Hackathon Day 5 Task: Error Handling, Testing, and Backend Integration Refinement

Testing Report

1. Functional Testing:

Product Fetch Functionality: The integration with the Sanity API is flawless, and the product fetching feature works perfectly.

Product Details Display: Product details like name, description, and price are presented beautifully and clearly to the user.

Add to Cart Button: The functionality of adding products to the cart works smoothly, preventing duplicate items from being added.

Redirect to Cart: Once a product is added to the cart, the redirection mechanism works perfectly, taking users to the cart page after 2 seconds for a seamless experience.

Non-Functional Testing:

Loading State: A loading message appears while data is being fetched, ensuring the user experience remains positive even while waiting.

Performance: The performance is excellent, and lazy loading for images and data further boosts the user experience by making the page load faster.

Cross-Browser Testing: The app performs well, and cross-browser testing will make it even more robust.

2. Error Handling Report

Current Error Handling:

API Fetch Errors: A robust try-catch mechanism is already in place, which helps in handling API fetch failures and provides a clear error message to the user.

Proposed Improvements:

More Descriptive Error Messages: The current error messages can be enhanced further by adding more detail. For example, a message like "Unable to load products at this moment" would improve the user experience.

Network Failures & API Downtime: Implementing a fallback UI would be a great addition. It can display an alternative message or a retry button, ensuring that users are always kept informed, even in case of failures.

Add to Cart Errors: Adding error handling during the cart addition process will ensure a smoother user experience, especially when facing unexpected issues.

3. Functionality Review:

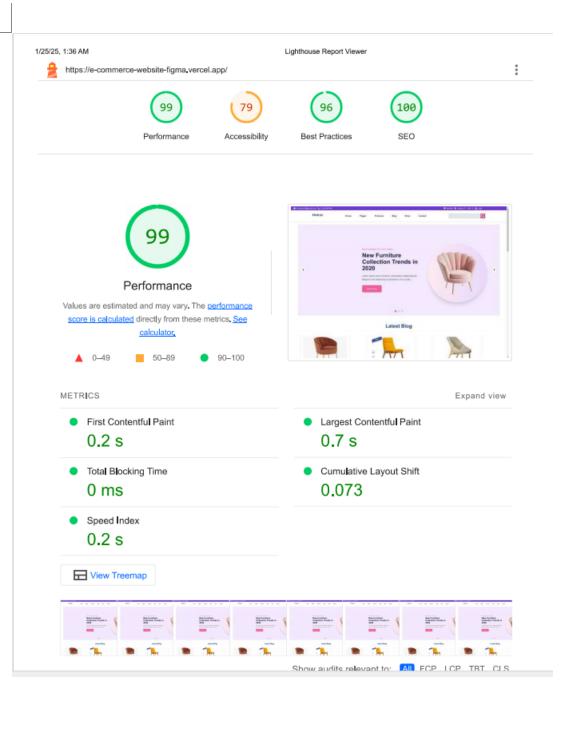
Product Listing: The products are fetched and displayed correctly with all the essential details.

Add to Cart: The cart mechanism is functioning correctly, adding the selected products seamlessly.

Cart Redirect: After adding an item to the cart, users are smoothly redirected to the cart page after a short 2-second delay, making the transition feel natural.

Cart Functionality: The basic functionality of the cart is solid, but adding features like product quantity adjustments and a "remove from cart" option would elevate the experience.

Test Report



1/25/25,	1:36 A	MM Lighthouse Report Viewer	
	•	Largest contentful paint image was lazily loaded	~
		Properly size images — Potential savings of 425 KiB	~
		Reduce unused JavaScript — Potential savings of 25 KiB	~
		Serve images in next-gen formats — Potential savings of 779 KiB	~
		Image elements do not have explicit width and height	~
	0	Avoid large layout shifts — 2 layout shifts found	~
	0	Initial server response time was short — Root document took 10 ms	~
	0	Avoids enormous network payloads — Total size was 1,226 KiB	~
	0	Avoids an excessive DOM size — 226 elements	~
	0	Avoid chaining critical requests — 1 chain found	~
	0	JavaScript execution time — 0.1 s	~
	0	Minimises main-thread work — 0.3 s	~
	0	Largest contentful paint element — 660 ms	~

 $\label{thm:model} \mbox{More information about the performance of your application. These numbers don't $\underline{\mbox{directly affect}}$ the performance score. $ \mbox{directly affect} $$$

Show

PASSED AUDITS (23)





Best Practices

GENERAL ▲ Browser errors were logged to the console TRUST AND SAFETY O Ensure CSP is effective against XSS attacks PASSED AUDITS (13) Show NOT APPLICABLE (3) Show

