aria-\\*\]](#) attributes match their roles ^

Each ARIA role supports a specific subset of `aria-*` attributes. Mismatching these invalidates the `aria-*` attributes. [Learn how to match ARIA attributes to their roles.](#)

[\[aria-hidden="true"\]](#) 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 how aria-hidden affects the document body.](#)

[\[role\]](#)s have all required [\[aria-\\*\]](#) attributes ^

Some ARIA roles have required attributes that describe the state of the element to screen readers. [Learn more about roles and required attributes.](#)

## [aria-\*] attributes have valid values

Assistive technologies, such as screen readers, can't interpret ARIA attributes with invalid values. [Learn more about valid values for ARIA attributes.](#)

## [aria-\*] attributes are valid and not misspelled

Assistive technologies, such as screen readers, can't interpret ARIA attributes with invalid names. [Learn more about valid ARIA attributes.](#)

## 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 how to make buttons more accessible.](#)

## Image elements have [alt] attributes

Informative elements should aim for short, descriptive alternative text. Decorative elements can be ignored with an empty alt attribute. [Learn more about the alt attribute.](#)

## Input buttons have discernible text.

Adding discernable and accessible text to input buttons may help screen reader users to understand the purpose of the input button. [Learn more about input buttons.](#)

[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 about the viewport meta tag.](#)

## ARIA attributes are used as specified for the element's role

Some ARIA attributes are only allowed on an element under certain conditions. [Learn more about conditional ARIA attributes.](#)

## [aria-hidden="true"] elements do not contain focusable descendants

Focusable descendants within an [aria-hidden="true"] element prevent those interactive elements from being available to users of assistive technologies like screen readers. [Learn how aria-hidden affects focusable elements.](#)

## Elements use only permitted ARIA attributes

Using ARIA attributes in roles where they are prohibited can mean that important information is not communicated to users of assistive technologies. [Learn more about prohibited ARIA roles.](#)

### [role] values are valid

ARIA roles must have valid values in order to perform their intended accessibility functions. [Learn more about valid ARIA roles.](#)

### Background and foreground colours have a sufficient contrast ratio

Low-contrast text is difficult or impossible for many users to read. [Learn how to provide sufficient colour contrast.](#)

### 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 about document titles.](#)

### <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 about the lang attribute.](#)

### <html> element has a valid value for its [lang] attribute

Specifying a valid [BCP 47 language](#) helps screen readers announce text properly. [Learn how to use the lang attribute.](#)

### Form elements have associated labels

Labels ensure that form controls are announced properly by assistive technologies, such as screen readers. [Learn more about form element labels.](#)

### Links have a discernible name

Link text (and alternative text for images, when used as links) that is discernible, unique and focusable improves the navigation experience for screen reader users. [Learn how to make links accessible.](#)

### 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 about proper list structure.](#)

List items (`<li>`) are contained within `<ul>`, `<ol>` or `<menu>` parent elements



Screen readers require list items (`<li>`) to be contained within a parent `<ul>`, `<ol>` or `<menu>` to be announced properly. [Learn more about proper list structure.](#)

Touch targets have sufficient size and spacing.



Touch targets with sufficient size and spacing help users who may have difficulty targeting small controls to activate the targets. [Learn more about touch targets.](#)

Heading elements appear in a sequentially-descending order



Properly ordered headings that do not skip levels convey the semantic structure of the page, making it easier to navigate and understand when using assistive technologies. [Learn more about heading order.](#)

Uses ARIA roles only on compatible elements



Many HTML elements can only be assigned certain ARIA roles. Using ARIA roles where they are not allowed can interfere with the accessibility of the web page. [Learn more about ARIA roles.](#)

Deprecated ARIA roles were not used



Deprecated ARIA roles may not be processed correctly by assistive technology. [Learn more about deprecated ARIA roles.](#)

Image elements do not have `[alt]` attributes that are redundant text.



