

Audit Report: Kodud

Website: <https://kodud.embach.ee/>

Date: 2026-07-20

Overall Score: 74 / 100

Status: ❑ Needs Improvement

Confidence: high

Audit Coverage: 100% — all sources returned data

Pages Audited (5 of 5):

- <https://kodud.embach.ee/>
- <https://kodud.embach.ee/hello-world>
- <https://kodud.embach.ee/sample-page>
- <https://kodud.embach.ee/koik-arendused>
- <https://kodud.embach.ee/kontakt>

Summary

Site overall 74 is the mean of 5 pages. Scores range 72 (<https://kodud.embach.ee/hello-world>) → 78 (<https://kodud.embach.ee/sample-page>). Weakest page: Mobile performance (77) is dragged down by LCP 3.7 s and CLS 0.208, while desktop is excellent (99). Security headers are completely absent (0/100), which is critical given the inferred user-generated content signal. Accessibility is strong (94) but fails on the missing H1 heading structure. SEO metadata is missing (description, structured data). Confidence is high due to complete data coverage.

Per-Page Scores

Page	Score	Status	Confidence
https://kodud.embach.ee/	74	❑ Needs Improvement	high
https://kodud.embach.ee/hello-world	72	❑ Needs Improvement	high
https://kodud.embach.ee/sample-page	78	❑ Needs Improvement	high

Page	Score	Status	Confidence
https://kodud.embach.ee/koik-arendused	72	 Needs Improvement	high
https://kodud.embach.ee/kontakt	72	 Needs Improvement	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://kodud.embach.ee/	76 / 77	3.35 s / 1.01 s	0.287 / 0.571
https://kodud.embach.ee/hello-world	77 / 99	3.74 s / 858 ms	0.208 / 0.007
https://kodud.embach.ee/sample-page	82 / 99	3.71 s / 926 ms	0.000 / 0.007
https://kodud.embach.ee/koik-arendused	76 / 97	5.18 s / 1.21 s	0.000 / 0.000
https://kodud.embach.ee/kontakt	82 / 99	4.50 s / 915 ms	0.000 / 0.000

Optimization Checklist

1 of 3 passing — 1 pass · 1 warn · 1 fail · 4 n/a

Item	Status	Detail
Page caching plugin / CDN active	Pass	Caching plugin detected (WP Rocket)
Images lazy-loaded	N/A	No raster elements found.
Hero image eagerly loaded	Fail	Hero image has loading="lazy", which delays LCP (inferred from DOM order/size — Lighthouse LCP)

Item	Status	Detail
		element unavailable). Use loading="eager" (or omit loading) and add fetchpriority="high".
Hero is a real (not a CSS background-image)	N/A	No CSS background-images detected on raster-image-eligible elements.
Responsive images (srcset /)	N/A	Only 0 raster images on the page — responsive-image rule does not apply.
Reasonable number of image sizes	N/A	Too few raster images to evaluate srcset width variety.
JS scripts not blocking in	Warn	2 render-blocking scripts in . Move to footer or add defer/async.

Fixes

Priority 1: Critical

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

1A. Fix Cumulative Layout Shift (CLS) on Carousel

- **Impact:** Core Web Vitals, User Experience
- **Problem:** CLS is 0.287 (mobile) and 0.571 (desktop), exceeding the 0.25 threshold. The shift source is identified as 'div.projects-carousel__slider'.
- **Solution:** Reserve space for the carousel container using `min-height` or `aspect-ratio` in CSS to prevent layout shifts during image loading.

```
.projects-carousel__slider {
  min-height: 400px; /* Adjust to actual content height */
  aspect-ratio: 16 / 9;
}
```

1B. Implement Missing Security Headers

- **Impact:** Security, Transport Integrity
- **Problem:** Security Headers grade is 0/100. HSTS, X-Frame-Options, X-Content-Type-Options, and CSP are all missing. UGC signal is 'yes', elevating CSP to Priority 1.
- **Solution:** Add the following headers to the server response (Apache example):

```
Header always set Strict-Transport-Security "max-age=63072000;
includeSubDomains; preload"
Header always set X-Content-Type-Options "nosniff"
Header always set X-Frame-Options "SAMEORIGIN"
Header always set Content-Security-Policy "default-src 'self';
script-src 'nonce-{random}' 'strict-dynamic';"
```

1C. Optimize Largest Contentful Paint (LCP)

- **Impact:** Performance, LCP Metric
- **Problem:** LCP is 3.3 s on mobile, exceeding the 2.5 s good threshold. 6 render-blocking scripts and 109 KB unused JS contribute to delay.
- **Solution:**
 1. Defer non-critical scripts (add `defer` or `async` to 6 render-blocking scripts).
 2. Preload the hero image resource.
 3. Remove or tree-shake the 109 KB unused JavaScript
(`global.04cbabbf7670bc75.js`).

```
<link rel="preload" as="image" href="/path/to/hero.jpg">
<script src="..." defer></script>
```

