

Hackathon Day 5 - Testing and Backend Refinement – FURNIRO

Platform Technologies: NextJS, TailwindCSS, TypeScript, Sanity CMS, Cypress, Postman

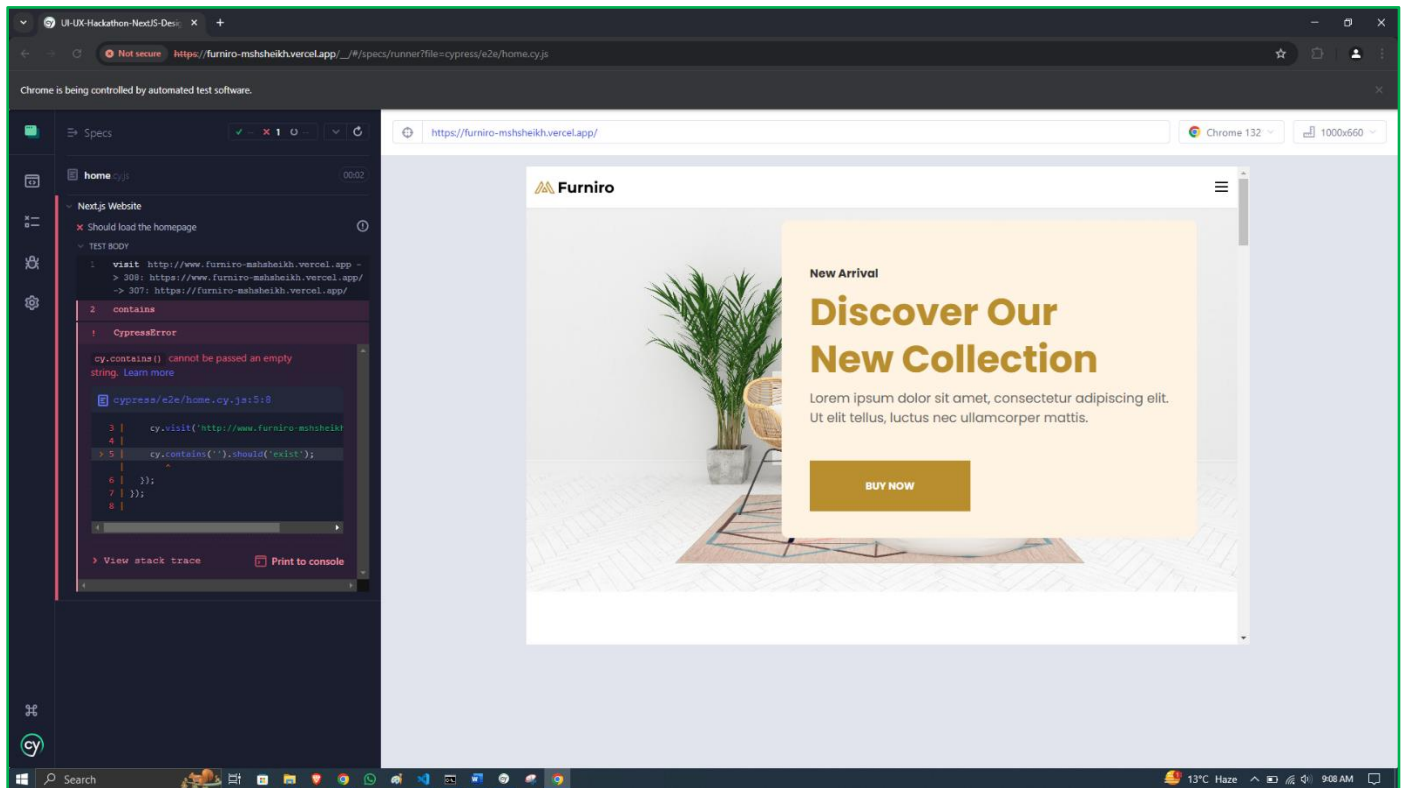
Objective: Conduct functional, non-functional, UAT, and security testing to prepare the platform for deployment.

