

Audit Report: Larsen - The Coolest Accommodation in Tallinn

Website: <https://larsen.ee/>

Date: 2026-06-10

Overall Score: 50 / 100

Status: ❑ Poor

Confidence: high

Audit Coverage: 100% — all sources returned data

Pages Audited (5 of 5):

- <https://larsen.ee/>
- <https://larsen.ee/about>
- <https://larsen.ee/faq>
- <https://larsen.ee/terms-of-service>
- <https://larsen.ee/et>

Summary

Site overall 50 is the mean of 5 pages. Scores range 45 (<https://larsen.ee/>) → 52 (<https://larsen.ee/et>). Weakest page: Mobile performance is catastrophic (PSI 48, LCP 47.1s) due to 69 MB page weight and 1.37 MB unused JavaScript, dragging the score into the 'Poor' band. Accessibility is compromised by 2 critical axe violations (button-name, image-alt) and 11 W3C errors including heading skips. Security headers are weak (40/100) with missing HSTS and X-Frame-Options, though no auth/payments signals reduce immediate exploitation risk. Desktop performance (43) is similarly poor, indicating systemic architectural issues rather than just mobile throttling.

Per-Page Scores

Page	Score	Status	Confidence
https://larsen.ee/	45	❑ Poor	high
https://larsen.ee/about	52	❑ Poor	high
https://larsen.ee/faq	52	❑ Poor	high

Page	Score	Status	Confidence
https://larsen.ee/terms-of-service	48	 Poor	high
https://larsen.ee/et	52	 Poor	high

PageSpeed Insights — Mobile vs Desktop

Lower is worse for Performance; higher is worse for LCP and CLS. Worse value is **bolded**.

URL	Performance (M / D)	LCP (M / D)	CLS (M / D)
https://larsen.ee/	48 / 43	47.08 s / 5.32 s	0.139 / 0.000
https://larsen.ee/about	47 / 51	36.15 s / 5.27 s	0.000 / 0.000
https://larsen.ee/faq	49 / 52	4.06 s / 3.07 s	0.651 / 0.000
https://larsen.ee/terms-of-service	27 / 55	15.99 s / 2.82 s	0.000 / 0.055
https://larsen.ee/et	53 / 44	10.50 s / 4.88 s	0.001 / 0.001

Optimization Checklist

1 of 7 passing — 1 pass · 1 warn · 5 fail

Item	Status	Detail
Page caching plugin / CDN active	Fail	No WordPress cache plugin marker or CDN edge cache detected on the document response.
Images lazy-loaded	Fail	5 of 7 non-hero raster images are not lazy-loaded (threshold: 2).
Hero image eagerly loaded	Fail	Hero image has loading="lazy", which delays LCP (inferred from DOM order/size — Lighthouse LCP element

Item	Status	Detail
		unavailable). Use loading="eager" (or omit loading) and add fetchpriority="high".
Hero is a real (not a CSS background-image)	Warn	Hero element uses a CSS background-image (no image-set() variants), so the browser always loads the original asset regardless of viewport — there is no srcset equivalent. Move the hero to a real with srcset/sizes (or) so smaller viewports can fetch a smaller file.
Responsive images (srcset /)	Fail	16/16 raster images lack srcset and are not inside .
Reasonable number of image sizes	Fail	No raster images use srcset; browsers cannot pick an optimally sized variant.
JS scripts not blocking in	Pass	No render-blocking scripts in .

Fixes

Priority 1: Critical

Immediate action — impacts user experience, search rankings, or site safety.

1A. Reduce JavaScript bundle and media weight to fix LCP

- **Impact:** LCP (47.1s), FCP (3.6s), Total Page Weight (69 MB)
- **Problem:** Mobile LCP is 47.1s with 1.37 MB unused JS (app-889782a39d4314ef1bf6.js) and 55 MB media weight causing massive load delays.
- **Solution:**
 - Split the 1.37 MB `app-*.js` bundle using code splitting (React.lazy or dynamic imports).
 - Compress media: Convert 55 MB of images/video to WebP/AVIF and implement lazy loading.
 - Defer non-critical third-party scripts (Hotjar, PostHog) until user interaction.