Informative elements should aim for short, descriptive alternative text. Alternative text that is exactly the same as the text adjacent to the link or image is potentially confusing for screen reader users, because the text will be read twice. [Learn more about the alt attribute.](#)

NOT APPLICABLE (31)

Hide

● `[accesskey]` values are unique



Access keys let users quickly focus a part of the page. For proper navigation, each access key must be unique. [Learn more about access keys.](#)

- [button](#), [link](#) and [menuitem](#) elements have accessible names

When an element doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. [Learn how to make command elements more accessible.](#)

- Elements with `role="dialog"` or `role="alertdialog"` have accessible names.

ARIA dialogue elements without accessible names may prevent screen reader users from discerning the purpose of these elements. [Learn how to make ARIA dialog elements more accessible.](#)

- 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. [Learn more about input field labels.](#)

- ARIA [meter](#) elements have accessible names

When a meter element doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. [Learn how to name meter elements.](#)

- 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. [Learn how to label progressbar elements.](#)

- 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 about roles and required children elements.](#)

- `[role]`s are contained by their required parent element

Some ARIA child roles must be contained by specific parent roles to properly perform their intended accessibility functions. [Learn more about ARIA roles and required parent element.](#)

- Elements with the `role=text` attribute do not have focusable descendants.

Adding `role=text` around a text node split by markup enables VoiceOver to treat it as one phrase, but the element's focusable descendants will not be announced. [Learn more about the `role=text` attribute.](#)

- 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. [Learn more about toggle fields.](#)

---

○ ARIA `tooltip` elements have accessible names ^

When a tooltip element doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. [Learn how to name tooltip elements.](#)

---

○ ARIA `treeitem` elements have accessible names ^

When a `treeitem` element doesn't have an accessible name, screen readers announce it with a generic name, making it unusable for users who rely on screen readers. [Learn more about labelling treeitem elements.](#)

---

○ 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 about bypass blocks.](#)

---

○ `<dl>`'s contain only properly-ordered `<dt>` and `<dd>` groups, `<script>`, `<template>` or `<div>` elements. ^

When definition lists are not properly marked up, screen readers may produce confusing or inaccurate output. [Learn how to structure definition lists correctly.](#)

---

○ Definition list items are wrapped in `<dl>` elements ^

Definition list items (`<dt>` and `<dd>`) must be wrapped in a parent `<dl>` element to ensure that screen readers can properly announce them. [Learn how to structure definition lists correctly.](#)

---

○ ARIA IDs are unique ^

The value of an ARIA ID must be unique to prevent other instances from being overlooked by assistive technologies. [Learn how to fix duplicate ARIA IDs.](#)

---

○ No form fields have multiple labels ^

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. [Learn how to use form labels.](#)

---

○ `<frame>` or `<iframe>` elements have a title ^

Screen reader users rely on frame titles to describe the contents of frames. [Learn more about frame titles.](#)

---

- `<html>` element has an `[xml:lang]` attribute with the same base language as the `[lang]` attribute.

^

If the webpage does not specify a consistent language, then the screen reader might not announce the page's text correctly. [Learn more about the `lang` attribute.](#)

- `<input type="image">` elements have `[alt]` text

^

When an image is being used as an `<input>` button, providing alternative text can help screen reader users understand the purpose of the button. [Learn about input image alt text.](#)

- Links are distinguishable without relying on colour.

^

Low-contrast text is difficult or impossible for many users to read. Link text that is discernible improves the experience for users with low vision. [Learn how to make links distinguishable.](#)

- The document does not use `<meta http-equiv="refresh">`

^

Users do not expect a page to refresh automatically and doing so will move focus back to the top of the page. This may create a frustrating or confusing experience. [Learn more about the refresh meta tag.](#)

- `<object>` elements have alternative text

^

Screen readers cannot translate non-text content. Adding alternative text to `<object>` elements helps screen readers convey meaning to users. [Learn more about alt text for object elements.](#)

- Select elements have associated label elements.

^

Form elements without effective labels can create frustrating experiences for screen reader users. [Learn more about the select element.](#)

- Skip links are focusable.

^

Including a skip link can help users skip to the main content to save time. [Learn more about skip links.](#)

- 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 about the `tabindex` attribute.](#)

- Tables have different content in the summary attribute and `<caption>`.

^

The summary attribute should describe the table structure, while <caption> should have the onscreen title.

