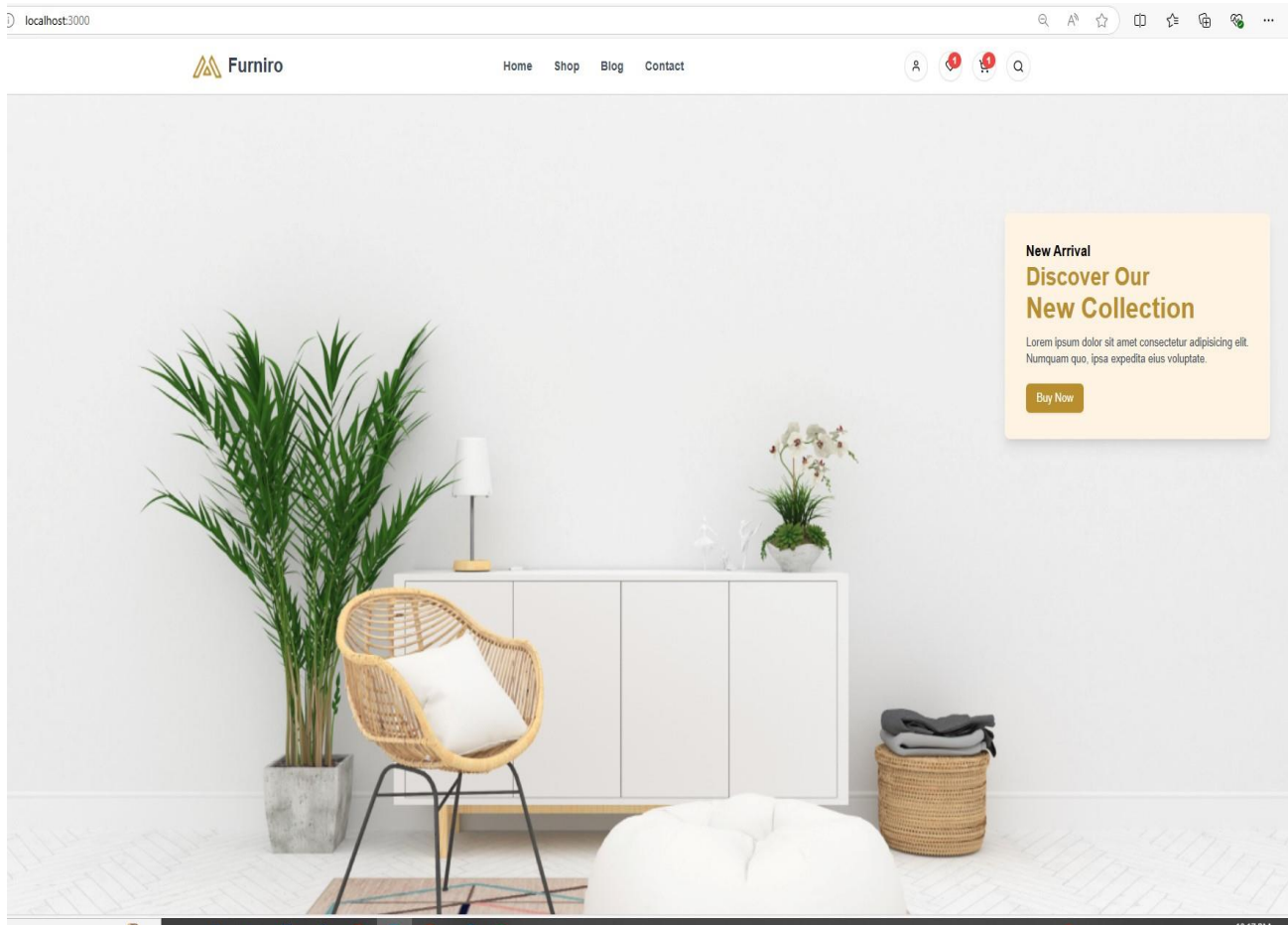


DAY 5 TESTING AND BACKEND REFINEMENT

PREPARED BY : Fatima Mudassir

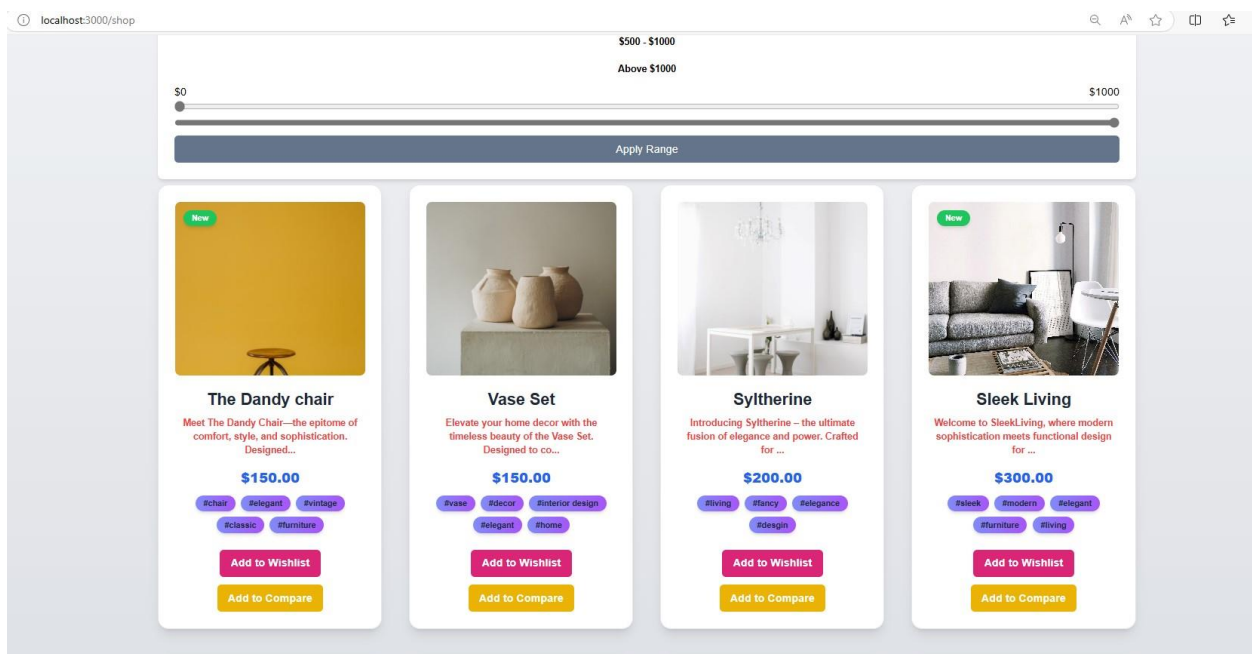
1) Functional Deliverables

a) HOMEPAGE



b) Shop Page:

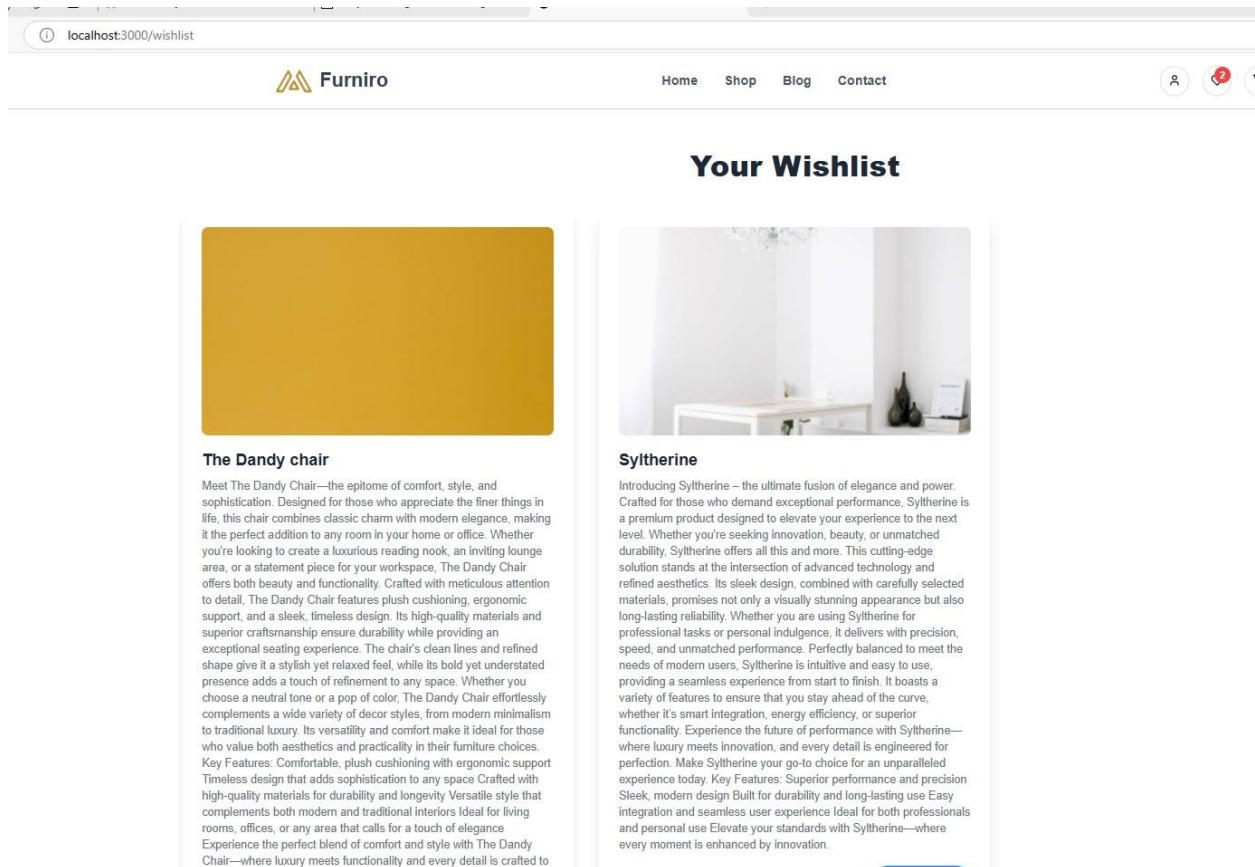
The first component to showcase is the **Shop Page**, where all the products are listed. This page will be captured in a screenshot, showing the various products available for users to browse.



c) Wishlist Functionality:

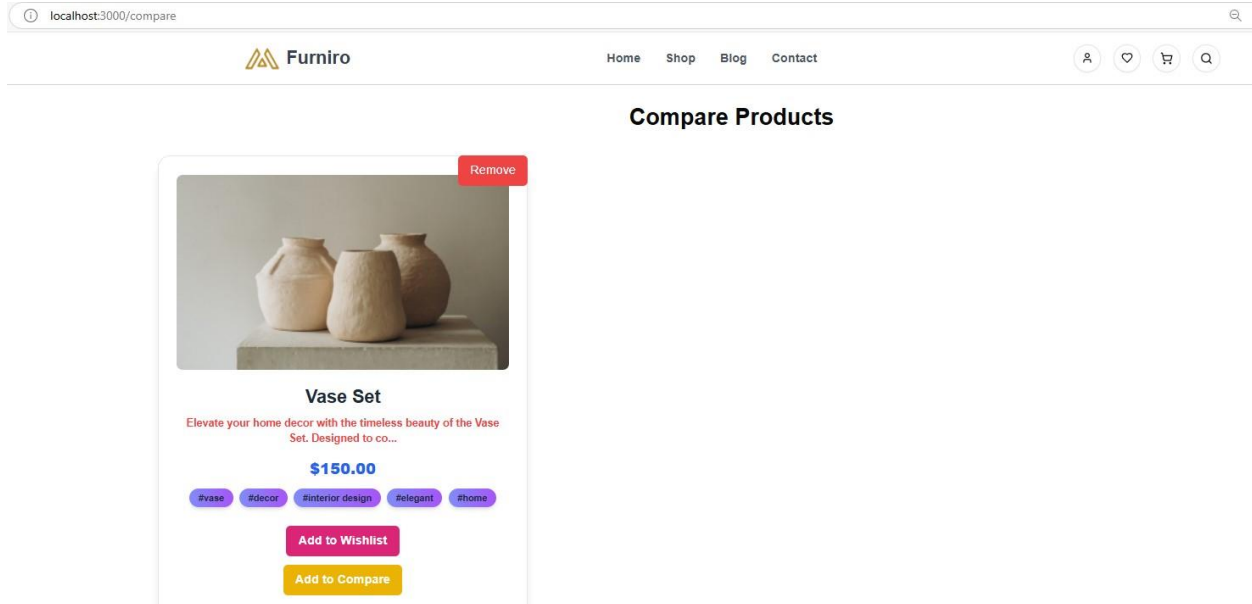
After navigating to the shop page, we demonstrate the **Wishlist Functionality**. A user can click the "Add to Wishlist" button beneath any product, and the product is successfully added to the wishlist. A

screenshot of the **Wishlist Page** will also be included, showing the added items.



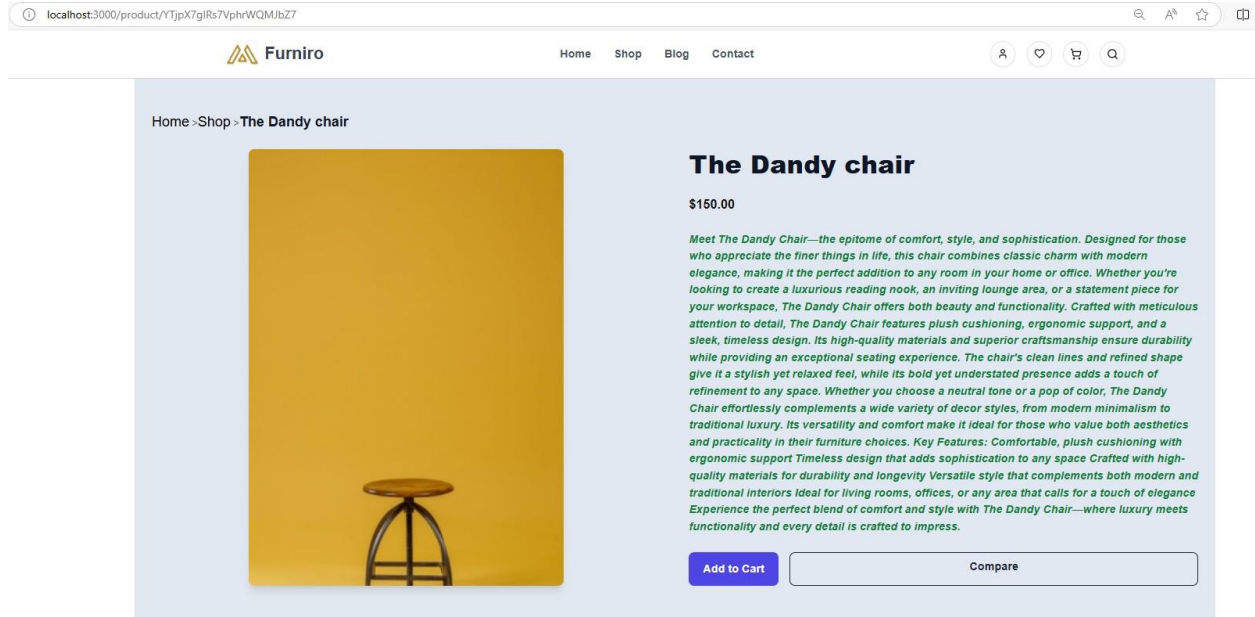
d) **Add to Compare:**

Similarly, a product can be added to the comparison list by clicking the "Add to Compare" button. Once clicked, the product is successfully added to the **Compare Page**. A screenshot of the **Compare Page** will be provided, showing the comparison of selected products.