1B. Fix critical accessibility violations

- **Impact:** WCAG 2.1 Compliance, Screen Reader Usability
- **Problem:** axe-core reports 2 critical violations: buttons lack discernible text (slider dots) and images lack alt attributes.

- **Solution:**
 - Add `aria-label` to all slider dot buttons (e.g., `aria-label="Slide 1"`).
 - Add descriptive `alt` text to all content images; use `alt=""` for purely decorative icons.
 - Ensure all interactive elements have accessible names.

1C. Reduce JavaScript bundle size and eliminate unused code

- **Impact:** LCP, FCP, TBT, Performance Score
- **Problem:** 1.4 MB of unused JavaScript detected (app-889782a39d4314ef1bf6.js alone is 1397 KB wasted), contributing to LCP of 36.2 s.
- **Solution:**
 - Implement code splitting to load only necessary JS for the About page.
 - Tree-shake dependencies and remove unused third-party scripts.
 - Defer non-critical scripts (e.g., analytics, hotjar) until after main content renders.

1D. Optimize and lazy-load images

- **Impact:** Page Weight, LCP, CLS
- **Problem:** Images total 3.75 MB with no srcset, 6 missing lazy loading, and 1 missing alt attribute. Hero image is a CSS background.
- **Solution:**
 - Convert all images to WebP/AVIF with fallbacks.
 - Add `srcset` and `sizes` attributes for responsive loading.
 - Add `loading="lazy"` to non-hero images.
 - Move hero CSS background to a real `<img>` tag with `fetchpriority="high"`.

1E. Strengthen Content Security Policy (CSP)

- **Impact:** XSS Defense, Security Score
- **Problem:** CSP is weak (only frame-ancestors set). Site signals indicate user-generated content (reviews), elevating XSS risk to Priority 1 per rubric.
- **Solution:**
 - Implement a strict CSP with `default-src` and `object-src 'none'`.
 - Use nonces or hashes for inline scripts rather than a permissive allowlist.
 - Example: `Content-Security-Policy: default-src 'self'; script-src 'nonce-{random}' 'strict-dynamic'; object-src 'none';`

1F. Fix Core Web Vitals (LCP, CLS) and Reduce JavaScript

- **Impact:** Performance, LCP, CLS, TBT
- **Problem:** Mobile Performance 49, LCP 4.1s (>4s penalty), CLS 0.651 (>0.25 penalty), and 1.4MB wasted JS (app-889782a39d4314ef1bf6.js).
- **Solution:**
 - **LCP:** Remove `loading="lazy"` from the hero image and add `fetchpriority="high"`.
 - **CLS:** Reserve space for dynamic content (cookies, ads) using CSS `min-height` or `aspect-ratio`.
 - **JS:** Code-split the 1.4MB `app-889782a39d4314ef1bf6.js` and defer non-critical third-party scripts (Hotjar, PostHog).

1G. Harden Security Headers (CSP & HSTS)

- **Impact:** XSS protection, Transport security
- **Problem:** Security Headers grade 40/100. HSTS max-age too short (15552000s) and missing `includeSubDomains`. CSP is weak (missing `default-src`). UGC signal present increases XSS risk.
- **Solution:**
 - **HSTS:** `Strict-Transport-Security: max-age=31536000; includeSubDomains; preload`
 - **CSP:** Implement nonce-based CSP with `strict-dynamic`:

```
Content-Security-Policy: default-src 'self'; script-src 'nonce-{random}' 'strict-dynamic'; object-src 'none'; base-uri 'none';
```
 - **X-Frame-Options:** Add `X-Frame-Options: SAMEORIGIN` as fallback.