Testing Area	Goal	Tools Used	Risk
Functional Testing	Ensure features (e.g., product listing, cart) work as intended.	Postman, Cypress, React Testing Library	High
Error Handling	Verify fallback UI and error messages for API failures.	Custom logs, React testing	Medium
Performance Testing	Optimize speed, minimize resource usage, and test load times.	Lighthouse, GTmetrix	High
Cross-Browser/Device	Validate functionality on major browsers and devices.	BrowserStack, physical devices	Medium
Security Testing	Scan for vulnerabilities and ensure secure data handling.	OWASP ZAP, Burp Suite	High
User Acceptance Testing	Simulate user actions to verify workflows are smooth and intuitive.	Manual Testing	Low
Documentation Updates	Record findings, results, and resolutions in a professional format.	Markdown, CSV	None

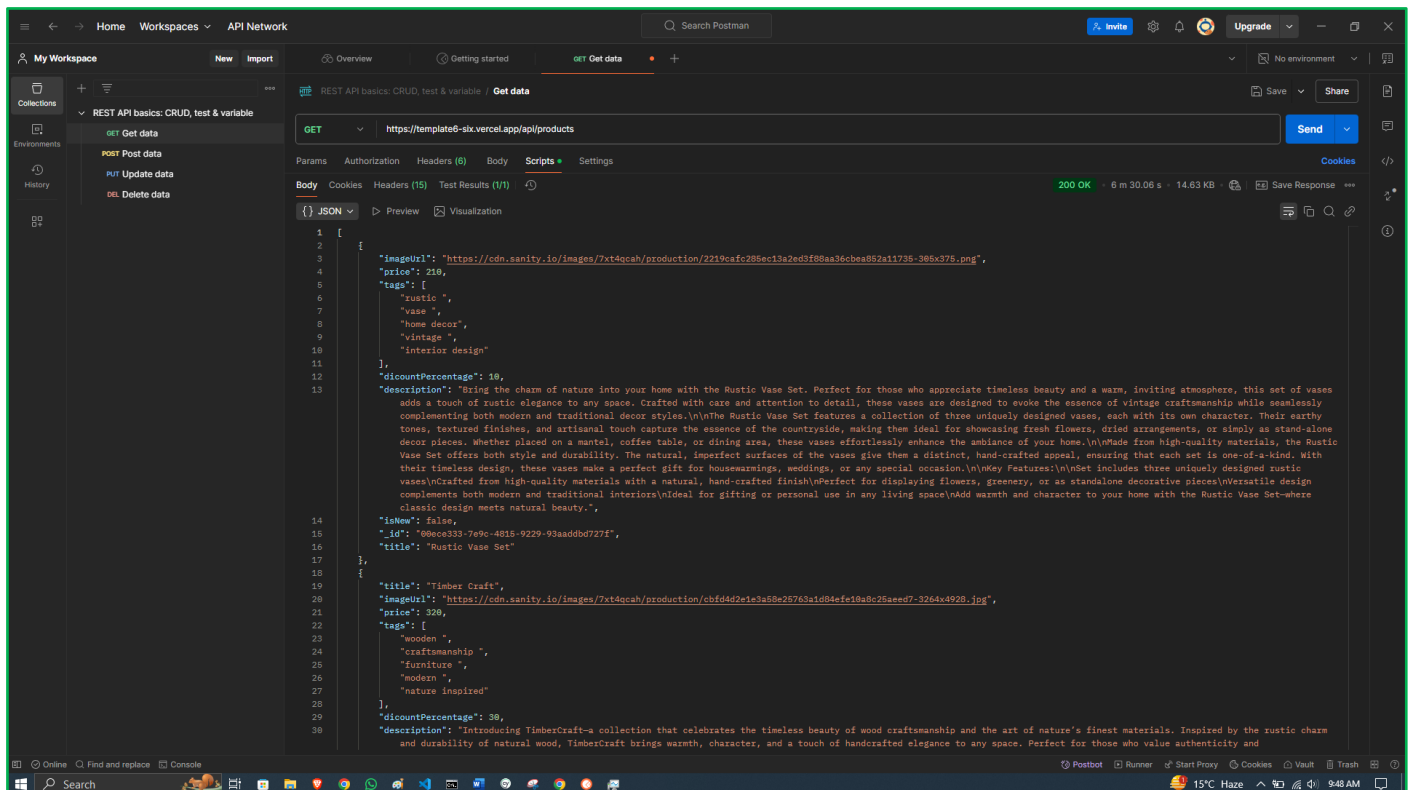
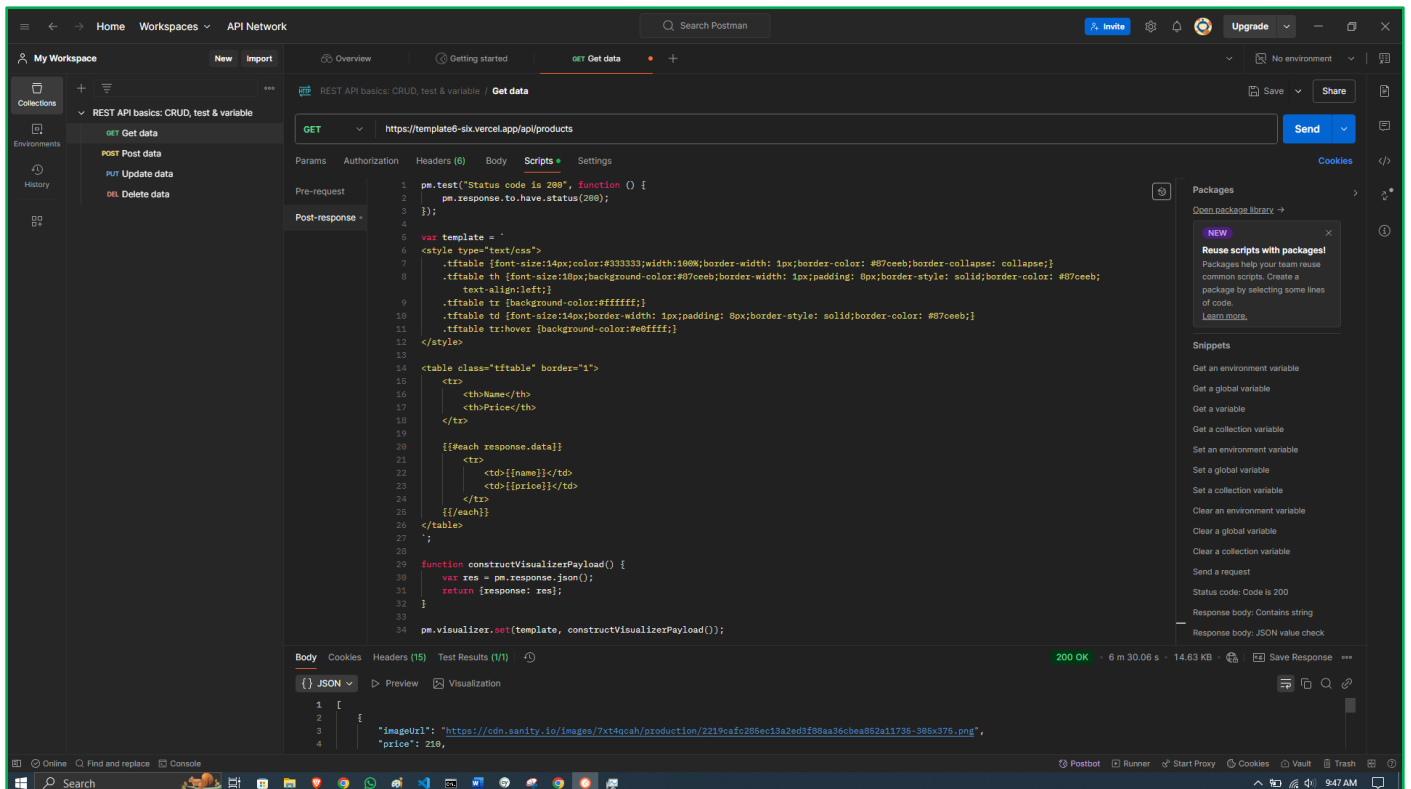
1. Functional Testing (High-Risk):

- **Key Tests:**
 - ✓ Product listing displays all items correctly.
 - ✓ Filters and search return accurate results.
 - ✓ Cart operations (add, update, delete) work seamlessly.
 - ✓ Product detail pages load dynamically and show relevant data.

