Day_5_Testing_Error_Handling_and_Backend_Integration_Refinement

1. Functional Testing

Objective: Validate core marketplace features, ensuring they function as expected.

The provided test cases cover key functionalities and aspects of the application, including product listing, cart functionality, search, error handling, responsiveness, and security. Here's a summary:

1. **Test Product Listing (TC001):**
    - Verifies that products are displayed properly on the homepage.
    - **Status:** Passed
    - **Severity:** Low
2. **Add to Cart Functionality (TC002):**
    - Ensures that products can be added to the cart successfully.
    - Issue identified: Images are not displayed correctly in the cart.
    - **Status:** Passed
    - **Severity:** Medium
3. **Search Functionality (TC003):**
    - Confirms that relevant search results are displayed when a search term is entered.
    - **Status:** Passed
    - **Severity:** Low
4. **API Error Handling (TC004):**
    - Tests the application's ability to handle API failures by displaying a fallback message.
    - **Status:** Passed
    - **Severity:** Low
5. **Responsive Layout (TC005):**
    - Checks that the application layout adjusts properly on mobile devices.
    - **Status:** Passed
    - **Severity:** Low
6. **Security Testing (TC006):**

    - Verifies that malicious input is sanitized to prevent vulnerabilities.
    - **Status:** Passed
    - **Severity:** Low

Key Findings and Recommendations:

- All test cases passed successfully, indicating good functionality.
- A **medium-priority issue** was identified in TC002 (Add to Cart Functionality): product images are not displayed correctly.
    - **Recommendation:** Address the image display issue in the cart.
- The overall system appears stable with low-severity issues noted.

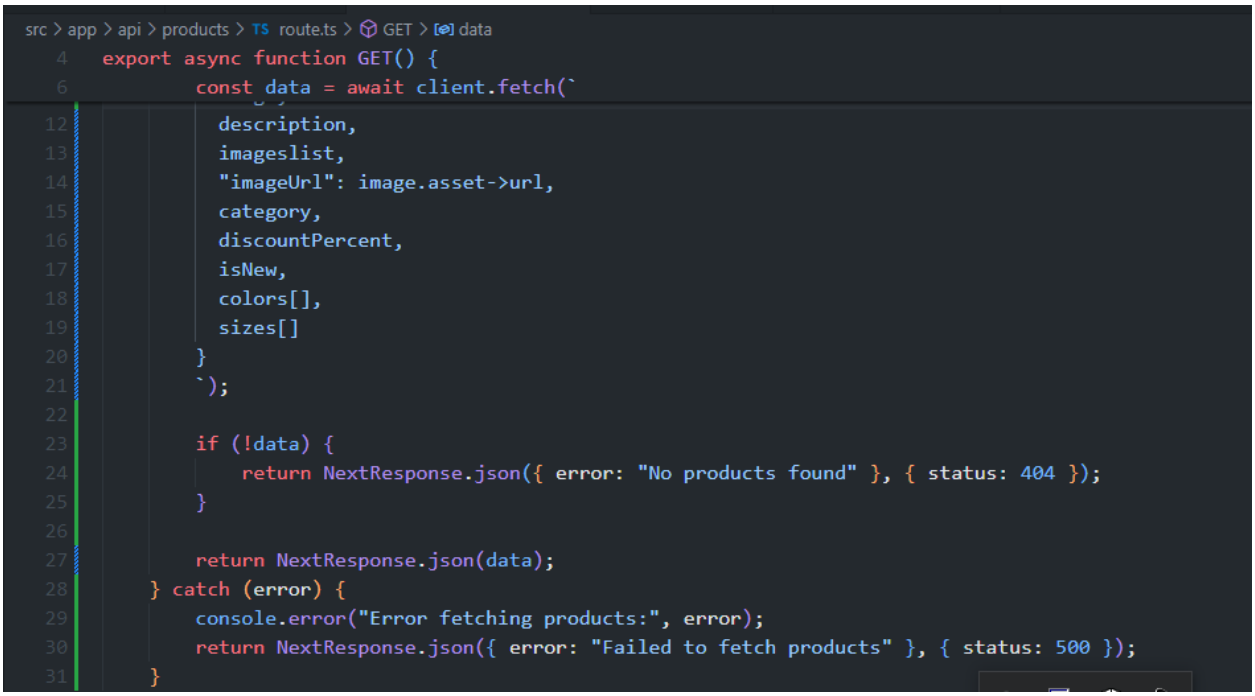
Test Case ID	Description	Steps to Execute	Expected Result	Actual Result	Status	Severity Level	Remarks
TC001	Test Product Listing	1. Open homepage. 2. Verify products are listed	Products should display properly	Products displayed as expected.	Passed	Low	Ok
TC002	Add to Cart Functionality	1. Select a product. 2. Click 'Add to Cart'.	Product should be added to cart.	Product added successfully, but can't show images.	Passed	Medium	Work on images
TC003	Search Functionality	1. Enter a search term. 2. Verify results.	Relevant results should display.	Results displayed.	Passed	Low	Ok
TC004	API Error Handling	1. Simulate API failure. 2. Verify fallback UI.	Display fallback message.	Fallback message displayed.	Passed	Low	Ok
TC005	Responsive Layout	1. Open app on mobile. 2. Check layout.	Layout should be responsive.	Layout is responsive.	Passed	Low	Ok
TC006	Security Testing	1. Enter malicious input. 2. Observe behavior.	Input should be sanitized.	Input sanitized successfully.	Passed	Low	Ok