1H. Reduce JavaScript bundle and defer non-critical scripts

- **Impact:** TBT, LCP, FCP, Performance Score
- **Problem:** 1.4 MB of unused JavaScript (GTM, PostHog, Facebook) causes 6.09 s TBT and 16.0 s LCP on mobile.
- **Solution:**
 - Audit third-party scripts; remove unused tracking codes.
 - Load critical scripts inline or defer non-critical ones.
 - Use `module / nomodule` pattern for modern/legacy JS.
 - Implement code splitting to reduce initial bundle size.

1I. Fix Hero Image Loading Strategy

- **Impact:** LCP, Performance Score
- **Problem:** Hero image is lazy-loaded (`loading="lazy"`), delaying LCP to 16.0 s on mobile.
- **Solution:**
 - Remove `loading="lazy"` from the hero image.
 - Add `fetchpriority="high"` to the hero image.
 - Ensure hero image is preloaded if it's not the first resource.

1J. Implement Strict Content Security Policy (CSP)

- **Impact:** XSS Protection, Security Score
- **Problem:** CSP is missing `default-src` and `object-src` , leaving the site vulnerable to XSS (site has user-generated content).
- **Solution:**
 - Deploy a nonce-based CSP rather than a flat allowlist.
 - Example: `Content-Security-Policy: default-src 'self'; script-src 'nonce-{random}' 'strict-dynamic'; object-src 'none';`
 - Ensure all inline scripts use the nonce.

1K. Reduce page weight and optimize media delivery

- **Impact:** LCP, Speed Index, Total Blocking Time
- **Problem:** Total page weight is 69.19 MB (56 MB media); LCP is 10.5 s on mobile. Unused JavaScript alone is 1.37 MB.
- **Solution:**
 - Compress and resize images; serve WebP/AVIF.
 - Implement lazy loading for below-fold media.
 - Remove or defer unused JavaScript (e.g., `app-889782a39d4314ef1bf6.js`).
 - Use a CDN with edge caching to reduce TTFB and transfer time.

1L. Harden security headers for UGC site

- **Impact:** XSS, Clickjacking, Transport Security
- **Problem:** Security grade is 40/100. HSTS max-age is short (15M s) and missing `includeSubDomains` . CSP lacks `default-src` . Site has user-generated content (reviews), increasing XSS risk.
- **Solution:**
 - Update HSTS: `max-age=31536000; includeSubDomains; preload` .
 - Add `X-Frame-Options: SAMEORIGIN` .

- Implement strict CSP with nonce/hash: `Content-Security-Policy: default-src 'self'; script-src 'nonce-{random}' 'strict-dynamic'; object-src 'none';`

Priority 2: Important

Essential for compliance, user reach, and search visibility.

2A. Strengthen Security Headers (HSTS, X-Frame-Options)

- **Impact:** Transport Security, Clickjacking Protection
- **Problem:** HSTS max-age is too short (15552000s) and missing directives; X-Frame-Options is missing entirely.
- **Solution:**
 - Update HSTS: `max-age=31536000; includeSubDomains; preload` .
 - Add `X-Frame-Options: SAMEORIGIN` (or use CSP `frame-ancestors` exclusively).
 - Ensure `X-Content-Type-Options: nosniff` is present (currently OK).

2B. Implement Responsive Images (srcset)

- **Impact:** Mobile Data Usage, LCP, CLS
- **Problem:** 16/16 raster images lack `srcset` , forcing mobile devices to download desktop-sized assets (55 MB total media).
- **Solution:**
 - Generate multiple image sizes (e.g., 400w, 800w, 1200w) for all raster images.
 - Update HTML to use `<img srcset="..." sizes="...">` or `<picture>` elements.
 - Add explicit `width` and `height` attributes to prevent CLS.

2C. Fix HSTS and Accessibility violations

- **Impact:** Transport Security, WCAG Compliance
- **Problem:** HSTS max-age is too short (15552000s) and missing `includeSubDomains` . 5 axe violations including missing `lang` and `alt` .
- **Solution:**
 - Update HSTS: `Strict-Transport-Security: max-age=31536000; includeSubDomains; preload` .
 - Add `lang="en"` to `<html>` .
 - Add descriptive `alt` text to all content images (e.g., `Co-Liv.png`).
 - Ensure color contrast ratios meet 4.5:1 for text.

