Day 5-Testing And Backend Refinement - [www.WoodenAspire.com]

Objective:

On Day 5, the goal is to get your marketplace ready for launch. This involves testing everything to make sure it works well, runs smoothly, and can handle lots of users. You'll focus on checking backend connections, adding ways to deal with errors, and improving the overall user experience. Basically, it's about making sure everything is polished and ready for real customers.

Key Learning Outcomes:

Functional Testing: Conduct functional, non-functional, user acceptance, and security testing to ensure the marketplace is robust and secure.

Performance Optimization: Optimize the marketplace for speed, responsiveness, and overall performance.

Security Testing: Secured API requests by using HTTPS for data protection and stored sensitive information like API keys in environment variables to prevent frontend exposure.

Error Handling: Implement clear, user-friendly error messages and fallback mechanisms for a smooth user experience.

Professional Documentation: I developed detailed testing documentation, including a CSV-based test report, following industry standards to ensure clarity and professionalism in presenting test results.

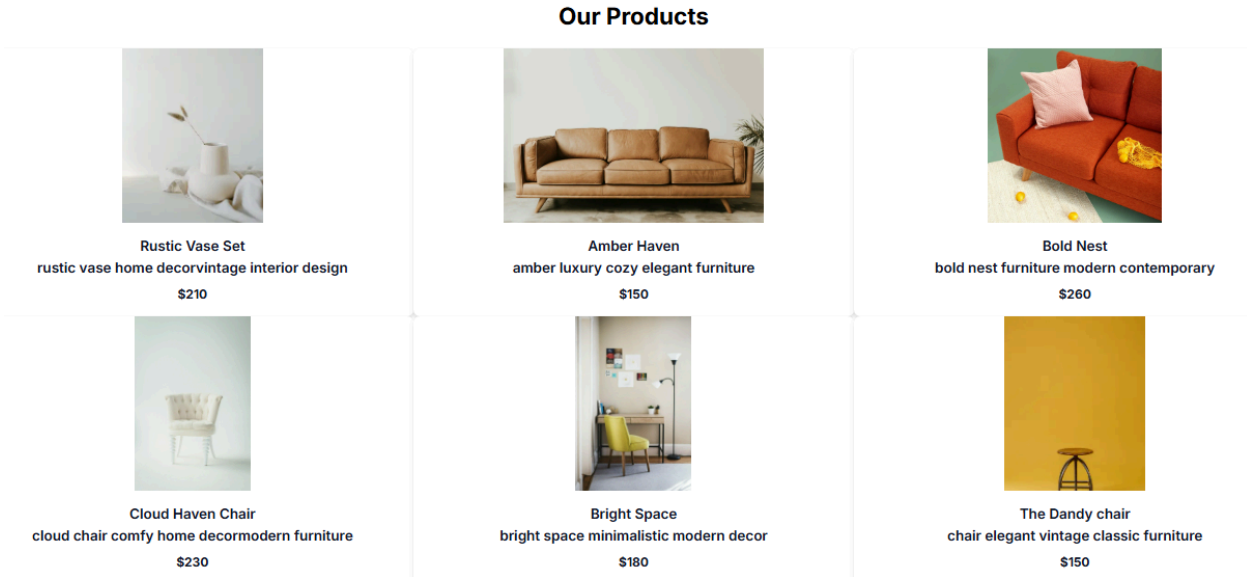
Cross-Browser Testing: I conducted comprehensive testing of the application on multiple web browsers, such as Chrome and Edge, to verify its reliability, seamless functionality, and consistent performance, ensuring a smooth and uniform user experience.

Functional Testing.

Test cases:

Test case for Product Listing.

1. Test Case ID: TC001.
Test Case Description: Validate product listing page.
Steps: Open products page > Verify products
Expected Result: Products Display Correctly.
Actual Result: Product Listings Appear Perfectly.
Severity Level: Low.
Assigned To: -
Remarks: No Bugs Detected.



Test case for API Error Handling.

