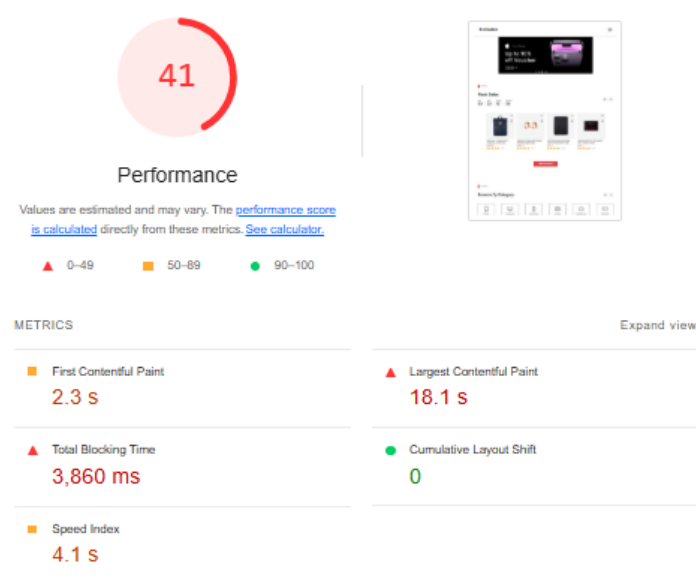# *TESTING AND BACKEND REFINEMENT*

On the 5th day of the hackathon, I focused on testing the webpage's performance, functionality, and overall user experience. This task ensures that all website components work seamlessly and meet the desired standards.

1. PERFORMANCE TESTING

Objective: Assess the page loading speed and responsiveness.

Method: Employed tools such as Lighthouse to inspect performance metrics like First Contentful Paint, Speed Index, and Time to Interactive.

Result: The performance score was **41**, indicating areas for improvement in optimizing assets like images, JavaScript, and CSS.
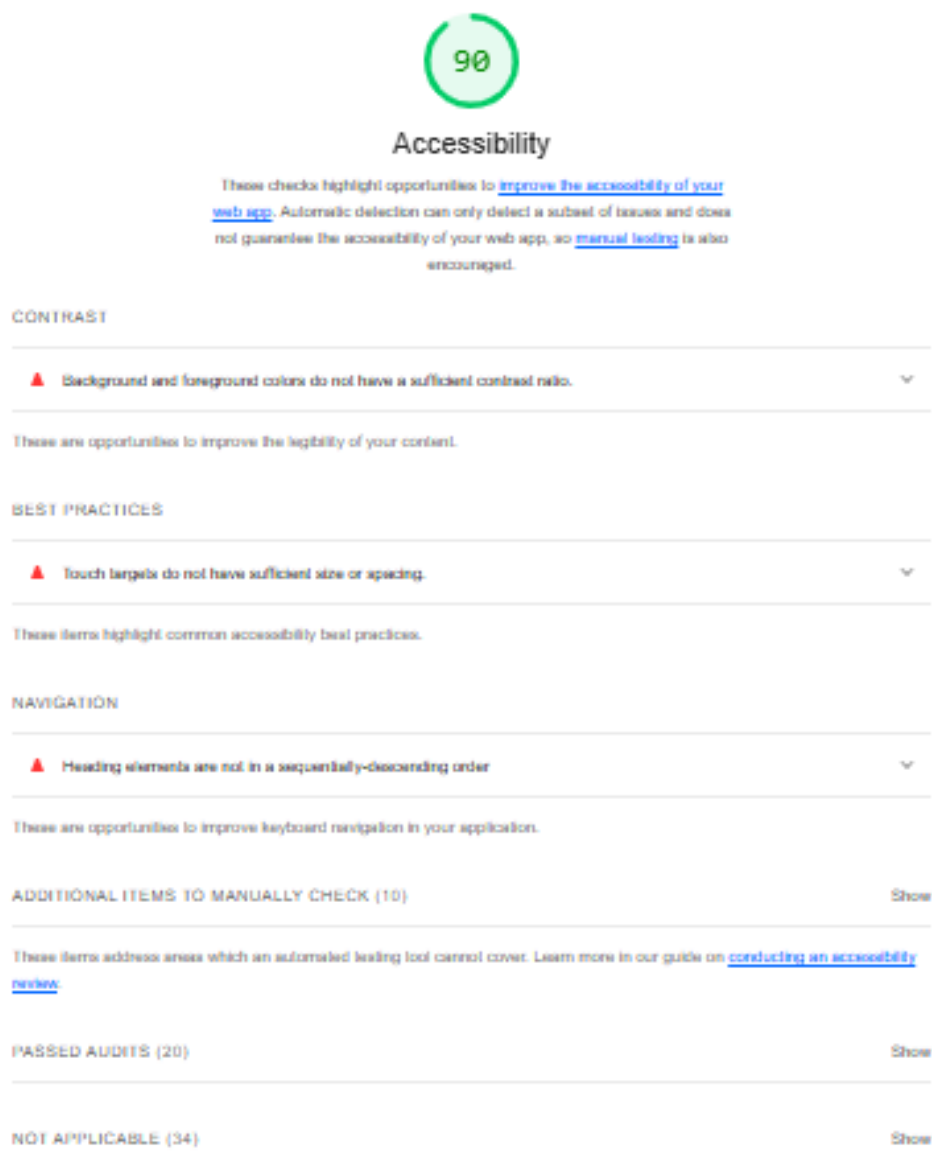
2. ACCESSIBILITY TESTING

Objective: Make the website usable for all visitors, including disabled individuals.