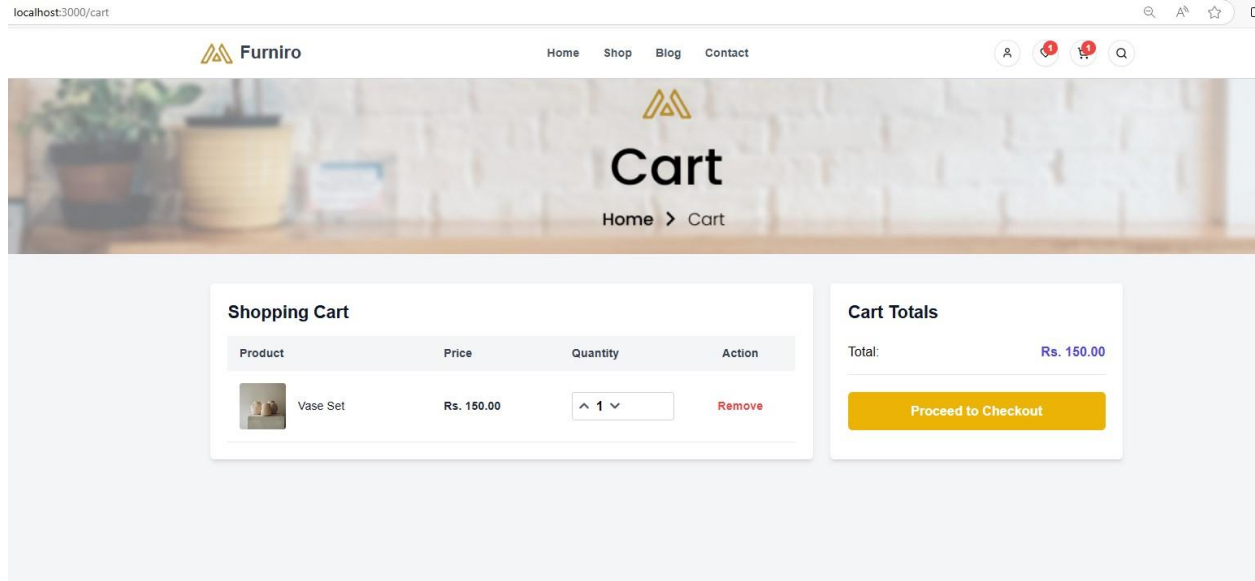
e) **Dynamic Product Pages:**

The **Dynamic Product Pages** will be showcased by clicking on any product on the shop page. Each product page dynamically loads detailed information about the selected product, including its description, specifications, and images. A screenshot of the dynamic product page will be included, highlighting the dynamic data and content.



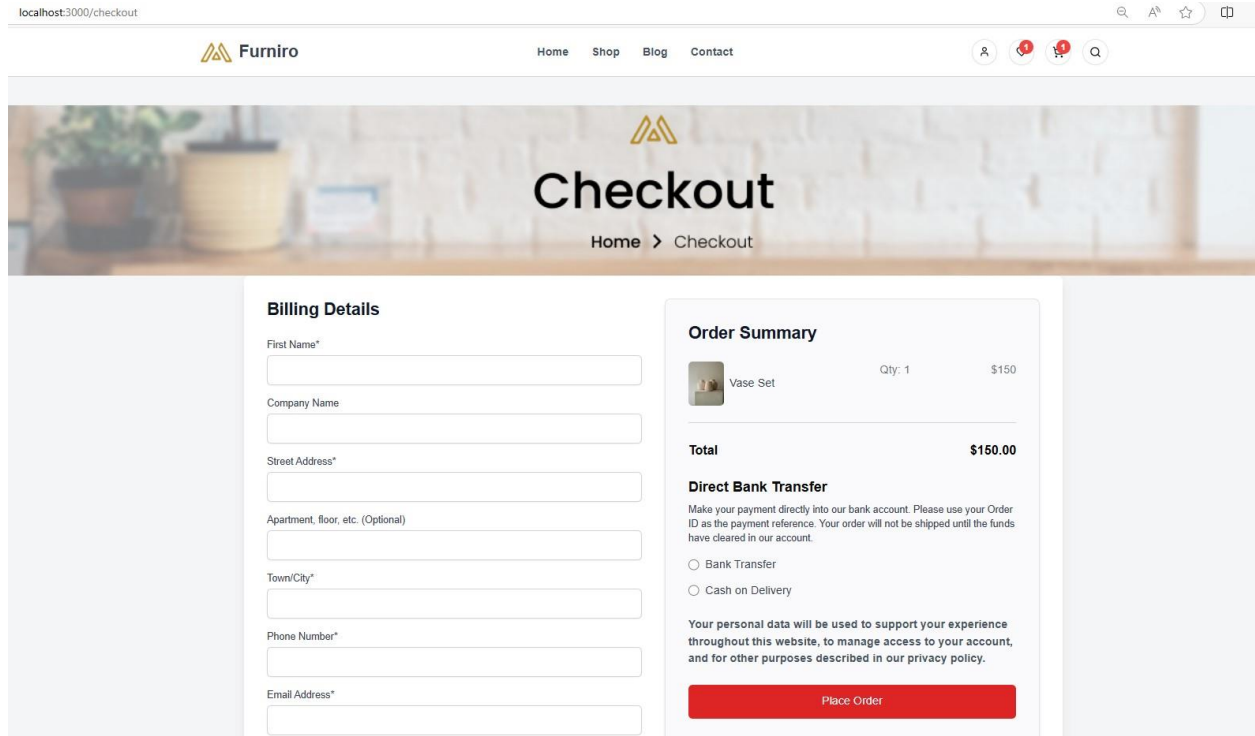
f) **Add to Cart Functionality:**

On the product page, users can click the "Add to Cart" button. Upon clicking, a notification will appear indicating that the product has been added to the cart. The user can then click the "View Cart" button to navigate to the **Cart Page**. A screenshot of the **Cart Page** will be included, showing the product details, quantity, and price.