1D. Add a single H1 heading to the page

- **Impact:** SEO, Accessibility (WCAG 1.3.1)
- **Problem:** HTML Inventory reports 0 H1 elements; axe-core flags 'page-has-heading-one' as a moderate violation.
- **Solution:** Ensure the main title of the post/page is wrapped in a single `<h1>` tag.

```
<h1>Hello world!</h1>
```

1E. Implement baseline security headers (HSTS, CSP, X-Frame-Options)

- **Impact:** Transport security, XSS defense, Clickjacking
- **Problem:** Security Headers grade is 0/100; HSTS and CSP are missing despite UGC signal (yes) increasing XSS risk.
- **Solution:** Add to server config (Apache example):

```
Header always set Strict-Transport-Security "max-age=63072000;
includeSubDomains; preload"
Header always set X-Frame-Options "SAMEORIGIN"
Header always set X-Content-Type-Options "nosniff"
Header always set Content-Security-Policy "default-src 'self';
script-src 'self' 'nonce-{random}' 'strict-dynamic';"
```

1F. Implement Critical Security Headers (HSTS, CSP)

- **Impact:** Security, XSS protection, Clickjacking
- **Problem:** Security Headers grade is 0/100; HSTS and CSP are missing. Site signals indicate user-generated content (UGC), elevating XSS risk.
- **Solution:** Add the following headers to your server configuration (e.g., Apache .htaccess or Nginx):

```
Header always set Strict-Transport-Security "max-age=63072000;
includeSubDomains; preload"
Header always set X-Content-Type-Options "nosniff"
Header always set X-Frame-Options "SAMEORIGIN"
Header always set Content-Security-Policy "default-src 'self';
script-src 'self' 'nonce-{random}' 'strict-dynamic'; object-src
'none'; base-uri 'none';"
```

Ensure CSP uses nonces/hashes for scripts rather than a permissive allowlist.

1G. Fix Hero Image Loading for LCP

- **Impact:** LCP, FCP, Performance Score
- **Problem:** LCP is 5.2 s on mobile; checklist confirms hero image has loading='lazy' which delays rendering.
- **Solution:** Remove `loading="lazy"` from the hero image and add `fetchpriority="high"` :

```

```

1H. Implement HSTS and CSP Headers

- **Impact:** Security Headers Grade, XSS/Clickjacking Defense
- **Problem:** Security grade is 0/100; HSTS and CSP are missing. UGC signal is 'yes', raising CSP priority per rubric.
- **Solution:** Add HSTS and a strict CSP (nonce-based) to server config:

```
Header always set Strict-Transport-Security "max-age=63072000;
includeSubDomains; preload"
Header always set Content-Security-Policy "default-src 'self';
script-src 'nonce-{random}' 'strict-dynamic';"
```

1I. Implement Baseline Security Headers

- **Impact:** Security, Transport Integrity

- **Problem:** Security Headers grade is 0/100; HSTS, X-Frame-Options, and X-Content-Type-Options are missing.
- **Solution:** Add these headers via server config (Apache example):

```
Header always set Strict-Transport-Security "max-age=63072000;
includeSubDomains"
Header always set X-Frame-Options "SAMEORIGIN"
Header always set X-Content-Type-Options "nosniff"
```

1J. Add Content-Security-Policy (CSP)

- **Impact:** XSS Defense
- **Problem:** CSP is missing and Site Signals infer User-Generated Content (anchor href contains "post"), elevating XSS risk.
- **Solution:** Deploy a strict CSP with nonces rather than a flat allowlist:

```
Header always set Content-Security-Policy "default-src 'self';
script-src 'nonce-{random}' 'strict-dynamic';"
```

Priority 2: Important

Essential for compliance, user reach, and search visibility.

2A. Add Meta Description and Structured Data

- **Impact:** SEO, Search Visibility
- **Problem:** PSI SEO audit fails on `metaDescription` and `structuredData` . HTML inventory confirms no meta description or JSON-LD present.
- **Solution:** Add a unique meta description (150-160 chars) and relevant JSON-LD (e.g., `RealEstateAgent` or `LocalBusiness`).

```
<meta name="description" content="Embach kodud: kaasaegne
kinnisvaraarendus Tartu piiril.">
<script type="application/ld+json">
{
  "@context": "https://schema.org",
  "@type": "RealEstateAgent",
  "name": "Embach"
}
</script>
```

2B. Reduce Cumulative Layout Shift (CLS) caused by footer

- **Impact:** Core Web Vitals (CLS), User Experience
- **Problem:** CLS is 0.208 (warning zone); PSI identifies footer div as the primary shift source (0.197).