Accurate table mark-up helps users of screen readers. [Learn more about summary and caption.](#)

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

Screen readers have features to make navigating tables easier. Ensuring that <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 about the headers attribute.](#)

- <th> elements and elements with [role="columnheader"/"rowheader"] have data cells they describe. ^

Screen readers have features to make navigating tables easier. Ensuring that table headers always refer to some set of cells may improve the experience for screen reader users. [Learn more about table headers.](#)

- [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 how to use the lang attribute.](#)

- <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 about video captions.](#)



## 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 about this errors in console diagnostic audit](#)

Source	Description
127.0.0.1 <span style="border: 1px solid blue; padding: 2px;">First Party</span>	
shooting.webp:1	Failed to load resource: the server responded with a status of 404 (Not Found)
reportage.webp:1	Failed to load resource: the server responded with a status of 404 (Not Found)
portrait.webp:1	Failed to load resource: the server responded with a status of 404 (Not Found)
scripts.js:20	TypeError: Cannot read properties of null (reading 'addEventListener') at http://127.0.0.1:5500/assets/scripts.js:20:6

#### Detected JavaScript libraries



All front-end JavaScript libraries detected on the page. [Learn more about this JavaScript library detection diagnostic audit.](#)

Name	Version
Bootstrap	5.1.3
jQuery	3.4.1

## 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 how to use a CSP to prevent XSS](#)

Description	Directive	Severity
No CSP found in enforcement mode		High

#### Use a strong HSTS policy



Deployment of the HSTS header significantly reduces the risk of downgrading HTTP connections and eavesdropping attacks. A rollout in stages, starting with a low max-age is recommended. [Learn more about using a strong HSTS policy.](#)

Description	Directive	Severity
No HSTS header found		High

#### ○ Ensure proper origin isolation with COOP

The Cross-Origin-Opener-Policy (COOP) can be used to isolate the top-level window from other documents such as pop-ups. [Learn more about deploying the COOP header.](#)

Description	Directive	Severity
No COOP header found		High

#### ○ Mitigate clickjacking with XFO or CSP

The X-Frame-Options (XFO) header or the frame-ancestors directive in the Content-Security-Policy (CSP) header control where a page can be embedded. These can mitigate clickjacking attacks by blocking some or all sites from embedding the page. [Learn more about mitigating clickjacking.](#)

Description	Severity
No frame control policy found	High

### PASSED AUDITS (13)

Hide

#### Uses HTTPS

All sites should be protected with HTTPS, even ones that don't handle sensitive data. This includes avoiding [mixed content](#), where some resources are loaded over HTTP despite the initial request being served over HTTPS. HTTPS prevents intruders from tampering with or passively listening in on the communications between your app and your users, and is a prerequisite for HTTP/2 and many new web platform APIs. [Learn more about HTTPS.](#)

#### Avoids deprecated APIs

Deprecated APIs will eventually be removed from the browser. [Learn more about deprecated APIs.](#)

## Avoids third-party cookies

Chrome is moving towards a new experience that allows users to choose to browse without third-party cookies.

[Learn more about third-party cookies.](#)

## Allows users to paste into input fields

Preventing input pasting is bad practice for the UX and weakens security by blocking password managers.

[Learn more about user-friendly input fields.](#)

## Avoids requesting the geolocation permission on page load

Users are mistrustful of or confused by sites that request their location without context. Consider tying the request

to a user action instead. [Learn more about the geolocation permission.](#)

## 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 about responsibly getting permission for notifications.](#)

## Displays images with correct aspect ratio

Image display dimensions should match natural aspect ratio. [Learn more about image aspect ratio.](#)

## Serves images with appropriate resolution

Image natural dimensions should be proportional to the display size and the pixel ratio to maximise image clarity.