2. Test Case ID: TC002.
Test Case Description: Test API error handling.
Steps: Disconnect API > Refresh Page.
Expected Result: Display Error Notification on UI.
Actual Result: Display Error Notification on UI.
Severity Level: Low
Assigned To: -
Remarks: Respond Appropriately.

```
    const [products, setProducts] = useState([]);
    const [loading, setLoading] = useState(true);// End loading
    useEffect(() => {
        const getProducts = async () => {
            setLoading(true); // Start loading when fetching starts
            try {
                const data = await fetchProducts(); // Call the utility
function
                setProducts(data); // Set products in the state
            } catch (error) {
                console.error("Error fetching products:", error);
            } finally {
                setLoading(false);
            }
        };

        getProducts();
    }, []);
```

Test case for Cart.

3. Test Case ID: TC003.

Test Case Description: Check Cart Functionality.

Steps: Add Item to Cart > Confirm Cart Items.

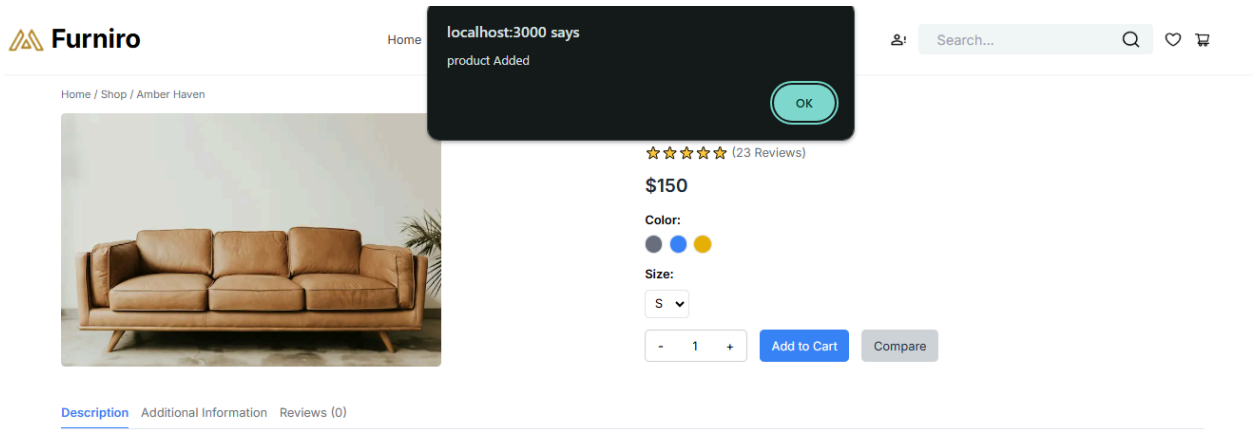
Expected Result: Cart Updates to Show New Addition.

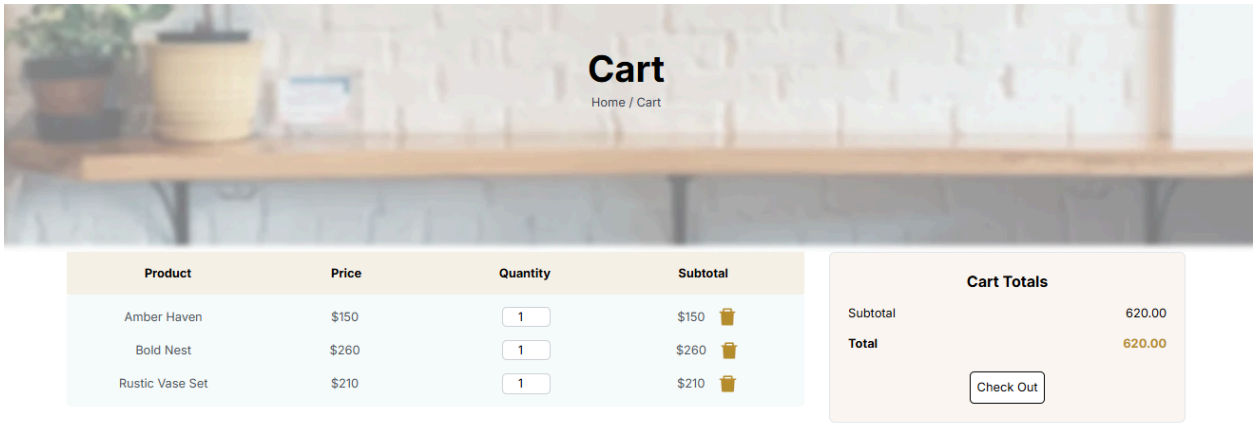
Actual Result: Cart Update as Expected.

