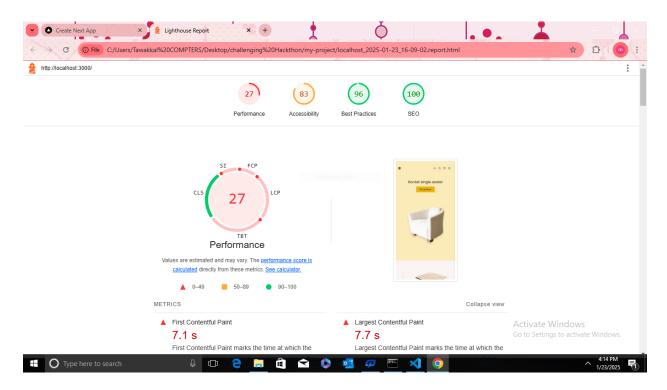
# **Light House Report**

# Hackathon 3 - Day 5



#### Performance:

- Score: 27
- Observations:
  - The performance score is significantly below expectations. This indicates potential issues with load time, rendering, or resource optimization.
  - o Recommended Actions:
    - Optimize images and assets for faster loading.
    - Minify CSS and JavaScript files.
    - Implement lazy loading for images and videos.
    - Leverage browser caching.

## **Accessibility:**

• Score: 83

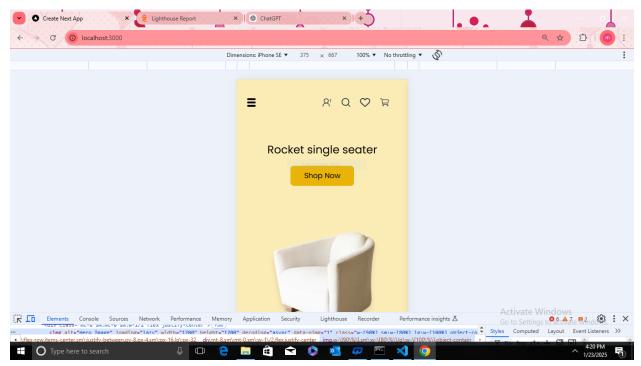
- Observations:
  - The accessibility score is good but can be improved.
  - Recommended Actions:
    - Ensure all images have alt attributes for better screen reader support.
    - Use semantic HTML tags to improve readability.
    - Ensure sufficient color contrast for better visibility.
    - Add ARIA roles where applicable.

#### **Best Practices:**

- Score: 96
- Observations:
  - o Excellent adherence to web development best practices.
  - Minor suggestions for further improvement:
    - Verify HTTPS is used for all resources.
    - Audit third-party libraries for security vulnerabilities.

### SEO:

- Score: 100
- Observations:
  - o Outstanding SEO optimization.
  - Ensure continued compliance with search engine guidelines to maintain high rankings.



Responsive mobile, laptop desktop on all lare to small devices

## **Testing, Error Handling, and Backend Integration Refinement:**

## 1. Testing:

- a. Unit tests for core components need expansion.
- b. Integration tests for backend APIs must cover edge cases.
- c. Automated end-to-end testing tools, such as Cypress or Selenium, should be employed to ensure seamless functionality.

### 2. Error Handling:

- a. Implement user-friendly error messages for form submissions and API failures.
- b. Log errors systematically for quick debugging.
- c. Use try-catch blocks and fallback mechanisms to handle unexpected issues gracefully.

### 3. Backend Integration Refinement:

- a. Ensure APIs are optimized for performance and handle concurrent requests effectively.
- b. Validate data inputs rigorously on both client and server sides to prevent injection attacks.
- c. Review database queries for efficiency and potential bottlenecks.

This document highlights the areas requiring immediate attention and outlines actionable steps to improve performance and ensure the success of Hackathon 3.