Method: Tested for color contrast, ARIA attributes, and keyboard navigation.

Result: Scored **90**, with a user-friendly interface and few improvements required.

3. BEST PRACTICES

Objective: Check code quality and web standards compliance.

Method: Checked security aspects (such as HTTPS), proper usage of web APIs, and good coding habits.

Result: Achieved **93**, demonstrating good development practices

93

Best Practices

USER EXPERIENCE

⚠ Document doesn't use legible font sizes — 0.78% legible text   ⌄

GENERAL

⚠ Browser errors were logged to the console   ⌄

⚠ Missing source maps for large first-party JavaScript   ⌄

TRUST AND SAFETY

○ Ensure CSP is effective against XSS attacks   ⌄

PASSED AUDITS (12)   Show
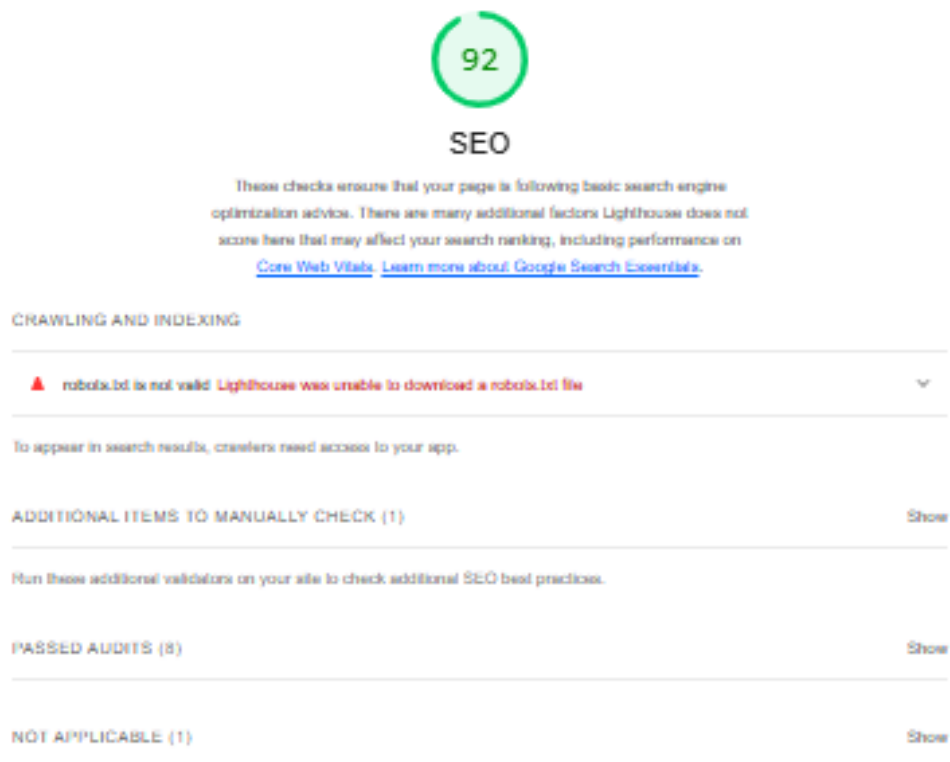
NOT APPLICABLE (2)   Show

4. SEO TESTING

Objective: Enhance search engine rankings and visibility.

Method: Examined meta tags, alt text, and mobile responsiveness.

Result: Scored **92**, citing great implementation of SEO.

5. FUNCTINAL TESTING

Objective: Try out every interactive element such as buttons, forms, and navigation.

Method: Manually navigated through pages and performed actions to verify intended outcomes.

Result: Every functionality performed precisely.

All Test Results :

Test Area	Status	Notes
Home Page	✅ Passed	Homepage loads correctly with all elements displayed as expected.
Product Pages	✅ Passed	Product details and images displayed accurately for all items.
Navigation	✅ Passed	Smooth and seamless navigation across all website pages.
Error Handling	✅ Passed	Proper error messages for invalid inputs or failed actions.
Performance	⚠ Partially Passed	Score: 41. Optimizations required for faster loading and efficiency.
Accessibility	✅ Passed	Score: 90. Most standards met; minor improvements for contrast.
Best Practices	✅ Passed	Score: 93. Secure and modern coding implementation.
SEO	✅ Passed	Score: 92. Well-optimized for search engines.
Functional Testing	✅ Passed	All interactive elements (buttons, forms) work as expected.
Browser Testing	✅ Passed	Works consistently across multiple browsers.
Device Testing	✅ Passed	Responsive and functional on all tested devices.