

# Testing Report

**Project Name:** UIUX Hackathon - Next.js Design Jam

**Tested By:** Muhammad Asif

**Date:** 04-02-2025

## 1Functional Testing

Test Case ID	Description	Test Steps	Expected Result	Actual Result	Status
TC001	Product Listing	Open Home Page & Check Products	Products should load correctly	Products load successfully	Passed
TC002	Product Detail Page	Click on any product	Product details should display	Details appear correctly	Passed
TC003	Cart Functionality	Add item to cart & check cart page	Item should appear in cart	Cart updates successfully	Passed
TC004	Wish List Functionality	Add item to wish list & check wish list page	Item should appear in wish list	Wish list updates successfully	Passed
TC005	Search & Filters	Use search bar & apply filters	Results should match query	Works as expected	Passed
TC006	API Data Fetching	Disable API & reload page	Show error or fallback UI	Displays "No products available"	Passed

## Error Handling

Error Scenario	Expected Behavior	Actual Behavior	Status
Network Failure	Show "Unable to load products" message	Displays proper error message	Passed
Invalid API Response	Show fallback UI	Works correctly	Passed
Empty Cart	Display "Your cart is empty"	Works correctly	Passed

---

## Performance Optimization

Metric	Tool Used	Current Score	Optimization Suggestions
Page Load Time	Lighthouse	90+	Optimize images, enable caching
Largest Contentful Paint (LCP)	Lighthouse	2.5s	Lazy load images, optimize JS
First Input Delay (FID)	Lighthouse	80ms	Reduce unused JavaScript

---

## Security Testing

Security Test	Expected Behavior	Actual Behavior	Status
Input Validation	Block XSS & SQL Injection	No vulnerabilities detected	Passed
API Security	API Keys should not be exposed	Environment variables used	Passed
HTTPS Encryption	Secure connection required	Working properly	Passed

---

## Cross-Browser & Device Test

Browser/Device	Tested?	Issues Found?
Google Chrome (Desktop)	Yes	None
Firefox (Desktop)	Yes	None
Safari (Mac)	Yes	None
Edge (Windows)	Yes	None
Mobile (Android, iOS)	Yes	None

---

## User Acceptance Testing (UAT)

- Users were able to browse, search, and filter products smoothly.
  - No major UI/UX issues found.
  - Checkout flow tested manually—working fine.
- 

## Final Summary

All major functionalities passed testing.

Performance optimizations applied (Lighthouse score improved).

Error handling tested—fallback UI works properly.

**Security checks confirmed API keys are secure & inputs are validated.**

**Cross-browser & device compatibility ensured.**