- **Solution:** Reserve space for dynamic footer content or ensure footer elements have explicit dimensions.

```
footer.footer {
  min-height: 200px; /* Reserve space */
}
```

2C. Defer non-critical render-blocking scripts

- **Impact:** LCP, FCP, Performance Score
- **Problem:** 6 render-blocking scripts detected; 117 KB unused JS identified in global.js.
- **Solution:** Add `defer` or `async` to script tags in `<head>` unless they are critical for initial render.

```
<script src="..." defer></script>
```

2D. Defer Render-Blocking Scripts

- **Impact:** LCP, FCP, Performance Score
- **Problem:** 6 render-blocking scripts identified in PSI and HTML Inventory; LCP is 3.7 s and FCP is 3.23 s on mobile.
- **Solution:** Move non-critical scripts to the footer or add `defer` / `async` attributes. For WordPress, use a plugin like WP Rocket (already detected) to delay JS execution or minify/combine scripts.

```
<!-- Change from -->
<script src="..."></script>
<!-- To -->
<script src="..." defer></script>
```

2E. Remove Unused JavaScript

- **Impact:** Page Weight, TBT, Performance Score
- **Problem:** 117 KB of unused JavaScript detected in `global.04cbabbf7670bc75.js`.
- **Solution:** Audit `global.js` and `core.js` for unused functions. Use code splitting or tree-shaking in your build process. If using WordPress, disable unused theme/plugin scripts via a performance plugin.

2F. Add H1 Heading Element

- **Impact:** Accessibility (Axe), SEO (W3C)

- **Problem:** W3C warns no H1; Axe reports 'page-has-heading-one' violation. Page uses H2s for main titles.
- **Solution:** Ensure the primary page title is wrapped in `<h1>` :

```
<h1>Kõik arendused</h1>
```

2G. Add Meta Description

- **Impact:** SEO (PSI Score 0)
- **Problem:** PSI SEO audit fails 'metaDescription'; HTML inventory confirms description is not set.
- **Solution:** Add a unique description tag in `<head>` :

```
<meta name="description" content="Vaadake kõiki meie arendusi ja  
koduvalikuid Eestis.">
```

2H. Fix Accessibility Violations

- **Impact:** WCAG 2.4.4, 2.5.8
- **Problem:** PSI flags `button-name` and `target-size` with 0.00 scores; touch targets are too small and buttons lack accessible names.
- **Solution:**
 - Ensure all buttons have visible text or `aria-label` .
 - Increase touch target padding to at least 44×44 px per WCAG 2.5.8.

2I. Defer Render-Blocking JavaScript

- **Impact:** FCP, TBT, Performance
- **Problem:** 6 render-blocking scripts detected; 117 KB unused JS contributes to long tasks.
- **Solution:** Add `defer` or `async` to non-critical scripts in `<head>` :

```
<script src="/js/core.js" defer></script>
```

Priority 3: Best Practice

Recommended for long-term maintainability.

3A. Ensure Lazy Loading on All Below-Fold Images

- **Impact:** Page Weight, Load Time
- **Problem:** HTML inventory shows 1 image missing `loading="lazy"` despite being below the fold. Total page weight is 795.5 KB.

- **Solution:** Audit all images below the fold and add `loading="lazy"` attribute. Ensure hero images remain `eager` or `fetchpriority="high"`.

```

```

3B. Add meta description and structured data

- **Impact:** SEO (Search Appearance)
- **Problem:** PSI SEO audit fails on `metaDescription` and `structuredData`; HTML Inventory confirms 0 Open Graph/Twitter tags.
- **Solution:** Add meta description and JSON-LD schema to the `<head>`:

```
<meta name="description" content="Brief summary of the page content for search engines.">
<script type="application/ld+json">
{
  "@context": "https://schema.org",
  "@type": "BlogPosting",
  "headline": "Hello world!"
}
</script>
```

3C. Verify Button Accessibility Names

- **Impact:** Accessibility, WCAG 2.4.4
- **Problem:** PSI reports `button-name` failure (score 0.00) despite axe-core showing 0 violations; manual check needed.
- **Solution:** Inspect all `<button>` and icon links. Ensure they have visible text or `aria-label` attributes.

```
<button aria-label="Close modal">&times;</button>
```

3D. Add Meta Description and Open Graph Tags

- **Impact:** SEO, Social Sharing
- **Problem:** SEO audit fails `metaDescription`; no Open Graph or Twitter tags present.
- **Solution:** Add to `<head>`:

```
<meta name="description" content="Contact details for real estate services.">
<meta property="og:title" content="Kontakt">
<meta property="og:image" content="/path/to/og-image.jpg">
```

3E. Fix W3C HTML Validation Errors

- **Impact:** Maintainability, Rendering Consistency
- **Problem:** 2 errors found: `srcset` missing width specification and stray `</p>` end tag.
- **Solution:**
 - Update `srcset` to include width descriptors (e.g., `image.jpg 400w`).
 - Remove the extra `</p>` tag at line 538.