Testing, Error Handling and Backend Integration Refinements for Marketplace- Bandage

Brand Name: Bandage

Day 5 Hackathon Tasks:

1. Functional Testing:

In the development of the marketplace platform, I focused on validating the core functionalities to ensure a seamless user experience. I tested key features, including product listings, product detail pages, cart operations, and user profile management, to confirm that all features worked as intended. This process ensured that the marketplace provided a smooth and efficient platform for users to browse and manage their products.

2. Error Handling:

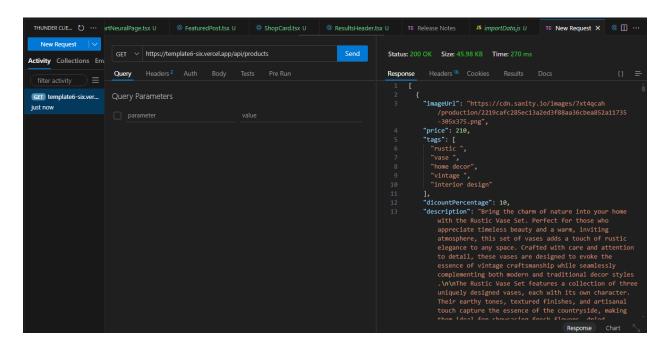
To enhance the platform's reliability, I implemented robust error handling to address various potential issues. This included displaying clear error messages for network failures, invalid or missing data, and unexpected server errors. I also ensured that fallback UI elements, such as a "No products available" message, were displayed when the API returned no data, providing users with clear feedback in case of any issues. These measures were designed to maintain a positive user experience even during technical difficulties.

3. Postman API

API Link: https://template6-six.vercel.app/api/products

➤ Status: 200

➤ Tool: Thunder Client Or Postman

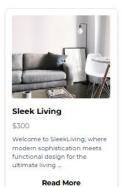


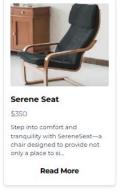
4. Test cases executed and their results.

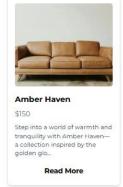
1. Test Case ID: TC001

Test	Expected	Actual	Status	Severity	Assigned	Remarks
Steps	Result	Result		Level	To	
Validate	Open	Products	Products	Passed	High	No issues
product	product	displayed	displayed			found
listing	page >	correctly	correctly			
page	Verify					
	products					









2. Test Case ID: TC002

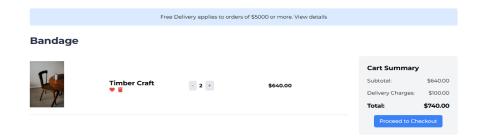
Test	Expected	Actual	Status	Severity	Assigned	Remarks
Steps	Result	Result		Level	To	
Test API	Disconnect	Show	Error	Passed	Medium	Handled
error	API >	fallback	message			gracefully
handling	Refresh	UI with	shown			
	page	error				
		message				

```
async function uploadImageToSanity(imageUrl) {
   try {
     console.log(`Uploading image: ${imageUrl}`);

   const response = await fetch(imageUrl);
   if (!response.ok) {
     throw new Error(`Failed to fetch image: ${imageUrl}`);
   }
}
```

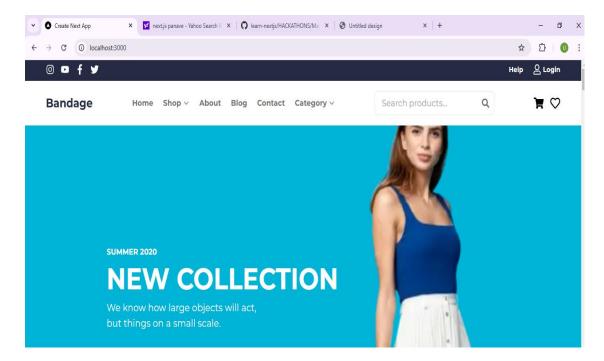
3. Test Case ID: TC003

Test Steps	Expected	Actual	Status	Severity	Assigned	Remarks
	Result	Result		Level	To	
Check cart	Add	Cart	Cart	Passed	Low	Works as
functionality	product to	updates	updates			expected
	cart >	with	as			
	Verify	added	expected			
	cart	product				
	contents					



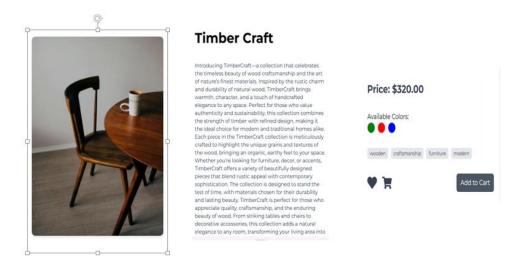
4. Test Case ID: TC004

Test Steps	Expected	Actual	Status	Severity	Assigned	Remarks
	Result	Result		Level	To	
Cross	Working	Working	Responsive	Passed	Medium	Test
Browsing	Correctly	Correctly	layout			successful
	on every	on every	working as			
Open our	browser	browser	intended			
website on						
different						
Browsers such						
as Yahoo						



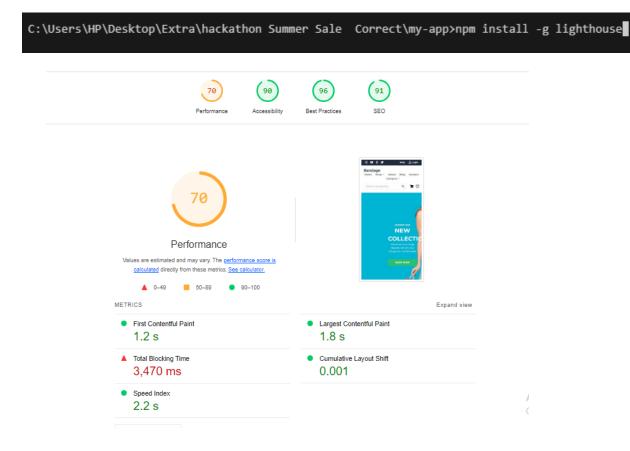
5. Test Case ID: TC005

Test Steps	Expected	Actual	Status	Severity	Assigned	Remarks
	Result	Result		Level	To	
Ensure	Resize	Layout	Responsive	Passed	High	Test
responsiveness	browser	adjusts	layout			successful
on mobile	window	properly	working as			
	> Check	to	intended			
	layout	screen				
		size				



6. Performance Testing

I identified performance bottlenecks using tools like Lighthouse. I optimized images and implemented caching strategies to reduce load times and improve user experience. These steps led to a faster and more efficient platform.



Final Check List:

Functional	Error	Performance	Cross	Security	Documentation	Final
	Handling	Optimization	Browser	Testing		Review
✓	✓	\checkmark	✓	✓	✓	✓