

Performance Testing Report

This report provides an in-depth analysis of the performance testing conducted on the web application. The objective of this testing is to evaluate the application's response time, stability, and efficiency under different conditions, including normal and peak loads.

1. Load Time Analysis

The load time of the product detail page was measured to assess how quickly the application responds to user requests. The standard acceptable load time is under 2 seconds.

Result:

The application successfully loaded within 1.8 seconds, meeting the expected performance standards.

2. Stress Testing

Stress testing was conducted by simulating 100+ concurrent users accessing the application simultaneously. The aim was to observe how the system handles high traffic loads.

Result:

The application remained responsive with minor delays under heavy load. Performance remained stable.

3. API Response Time

The response time of the API responsible for fetching product details was measured. The acceptable response time is under 500ms.

Result:

The API responded within 450ms, which is well within the acceptable limit.

4. Page Rendering Speed

Page rendering speed was analyzed to ensure UI elements load smoothly without delays. The benchmark for rendering is under 1 second.

Result:

The UI elements loaded within 0.9 seconds, meeting performance expectations.

5. Browser & Device Compatibility

Compatibility testing was performed on multiple browsers and devices to ensure consistent user experience.

Result:

The application performed well across all tested browsers, with no UI or functionality issues.

Conclusion

The performance testing results indicate that the application meets performance benchmarks in all tested areas. The system handles high loads efficiently, responds within expected time limits, and renders pages smoothly.