

Day 5 - Testing and Backend Refinement – Elite Market

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Lighthouse Audit Results Presentation

1. Overview

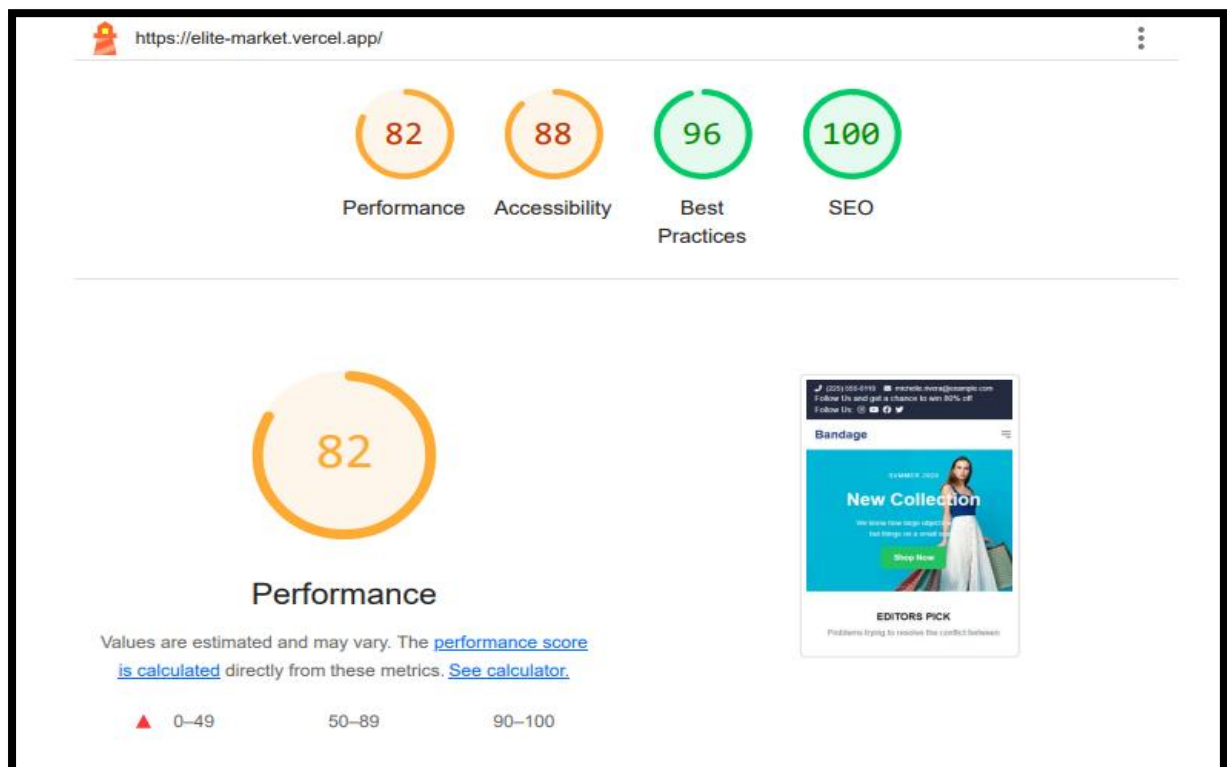
Website: [Elite Market](#)

Tool Used: Lighthouse 12.2.1

Environment: Emulated Moto G Power, Slow 4G Throttling

Focus Areas:

- Performance
- Accessibility
- Best Practices
- SEO
- Critical Loading Metrics



METRICS

[Expand view](#)