Severity Level:Medium.

Assigned To: -

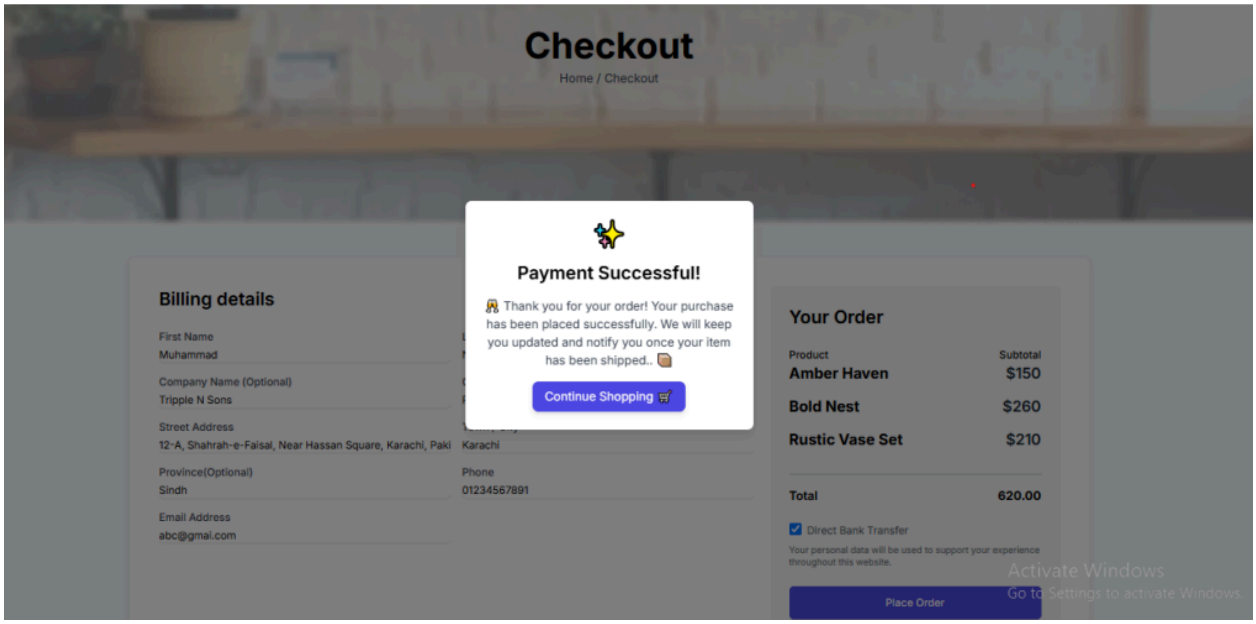
Remarks: Executed Perfectly.





Test case for Check Out.

4. Test Case ID: TC004.
Test Case Description: Check Out Functionality.
Steps: Add Item to Cart > Confirm Cart Items
Expected Result: Show Products On Cart.
Actual Result: Show Products On Cart.
Severity Level:Medium.
Assigned To: -
Remarks: Executed Perfectly.



Test case for SearchBar.