Erro Handling

Objective: Handle API errors and unexpected issues gracefully with clear messages.

Steps:

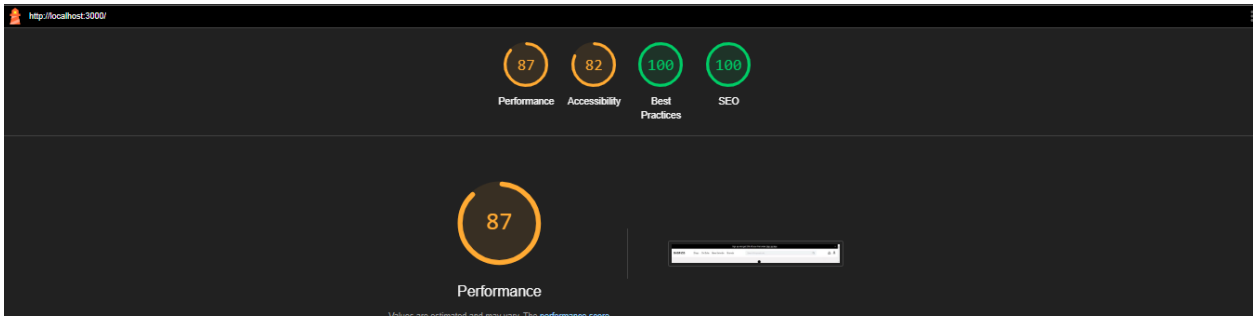
1. **Implement Try-Catch Blocks:**
    -