2D. Resolve W3C HTML Errors and Structure

- **Impact:** SEO, Document Outline, Validation
- **Problem:** 18 W3C errors including obsolete `<font>` tags, missing `<h1>`, duplicate IDs, and charset placement issues.
- **Solution:**
 - **Headings:** Add one `<h1>` at the top of the page content.
 - **Tags:** Replace `<font>` elements with CSS classes.
 - **IDs:** Ensure unique IDs (e.g., `what-are-the-prices-of-the-rooms-and-what-does-the-price-depend-on?`).
 - **Charset:** Move `<meta charset="UTF-8">` within the first 1024 bytes.

2E. Optimize Image Delivery

- **Impact:** Page Weight, CLS, Mobile Data
- **Problem:** 3 images lack `width / height` (causing CLS), 1 missing `alt`, and no `srcset` for responsive loading.
- **Solution:**
 - **Dimensions:** Add explicit `width` and `height` attributes to all `<img>` tags.
 - **Responsive:** Add `srcset` with WebP/AVIF variants for all raster images.
 - **Alt:** Ensure all content images have descriptive `alt` text; decorative images use `alt=""`.

2F. Add Responsive Images (srcset)

- **Impact:** Page Weight, LCP, CLS
- **Problem:** 3/3 raster images lack `srcset`, preventing browsers from loading optimally sized variants.
- **Solution:**
 - Generate multiple image sizes (e.g., 400w, 800w, 1200w).
 - Add `srcset` and `sizes` attributes to `<img>` tags.
 - Use `<picture>` for art direction if needed.

2G. Implement responsive images and dimensions

- **Impact:** CLS, Mobile Data Usage, LCP
- **Problem:** 16/16 raster images lack `srcset` and explicit `width / height`, preventing browser optimization and risking layout shifts.
- **Solution:**
 - Add `width` and `height` attributes to all `<img>` tags.

- Generate `srcset` variants (e.g., 400w, 800w, 1200w) for all raster images.
- Wrap hero images in `<picture>` elements for format switching.

2H. Fix SEO metadata and HTML structure

- **Impact:** Search Visibility, Crawlability
- **Problem:** Missing `canonical` tag, `robots.txt`, and heading hierarchy skips (h2 → h4). W3C reports 12 errors including nested buttons inside anchors.
- **Solution:**
 - Add `<link rel="canonical" href="...">`.
 - Ensure `robots.txt` exists at root.
 - Fix heading order (h2 → h3 → h4).
 - Remove `<button>` elements nested inside `<a>` tags; use `<a>` styled as buttons or JS event handlers.

Priority 3: Best Practice

Recommended for long-term maintainability.

3A. Resolve W3C HTML Validation Errors

- **Impact:** SEO, Code Maintainability
- **Problem:** 11 errors found including `button` inside `a` (x5) and heading skips (h2 → h4).
- **Solution:**
 - Remove `button` elements nested inside `a` tags; use `a` with `role="button"` or separate the link and button.
 - Fix heading hierarchy: Ensure `h3` follows `h2` without skipping levels.
 - Add `lang="en"` to the `<html>` tag.

3B. Enable proper caching and SEO metadata

- **Impact:** Repeat Visit Performance, Search Indexing
- **Problem:** No `Cache-Control` header (unpredictable caching), missing canonical tag, and missing `robots` meta.
- **Solution:**
 - Set `Cache-Control: public, max-age=31536000` for static assets.
 - Add `<link rel="canonical" href="https://larsen.ee/about">`.
 - Add `<meta name="robots" content="index, follow">`.

3C. Add Missing SEO Meta Tags

- **Impact:** Search Visibility, CTR
- **Problem:** Missing meta description, canonical URL, and robots meta tag.
- **Solution:**
 - Add `<meta name="description" content="...">` .
 - Add `<link rel="canonical" href="...">` .
 - Add `<meta name="robots" content="index, follow">` .