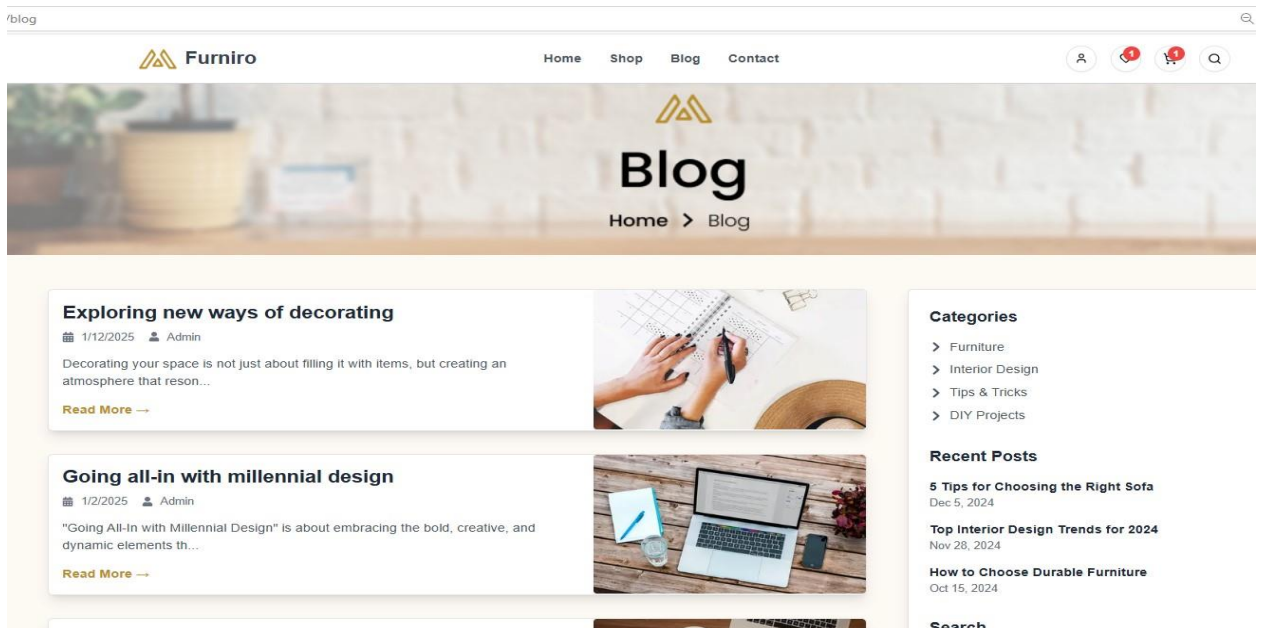


g) Checkout Process:

Once in the cart, the user can click the "Proceed to Checkout" button. After clicking, the **Checkout Page** loads, displaying the order summary and payment options. A screenshot of the **Checkout Page** will be provided, showcasing the final steps in the purchase process.