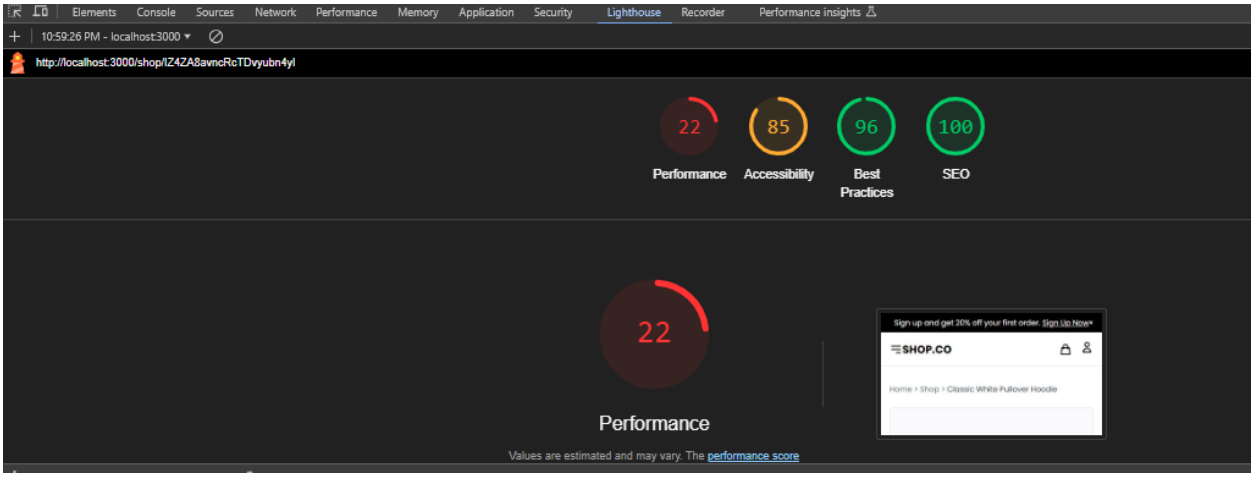


3. Performance Optimization

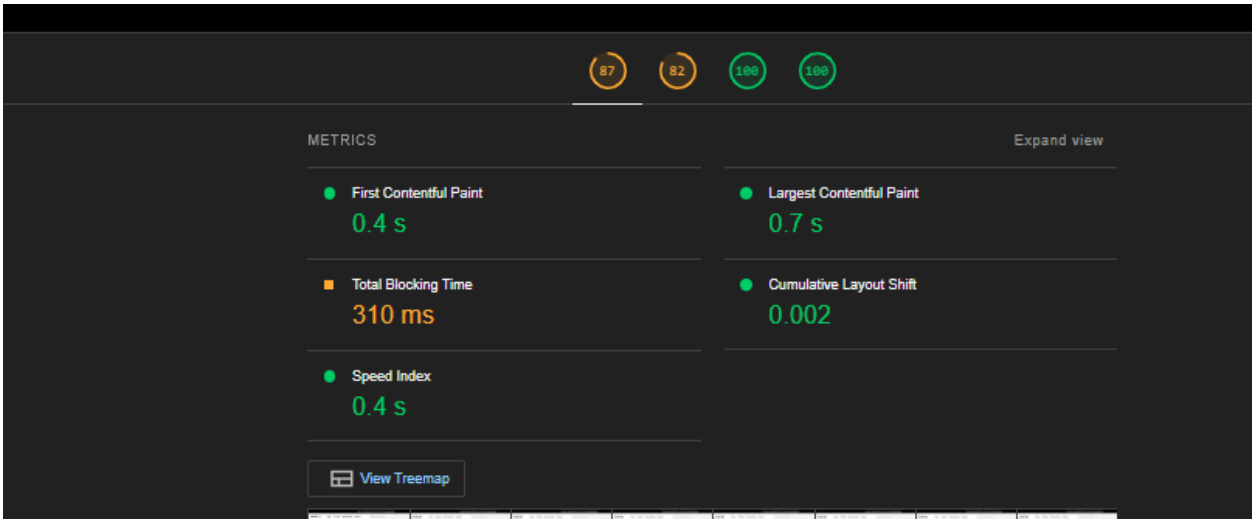
Objective: Improve speed and responsiveness of the application.