5. Test Case ID: TC005.

Test Case Description: Check Search Bar

Steps:Search Items if match shows on screen

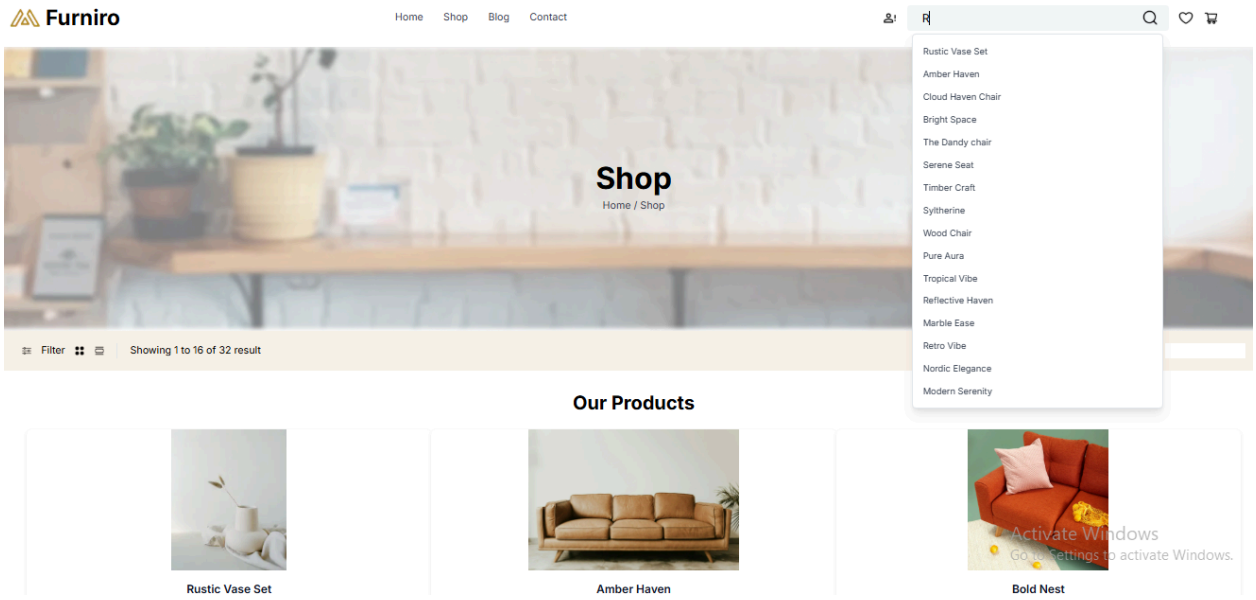
Expected Result: Show Items Matching User Search

Actual Result: Show Items Matching User Search

Severity Level: High

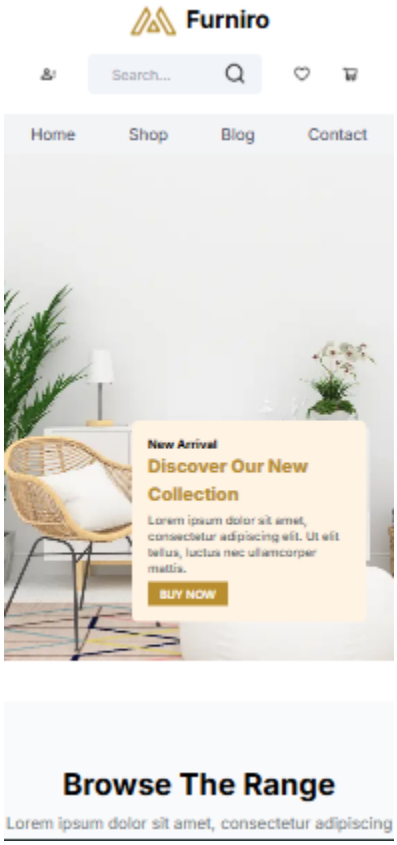
Assigned To: -

Remarks: No issue Found.



Test case for Responsiveness.

6. Test Case ID: TC006.
Test Case Description: Ensure Responsiveness On Mobile.
Steps: Inspect > Toolbar Options > Pick Mobile Device.
Expected Result: Showing Content Based on Screen Size
Actual Result:Showing Content Based on Screen Size
Severity Level: Medium
Assigned To: -
Remarks: Full Responsive.