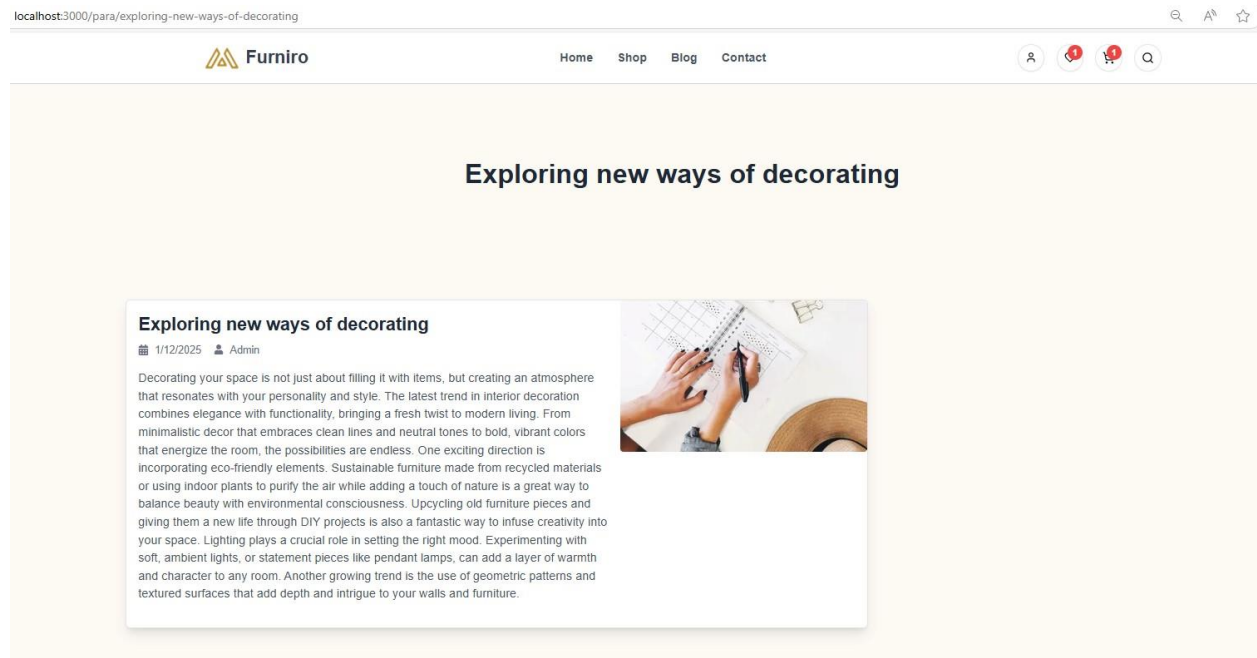


h) BLOG PAGE

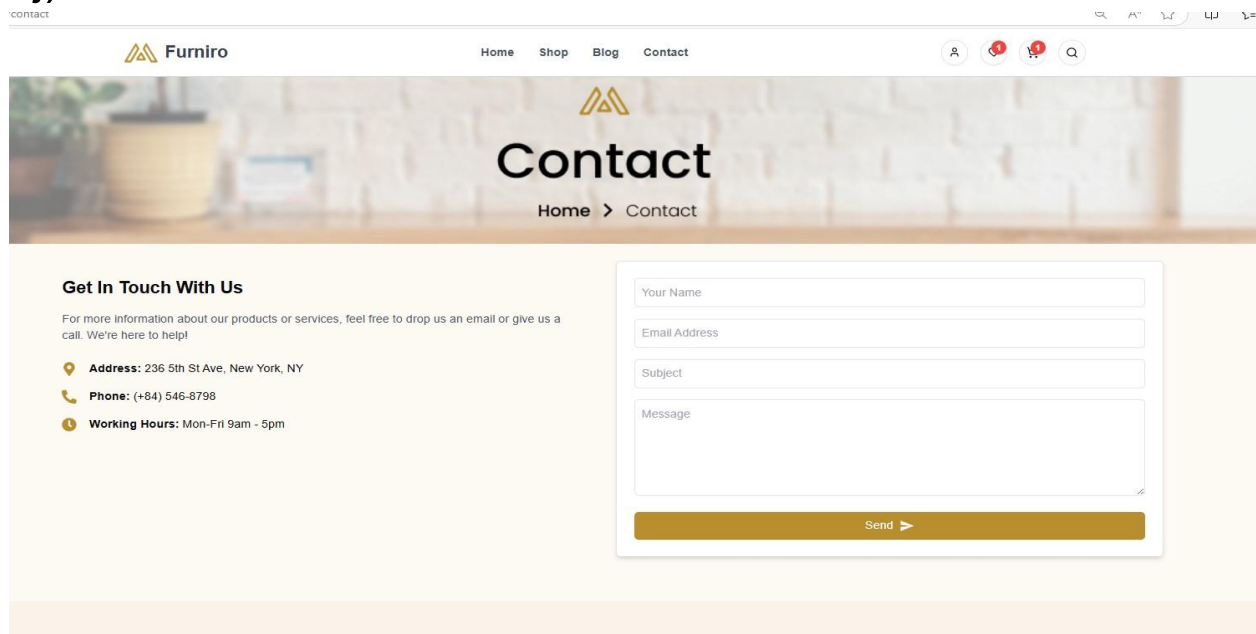


i) DYNAMIC BLOG PAGE

Click Any Blog Post And Navigate To Dynamic Blog Page

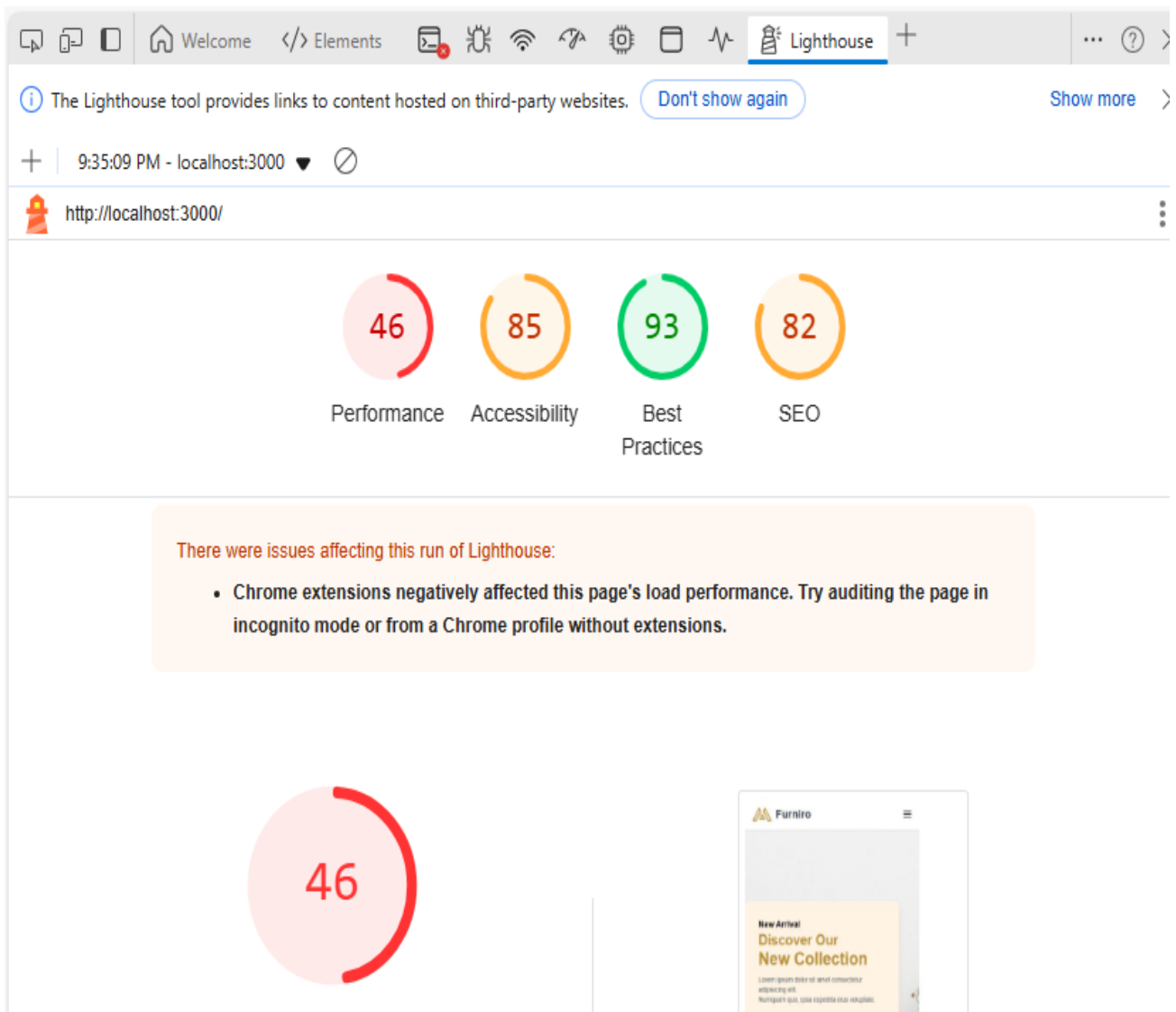


j) CONTACT PAGE



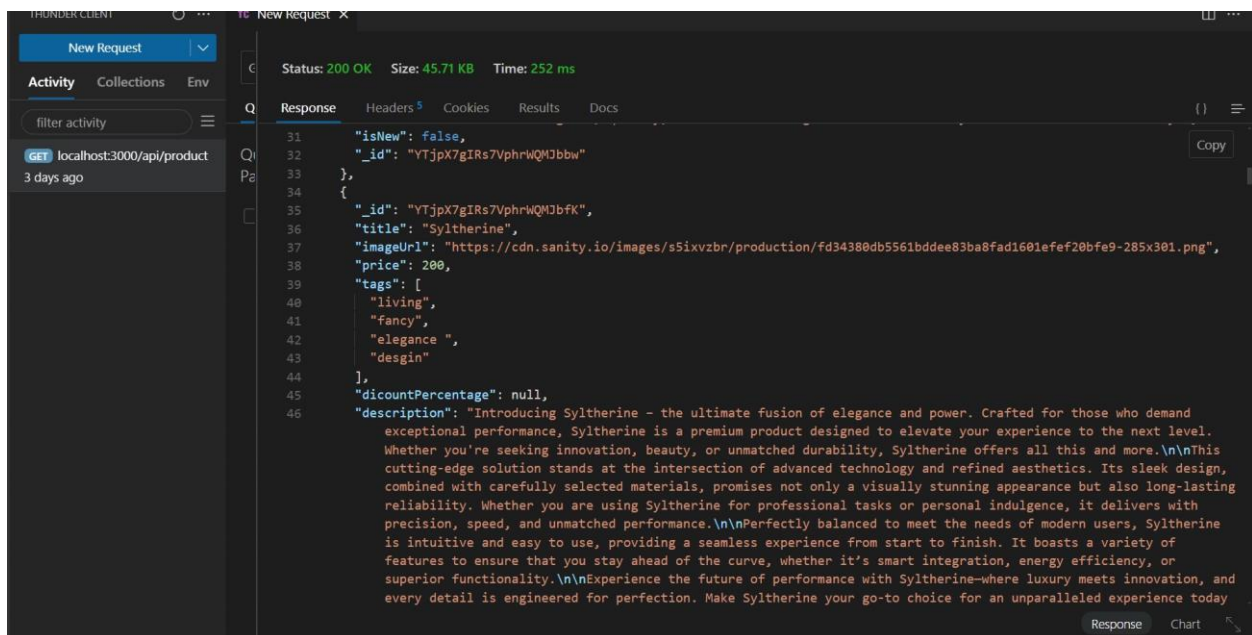
TESTING WEBSITES PERFORMANCE , ACCESSIBILITY AND SEO

To the performance of deployed application. I used lighthouse for testing my application and the test confirm the application performance meets performance expectations.



Testing Logs:

In addition to screenshots and recordings, the testing process will be verified through logs and reports generated from testing tools. These will include reports from **Lighthouse** (for performance and responsiveness) and **Postman** (for API testing), demonstrating the functionality and performance of the application.