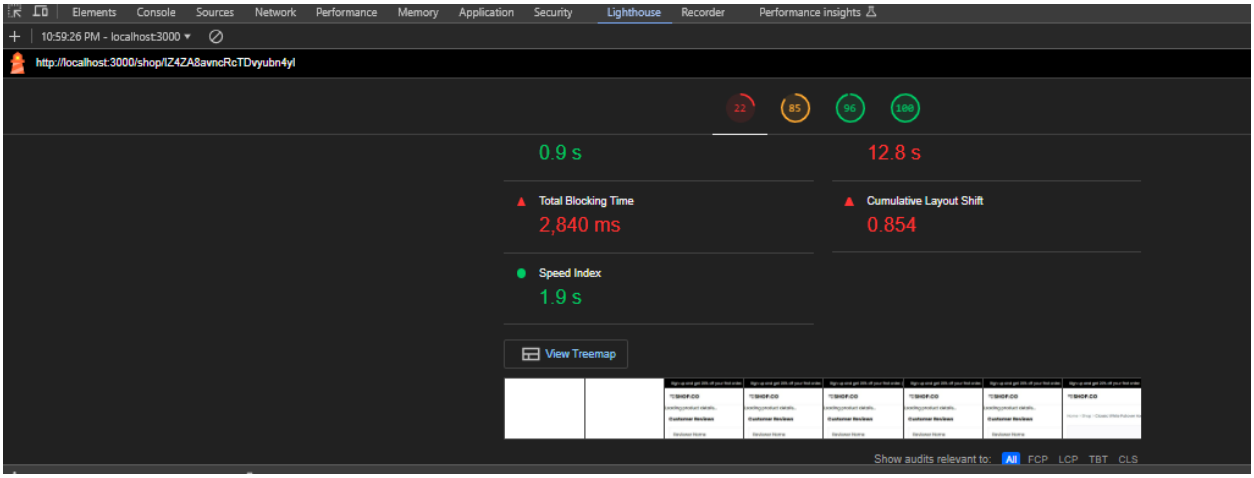
Homepage



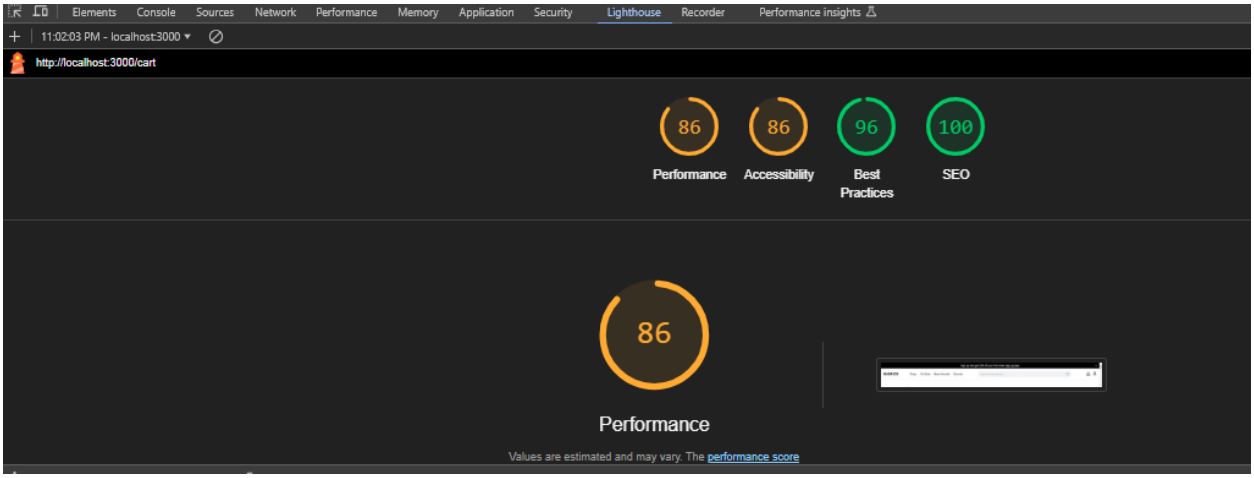


Product page

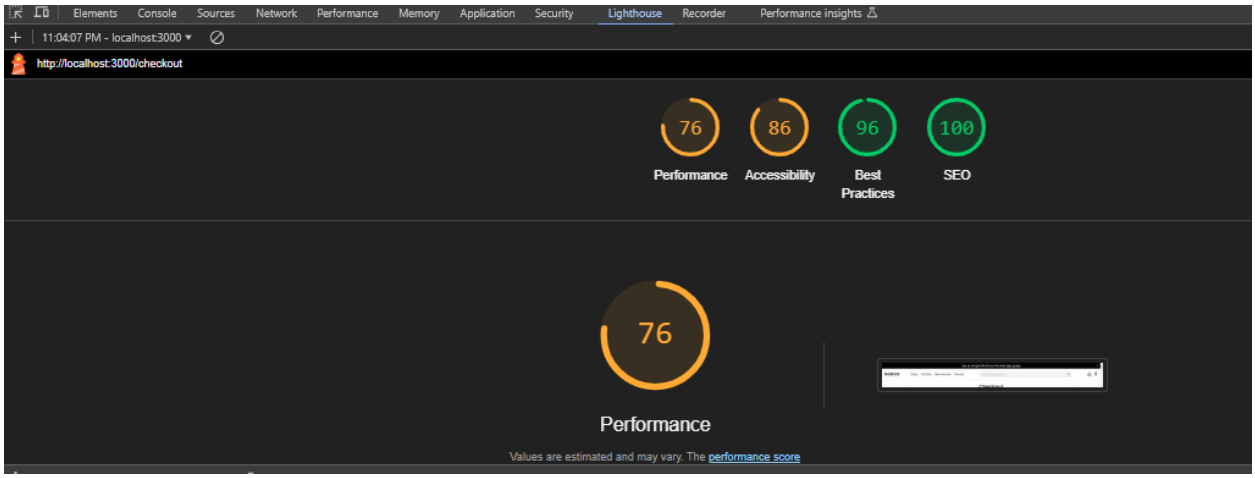




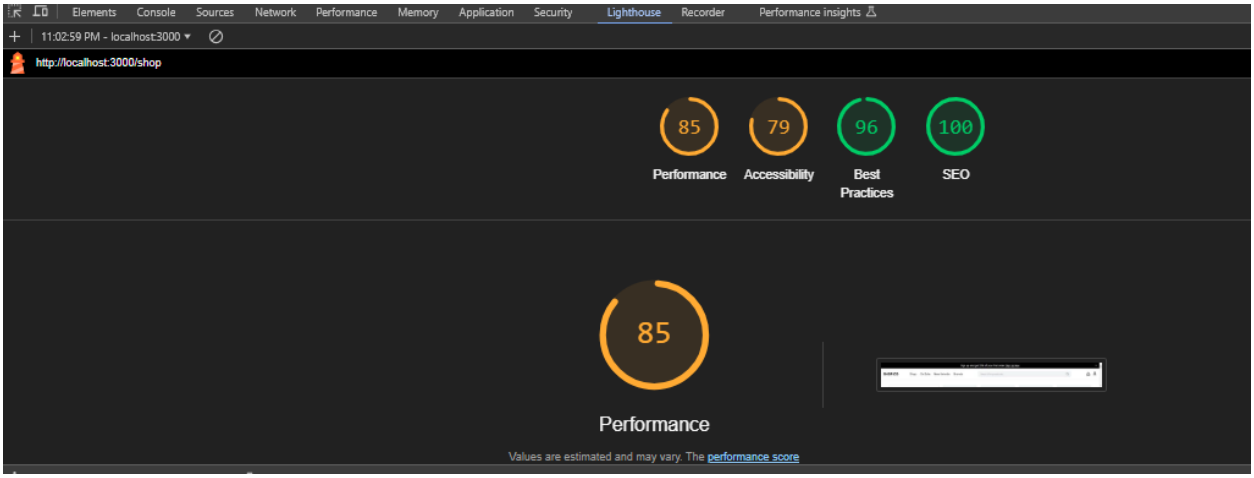
Cart Page



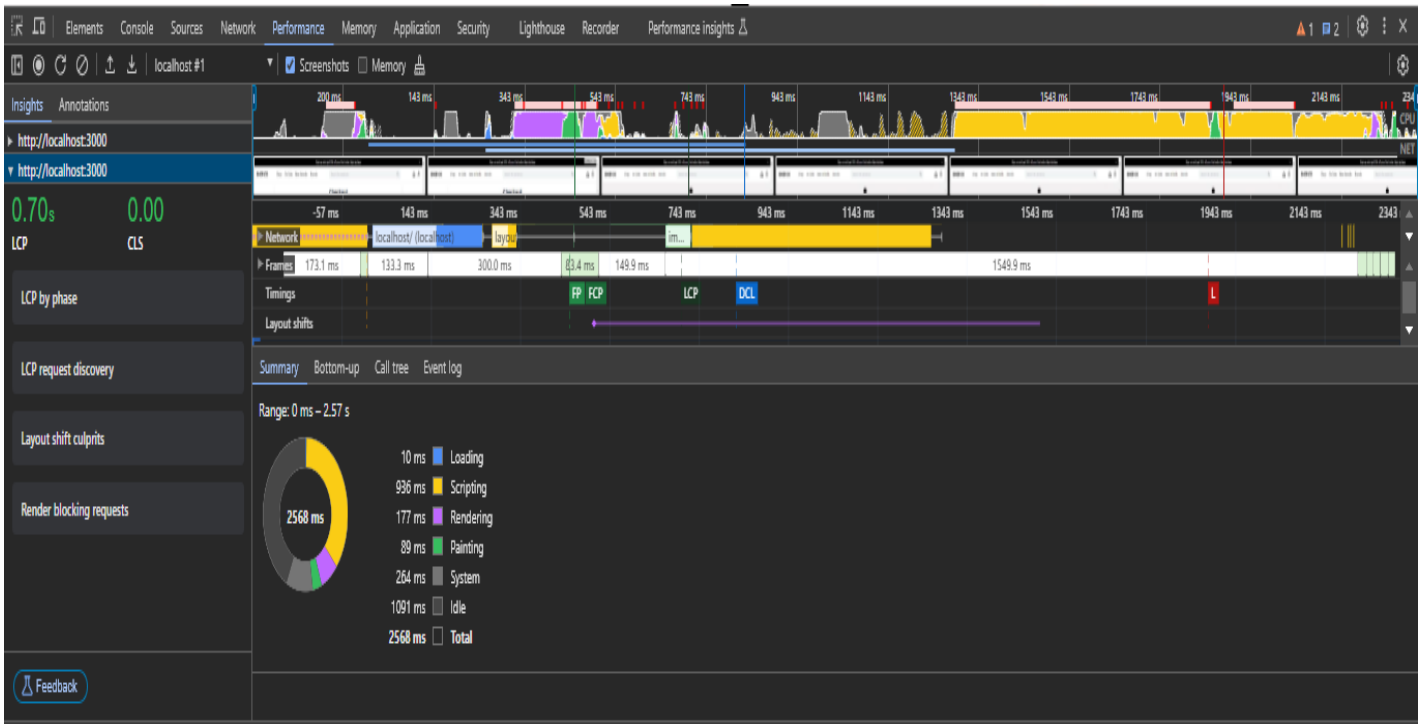