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Test case for Individual Product Detail.

7. Test Case ID: TC007.
Test Case Description: Individual Product Detail Page.
Steps:Open Product Page > Click to any product card.
Expected Result: Product Page Opens Successfully.
Actual Result: Product Page Opens Successfully.
Severity Level: Low
Assigned To: -
Remarks: Done Successfully.

Bold Nest

(23 Reviews)

$260

Color:

Size:

S

1

Add to Cart

Compare

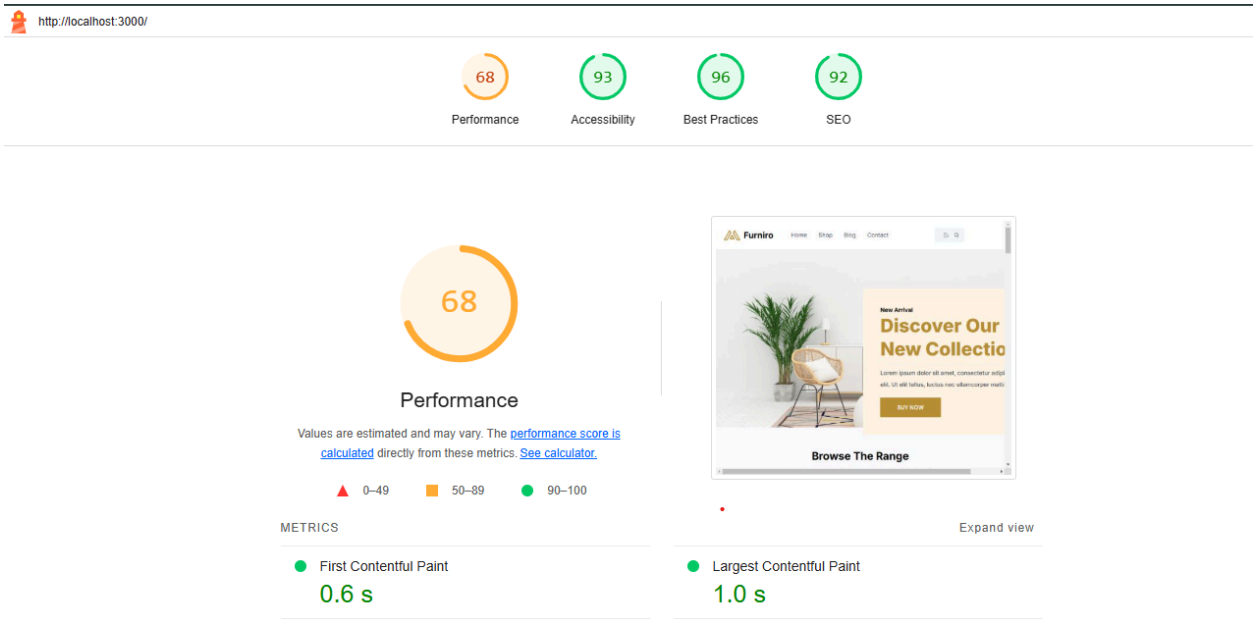
Description Additional Information Reviews (0)

Welcome to BoldNest—where fearless design meets comfort and creativity. Crafted for those who embrace individuality and bold expressions, BoldNest is more than just a piece of furniture; it's a statement. With its striking design, exceptional comfort, and modern aesthetics, BoldNest is perfect for anyone looking to add a unique touch to their home or office. The BoldNest collection combines daring colors, dynamic shapes, and high-quality materials to create an environment where style and comfort coexist in perfect harmony. Whether it's a chair, sofa, or accent piece, each item is designed to stand out while offering a welcoming space for relaxation and enjoyment. Its sturdy construction and thoughtful design ensure that BoldNest not only makes a bold visual impact but also provides lasting durability. Perfect for those who are looking to break away from the ordinary and make their home a reflection of their bold personality, BoldNest is an ideal choice for creating an energetic and unique atmosphere. Key Features: Bold and unique design that adds personality to any space High-quality materials for comfort, durability, and style Available in a variety of striking colors and patterns Perfect for modern homes and offices that embrace creativity Versatile design that complements contemporary and eclectic decor Transform your home into a space that reflects your bold, unique style with BoldNest—where standout design and comfort meet.