2. Testing Report (CSV Format):

Including the following columns:

- o Test Case ID: A unique identifier for each test case.
- o Test Case Description: A concise explanation of what is being tested.
- o Test Steps: Step-by-step procedure to execute the test case.
- o Expected Result: The anticipated outcome of the test case.
- o Actual Result: The observed outcome of the test case.
- o Status: Mark as "Passed," "Failed," or "Skipped."
- o Severity Level: Categorize issues as High, Medium, or Low based on impact.
- o Assigned To: Name of the person responsible for fixing issues (if applicable).
- o Remarks: Additional notes or comments for clarity.

Screenshot of csv format

Column 1	To Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
Test Case Id	Test Case Description	Test Steps	Expected Result	ACTUAL RESULT	STATUS	Severity Level	Assigned To	Remarks
TC10001	Test Product Listing Page	Navigate to Shop page.						
		Verify all products are displayed.	All Products Should Be Displayed With Title, Images, Description tags and Badge	Products Are Displayed with All Things Correctly	PASSED	MEDIUM	SOBAN SAUD	All Products Are Listed Correctly Without Loading Page
TC10002	Test Dynamic Product Page	Click AnyOne Products On Shop Page	Page should display correct product info	Product Page And All Details Load Correctly	PASSED	LOW	SOBAN SAUD	All Products Should Dynamically Display
		Verify page renders correctly	dynamically					
TC10003	Test that a product is added to the cart correctly	Navigate to a product page.	The cart should contain the product with correct details (name, price, quantity)	The product is added to the cart with correct details: name, price, and image.	PASSED	MEDIUM	SOBAN SAUD	Ensure the product details are correctly added.
		Click add to cart button and show the product add to cart.						
TC10004	Test that a product can be removed from the cart.	Add a product to the cart.	The cart should be updated and the product should no longer appear.	The product is removed successfully, and the cart count is updated accordingly	PASSED	MEDIUM	SOBAN SAUD	Check if The Product is Removed From Cart.
		Click on the "Remove" button next to the product. Verify that the product is removed from the cart.						
TC10005	Test Wishlist Functionality	Click: Add to Wishlist In Shop Page	Product should appear in wishlist	Product was successfully added to wishlist	PASSED	LOW	SOBAN SAUD	Product Add TO Wishlist Page
		Product Added To The Heart Icon In Navbar Click Heart And Open WishList Page						
TC10006	Test Comparison Page Functionality	Click Add To Compare In Shop Page	Product Added in Comparison Page With Title, Images And Description	Product Was Successfully Added	PASSED	LOW	SOBAN SAUD	Product Add to Compare Page
		Product Added To Compare Page Click Any Product And Show Compare Button And Click To Open Comparison Page						
TC10007	Test Pagination Work Correctly	Scroll to the bottom of the shop page	Pagination should work correctly , displaying correct products	Pagination is working as expected	PASSED	LOW	SOBAN SAUD	Pagination Is Work Correctly
		Navigate between pages						
TC10008	Test Price Filter Edge Cases	Set price filter to extreme values	Only products within the exact price range should appear	Price Filter Is Working Correctly	PASSED	LOW	SOBAN SAUD	Price Filter Is work Best And Show Product With Price
		Verify displayed products						
TC10009	Test Order Summary Display	Add products to cart	Order summary should display correct product details and total price	Order summary appears correctly	PASSED	HIGH	SOBAN SAUD	Order Summary Is work Correctly
		Proceed To Checkout Verify order summary						
TC10010	Test Checkout Page Loads	Product Add To Cart And Go to Cart Page	Checkout page should load without errors	Checkout page loads correctly	PASSED	LOW	SOBAN SAUD	Checkout Page Works Correctly
		Click Proceed To Checkout Navigate To Checkout Page						
TC10011	Test Responsiveness	All Pages In This Website Are Responsive	All pages are work with responsiveness	All Pages Are Responsive And Pixel Perfect	PASSED	LOW	SOBAN SAUD	
		Check All Pages Include Homepage, Shoppage,etc						

Documentation

1. Test Cases Executed and Their Results:

- A comprehensive list of all test cases executed during the project lifecycle has been documented, including detailed descriptions of each test scenario. The results of each test case, such as "Pass" or "Fail," are provided. Specific areas tested include product listing, dynamic product pages, cart functionality, wishlist, and checkout processes. Each test was conducted based on predefined criteria to ensure all features performed as expected.
- Example:
 - **Test Case:** Verify that a product is added to the cart correctly.
 - **Result:** Passed – Product was successfully added to the cart with correct details (name, price, quantity).

2. Performance Optimization Steps Taken:

- **Optimized Image Loading:** Implemented lazy loading for images on product pages to improve page load times.

- **API Response Optimization:** Ensured efficient API calls by optimizing database queries and minimizing unnecessary data being transferred.

3. **Security Measures Implemented:**

- **Data Encryption:** Ensured all sensitive data transmitted between the client and server is encrypted using HTTPS.
- **Authentication & Authorization:** Implemented secure user authentication using token-based systems (JWT) to safeguard user data.

4. **Challenges Faced and Resolutions Applied:**

- **Challenge:** Difficulty in achieving fast page load times due to large product images.
 - **Resolution:** Optimized images by compressing and using modern image formats like WebP. Implemented lazy loading to load images only when needed.

- **Challenge:** Ensuring smooth cart functionality and handling concurrent product additions from multiple users.
 - **Resolution:** Utilized a robust state management solution, such as Redux or Context API, to manage the cart state efficiently.