[Learn how to provide responsive images.](#)

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

A `<meta name="viewport">` not only optimises your app for mobile screen sizes, but also prevents [a 300 millisecond delay to user input](#). [Learn more about using the viewport meta tag.](#)

## Page has the HTML doctype

Specifying a DOCTYPE prevents the browser from switching to quirks mode. [Learn more about the doctype declaration.](#)

## Properly defines charset

A character encoding declaration is required. It can be done with a `<meta>` tag in the first 1,024 bytes of the HTML or in the Content-Type HTTP response header. [Learn more about declaring the character encoding.](#)

## No issues in the [Issues](#) panel in Chrome DevTools ^

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

## Page has valid source maps ^

Source maps translate minified code to the original source code. This helps developers to debug in production. In addition, Lighthouse is able to provide further insights. Consider deploying source maps to take advantage of these benefits. [Learn more about source maps.](#)

URL	Map URL
Unattributable	
<code>chrome-extension://fmkadmapgofadopljbjfkapdkoienihi/build/installHook.js</code>	<code>chrome-extension://fmkadmapgofadopljbjfkapdkoienihi/build/installHook.js.map</code>
Warning: missing 46 items in `sourcesContent`	
<code>chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/vendor/@eyeo/webext-ad-filtering-solution/content.js</code>	
<code>chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/polyfill.js</code>	<code>chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/polyfill.js.map</code>
<code>chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/onpage-dialog.preload.js</code>	<code>chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/onpage-dialog.preload.js.map</code>
<code>chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/onpage-dialog-ui.preload.js</code>	<code>chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/onpage-dialog-ui.preload.js.map</code>
<code>chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/cookie-banner-detection.preload.js</code>	<code>chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/cookie-banner-detection.preload.js.map</code>

URL	Map URL
chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/composer.preload.js	chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/composer.preload.js.map
chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/bypass.preload.js	chrome-extension://cfhdojbkjhnlbpkdaibdccddilifddb/bypass.preload.js.map
127.0.0.1 <span style="border: 1px solid blue; padding: 2px;">First Party</span>	
...bootstrap/bootstrap.bundle.js (127.0.0.1)	...bootstrap/bootstrap.bundle.js.map (127.0.0.1)

## NOT APPLICABLE (2)

Hide ^

### Redirects HTTP traffic to HTTPS

Make sure that you redirect all HTTP traffic to HTTPS in order to enable secure web features for all your users.

[Learn more.](#)

### Document uses legible font sizes

Font sizes less than 12px are too small to be legible and require mobile visitors to 'pinch to zoom' in order to read. Strive to have >60% of page text  $\geq$ 12px. [Learn more about legible font sizes.](#)



## SEO

These checks ensure that your page is following basic search engine optimisation advice. There are many additional factors that Lighthouse does not score here that may affect your search ranking, including performance on [Core Web Vitals](#). [Learn more about Google Search essentials.](#)

## ADDITIONAL ITEMS TO MANUALLY CHECK (1)

Hide

○ Structured data is valid

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

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

PASSED AUDITS (8)

Hide

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 about crawler directives.](#)

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 about document titles.](#)

Document has a meta description

Meta descriptions may be included in search results to concisely summarise page content. [Learn more about the meta description.](#)

Page has successful HTTP status code

Pages with unsuccessful HTTP status codes may not be indexed properly. [Learn more about HTTP status codes.](#)

Links have descriptive text

Descriptive link text helps search engines understand your content. [Learn how to make links more accessible.](#)

Links are crawlable

Search engines may use href attributes on links to crawl websites. Ensure that the href attribute of anchor elements links to an appropriate destination so that more pages of the site can be discovered. [Learn how to make links crawlable](#)

Image elements have `[alt]` attributes

Informative elements should aim for short, descriptive alternative text. Decorative elements can be ignored with an

empty alt attribute. [Learn more about the alt attribute.](#)

## Document has a valid `hreflang`

`hreflang` links tell search engines what version of a page they should list in search results for a given language or region. [Learn more about `hreflang`.](#)

## NOT APPLICABLE (2)

Hide

### robots.txt is valid

If your robots.txt file is malformed, crawlers may not be able to understand how you want your website to be crawled or indexed. [Learn more about robots.txt.](#)

### Document has a valid `rel=canonical`

Canonical links suggest which URL to show in search results. [Learn more about canonical links.](#)

Captured at 8 Jul 2025,

00:38 CEST

Initial page load

Emulated desktop with

Lighthouse 12.6.0

Custom throttling

Single-page session

Using Chromium 137.0.0.0  
with devtools

Generated by **Lighthouse** 12.6.0 | [File an issue](#)