Activate Windows
Go to Settings to activate Windo

Performance Optimization (Report):

To make the website faster. I used Lighthouse to find areas for improvement, such as removing unnecessary code, setting up browser caching, and improving JavaScript efficiency. My target is to ensure the page loads in less than 2 seconds for a better user experience.



Security Testing:

Secure API Communication:

Make sure that all API requests are transmitted over HTTPS to safeguard data while in transit. Do not expose sensitive information like API keys within the frontend. Instead, keep them secure by storing them in environment variables.

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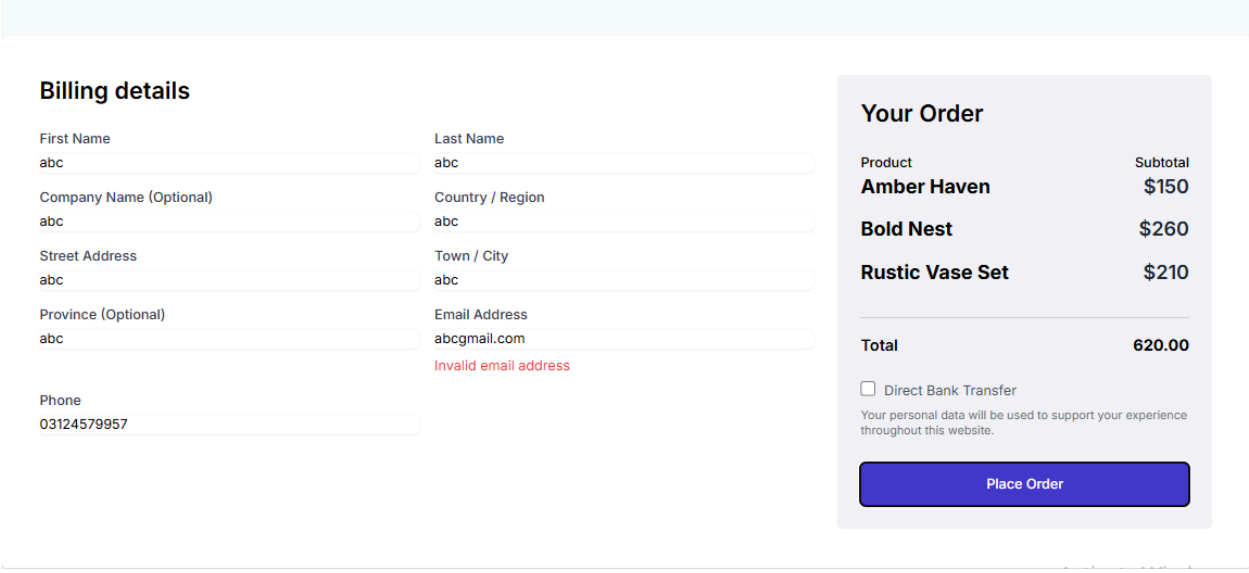
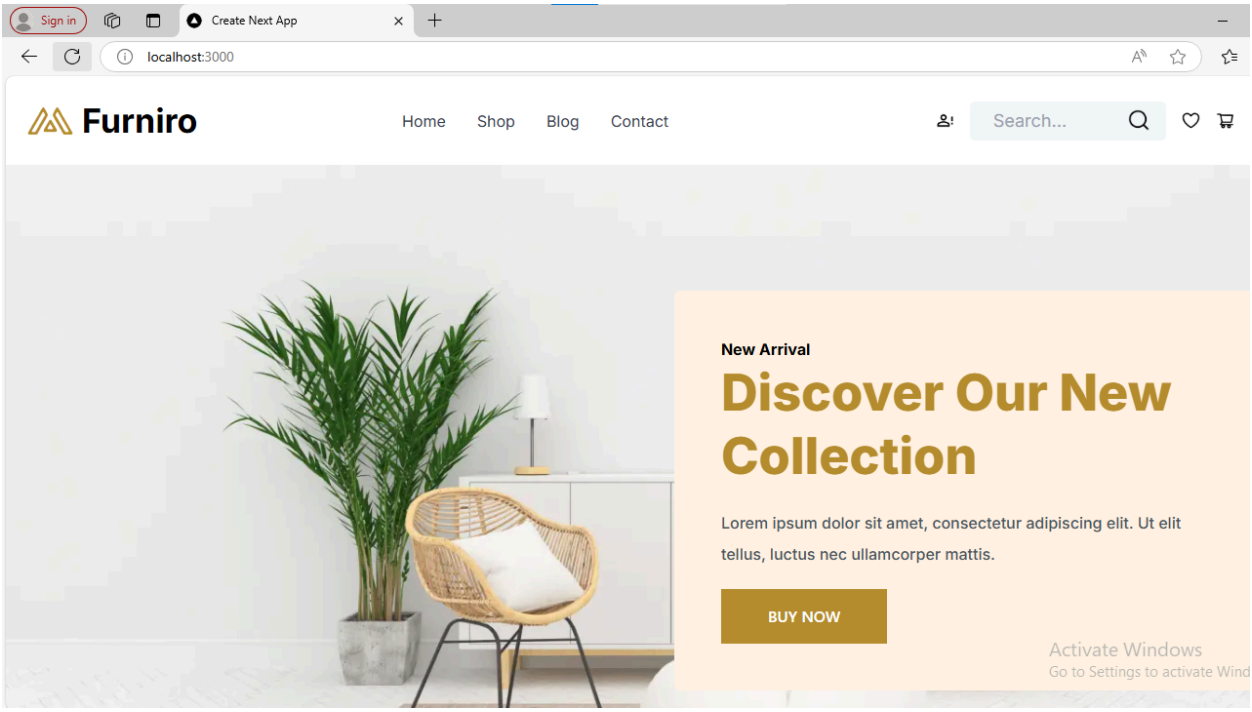
Error Handling:

I tested the email field by omitting the "@" symbol and verified that a validation message appeared, stating: "Invalid Email Address." This confirms the system correctly identifies incomplete email formats.



Cross-Browser Testing:

I conducted comprehensive testing of the application on multiple web browsers, such as Chrome and Edge, to verify its reliability, seamless functionality, and consistent performance, ensuring a smooth and uniform user experience across diverse platforms and operating systems.



CSV Format Report:

Test Case ID	Test Case Description	Steps	Expected Result	Actual Result	Severity Level	Assigned To	Remarks
TC001	Validate product listing page	Open products page > Verify products	Products Display Correctly	Product Listings Appear Perfectly	Low	-	No Bugs Detected
TC002	Test API error handling	Disconnect API > Refresh Page	Display Error Notification on UI	Display Error Notification on UI	Low	-	Respond Appropriately
TC003	Check Cart Functionality	Add Item to Cart > Confirm Cart Items	Cart Updates to Show New Addition	Cart Update as Expected	Medium	-	Executed Perfectly

TC004	Check Out Functionality	Add Item to Cart > Confirm Cart Items	Show Products On Cart	Show Products On Cart	Medium	-	Executed Perfectly
TC005	Check Search Bar	Search Items if match shows on screen	Show Items Matching User Search	Show Items Matching User Search	High	-	No issue Found
TC006	Ensure Responsiveness On Mobile	Inspect > Toolbar Options > Pick Mobile Device	Showing Content Based on Screen Size	Showing Content Based on Screen Size	Medium	-	Full Responsive
TC007	Individual Product Detail Page	Open Product Page > Click to any product card	Product Page Opens Successfully	Product Page Opens Successfully	Low	-	Done Successfully

Final CheckList :

Functional	Error Handling	Performance Optimization	Cross Browser	Security Testing	Documentation	Final Review
✔	✔	✔	✔	✔	✔	✔

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