Chekout page



Shop page



Performance Metrics



4. Cross-Browser and Device Testing

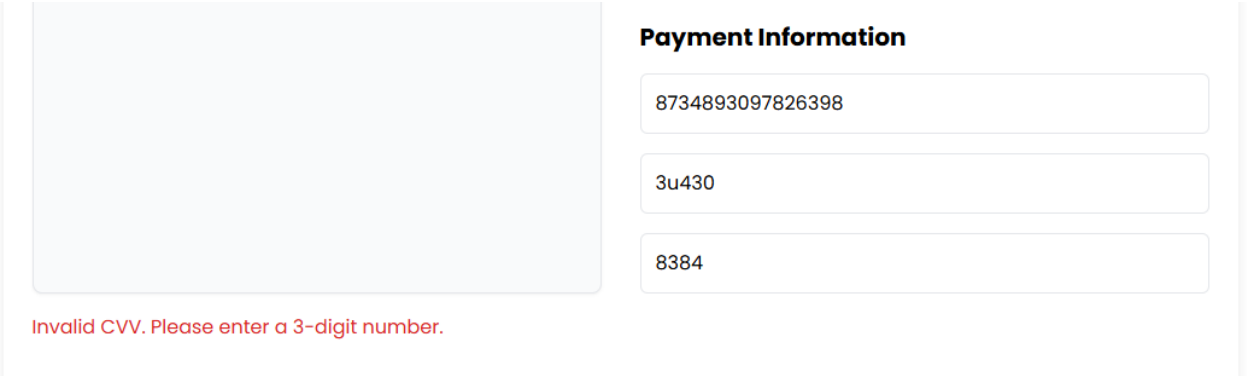
Objective: Ensure consistent performance across various browsers and devices.

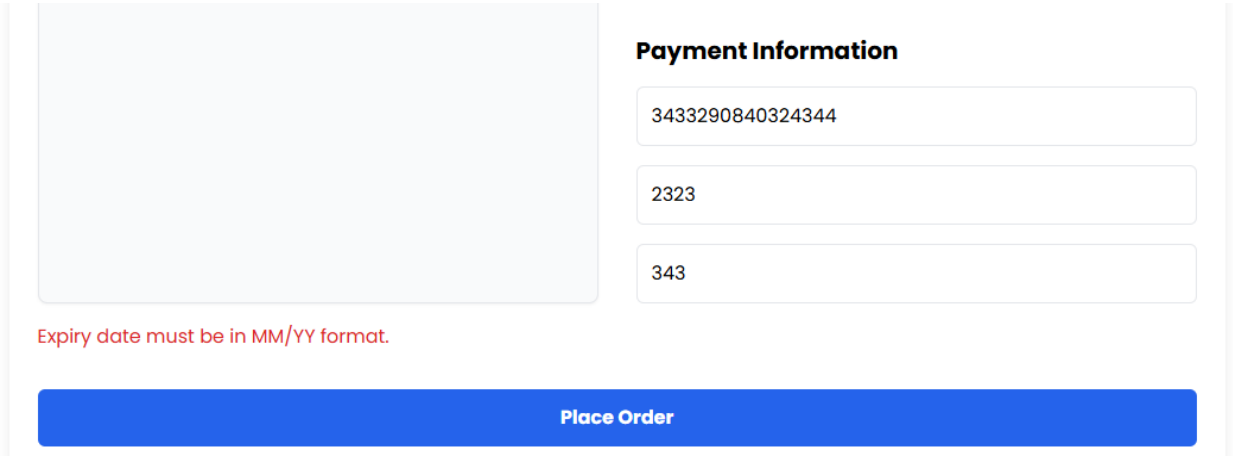
It is fully responsive across all devices.

4. Input Testing

Input Validation:

- Sanitize inputs for forms (e.g., email, phone).
- Use regular expressions for validation.





6. User Acceptance Testing (UAT)

Objective: Simulate real-world scenarios to ensure usability.