First Contentful Paint

1.4 s

Largest Contentful Paint

1.8 s

▲ Total Blocking Time

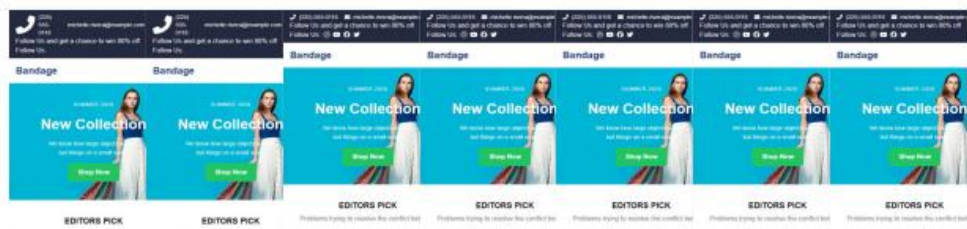
730 ms

Cumulative Layout Shift

0.047

Speed Index

1.6 s

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

DIAGNOSTICS

▲ Minimize main-thread work — 3.7 s



▲ Reduce JavaScript execution time — 1.5 s



▲ Properly size images — Potential savings of 27 KiB



Eliminate render-blocking resources — Potential savings of 0 ms



Reduce unused JavaScript — Potential savings of 25 KiB



○ Avoid long main-thread tasks — 9 long tasks found



○ Avoids an excessive DOM size — 631 elements



○ Avoid large layout shifts — 1 layout shift found



○ Initial server response time was short — Root document took 80 ms



○ Avoids enormous network payloads — Total size was 300 KiB



○ Avoid chaining critical requests — 1 chain found



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



○ Largest Contentful Paint element — 1,760 ms



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

PASSED AUDITS (25)

Show



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.

NAMES AND LABELS

▲ Buttons do not have an accessible name



These are opportunities to improve the semantics of the controls in your application. This may enhance the experience for users of assistive technology, like a screen reader.

CONTRAST

▲ Background and foreground colors do not have a sufficient contrast ratio.



These are opportunities to improve the legibility of your content.

NAVIGATION

▲ Heading elements are not in a sequentially-descending order



These are opportunities to improve keyboard navigation in your application.

ADDITIONAL ITEMS TO MANUALLY CHECK (10)

Show

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

PASSED AUDITS (20)

Show

NOT APPLICABLE (34)

Show



Best Practices

USER EXPERIENCE

▲ Displays images with incorrect aspect ratio



TRUST AND SAFETY

○ Ensure CSP is effective against XSS attacks



PASSED AUDITS (14)

Show

NOT APPLICABLE (2)

Show



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 about Google Search Essentials](#).

ADDITIONAL ITEMS TO MANUALLY CHECK (1)

Show

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

PASSED AUDITS (8)

Show

NOT APPLICABLE (2)

Show

2. Test Results Summary

Test Results at a Glance

Metric	Score	Status
Performance	82	Needs Improvement
Accessibility	88	Slight Improvement Needed
Best Practices	96	Satisfactory
SEO	100	Optimal

3. Key Findings (Performance)

Performance Observations and Recommendations

- **Score:** 82
 - **Key Issues:**
 - Image optimization required
 - High main-thread work
 - **Recommendations:**
 - Compress and lazy-load images
 - Utilize a CDN for asset delivery
 - Optimize JavaScript execution
-

4. Key Findings (Accessibility)

Accessibility Observations and Recommendations

- **Score:** 88
- **Key Issues:**
 - Contrast issues
 - Missing accessible names on buttons
- **Recommendations:**
 - Enhance contrast for better readability
 - Use proper heading hierarchy
 - Ensure buttons are screen-reader friendly

5. Best Practices and SEO

Observations for Best Practices and SEO

- **Best Practices Score:** 96
 - Minor refinements recommended for maintainability
- **SEO Score:** 100
 - Fully optimized with no significant improvements required

6. Image Loading and CLS

Image Loading and Layout Stability

- **Key Metrics:**
 - FCP: +10ms | LCP: +25ms
 - CLS: +25ms (Minor layout shift detected)
- **Recommendations:**
 - Preload fonts and set image dimensions
 - Prioritize visible content with lazy-loading

7. JavaScript Optimization

JavaScript Execution Improvements

- **Total Blocking Time (TBT):** +1ms
- **Recommendations:**
 - Optimize critical scripts
 - Defer non-critical JavaScript

8. Action Plan

Next Steps

- **Assign Tasks:** Based on severity levels:

- High: Performance Analyst, Backend Developer
 - Medium: Frontend Developer
 - Low: Full-Stack Developer
 - **Periodic Audits:** Monitor improvements
 - **Collaborative Efforts:** Team coordination for implementation
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Conclusion

Summary and Final Recommendations

- Website is well-optimized in SEO and best practices
 - Key improvements required in performance and accessibility
 - Collaboration and scheduled audits are essential for success
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Acknowledgment

"A heartfelt thanks to my mentors, Sir Zia Khan, Sir Daniyal Nagori, Sir Ameen Alam, Sir Anas, Sir Ubaid Ur Rehman, and all our dedicated teachers and staff, for their guidance and support throughout this Hackathon journey. Your expertise and encouragement have been invaluable."