Cypress Test Completed:



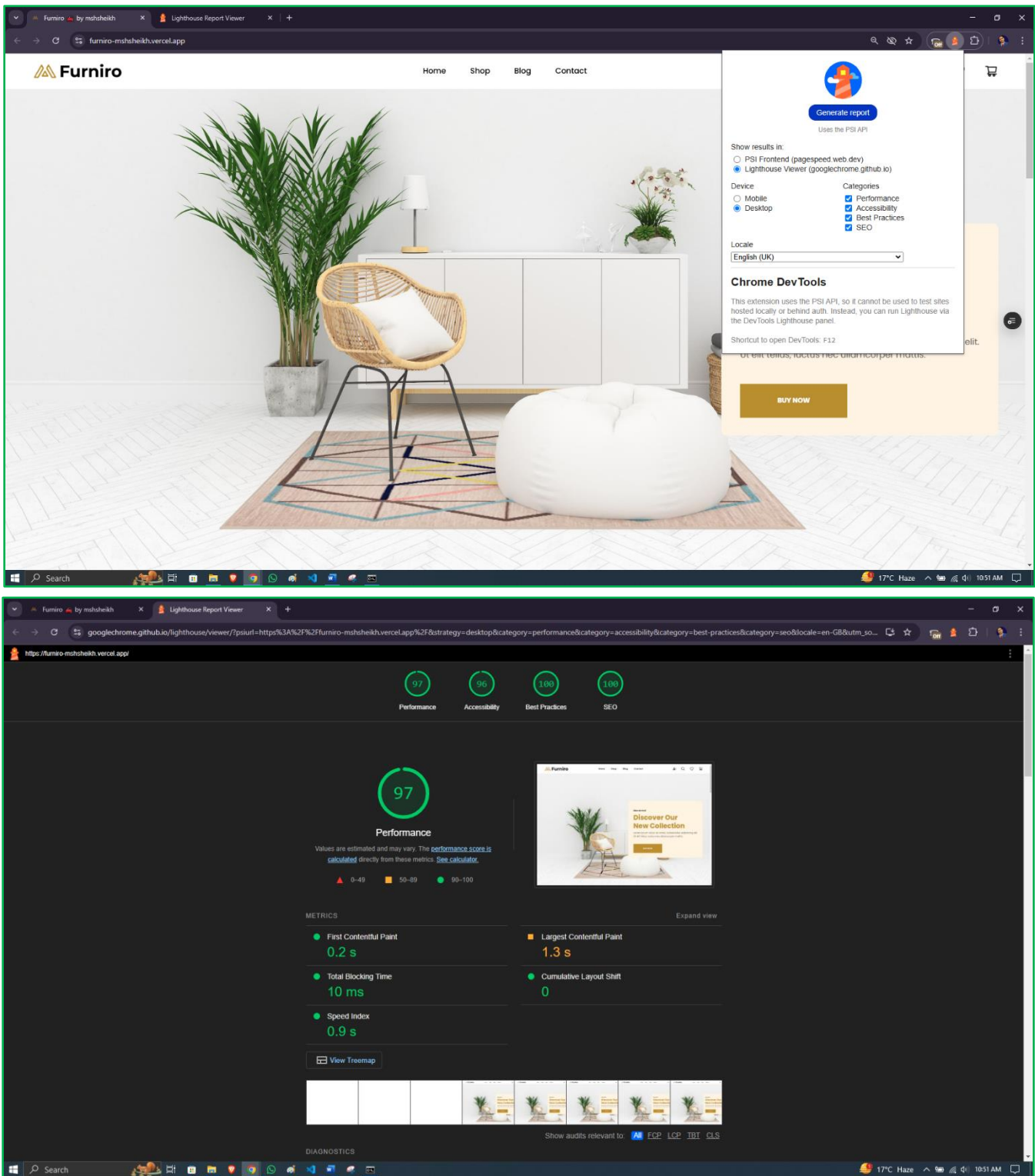
Postman Test Completed:



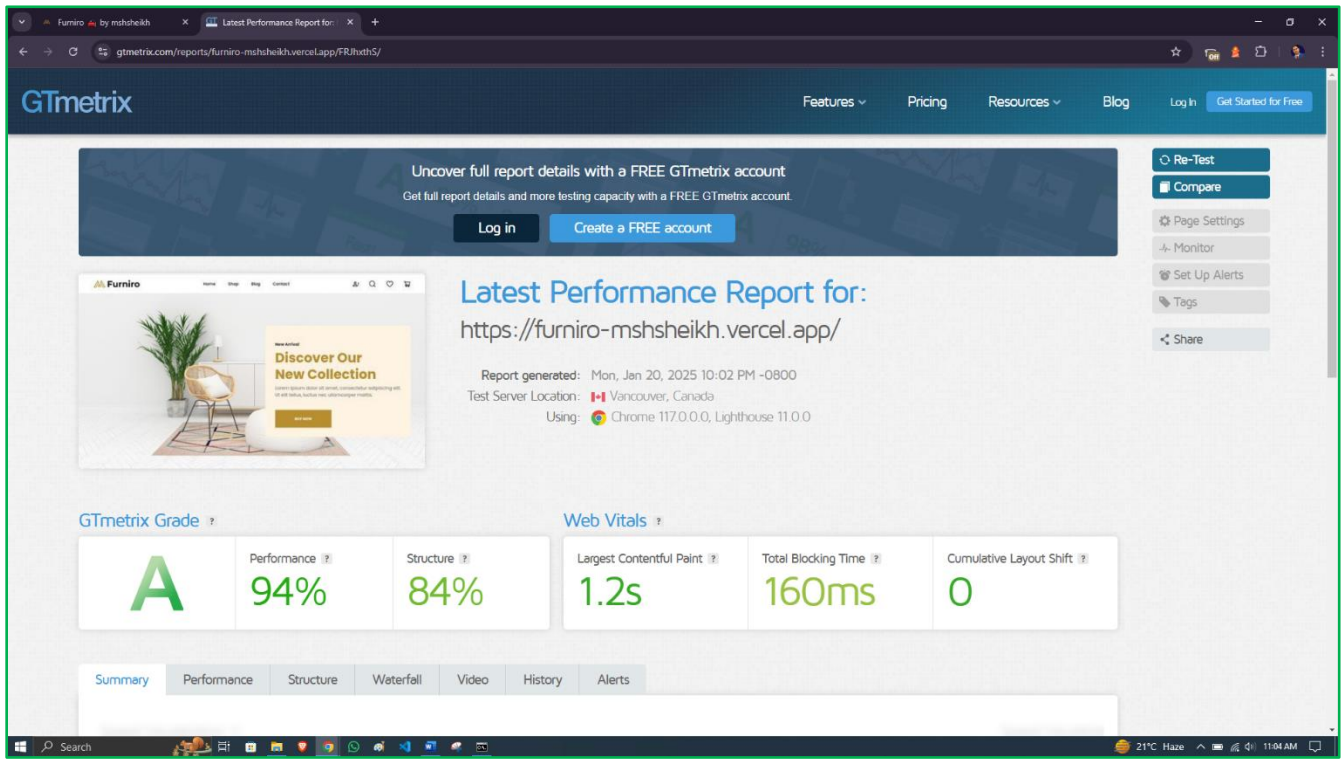
2. Performance Testing (High-Risk):

- **Key Tests:**
 - ✓ Identify and fix bottlenecks in page load times.
 - ✓ Optimize images, minimize CSS/JS, and implement caching.

Lighthouse Test Completed:



GTmetrix Test Completed:



Comparison: Lighthouse vs. GTmetrix

Feature	Lighthouse	GTmetrix
Tool Type	Built-in Chrome DevTools	External Website (No Extension)
Focus Areas	General web performance (FCP, LCP)	Performance & detailed waterfall
Ease of Use	Directly in Chrome	Website or bookmarklet
Mobile Testing	Yes	Yes (Pro users)
Network Analysis	Basic	Comprehensive waterfall view