MarketPlace-Builder-Hackathon

Day-5: Testing, Error Handling and Backend Integration Refinement

GIAIC: Friday (9 to 12)
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OVERVIEW

The primary objective of DAY-5 was to ready the marketplace for commercial launch by meticulously evaluating all modules, diagnosing and rectifying glitches, streamlining efficiency, and enhancing server-side interfaces. This encompassed executing comprehensive functional assessments to verify pivotal functionalities like catalog browsing, query processing, and shopping cart management operated seamlessly.

Implementing robust exception handling displayed intuitive error notifications and backup UI for API disruptions.
Performance optimization minimized latency and compressed visual assets.
Cross-platform and device compatibility testing ensured uniform user interactions.
Supplemental security audits validated data inputs and safeguarded API transmissions.

Test Case ID	Test Case Description	Test Steps	Expected Result	Actual Result	Status	Severity Level	Remarks
TC 01	Product Listing - Image Fetch Failure	1. Go to product listing. 2. Simulate network issue.	Product images should load correctly	Error message "Image fetch failed" appeared due to network issue.	Failed	Medium	Fixed by solving the network issue.
TC 02	Checkout Process with Missing Cart Items	1. Attempt to checkout with no items in the cart. 2. Verify error message.	A message should appear saying "Your cart is empty."	"Cart is empty" message appeared correctly.	Passed	Low	Checkout Functionality worked as expected
TC 03	Product Search Functionality	Enter a search term Verify search results are relevant.	Relevant products related to search should appear.	Relevant results appeared for the search.	Passed	Medium	Search function works correctly.
TC 04	Error Handling for API Failure	Disconnect internet or simulate API failure.	Error message should appear.	Error message displayed as expected.	Passed	High	Error handling works successfully
TC 05	Mobile Responsiveness	Verify that the product layout adapts correctly to all screen size.	Layout should be responsive across all devices	Layout was responsive on all screen sizes was no issues.	Passed	Low	Mobile version testing successfully.
TC 06	Security - Input Validation for Email Field	Enter an invalid email address	Form should reject invalid email formats with an error message	Invalid email format was rejected with an error.	Passed	High	Email validation works as aspect.
TC 07	User Login with Incorrect Credentials	1. Enter incorrect username/password.	User should see an error message: "Invalid username or password."	Error message displayed correctly.	Passed	Medium	Handled Successfully Work.

Product List Page

Problem Faced

During testing, while navigating to the bandage list page, I noticed that the images were not loading, and an error message reading "Image fetch failed" appeared. The issue was traced to a network problem that disrupted the retrieval of images from the content management system. This disruption was preventing the correct food images from displaying, which is a crucial aspect of the bandage online ordering experience.

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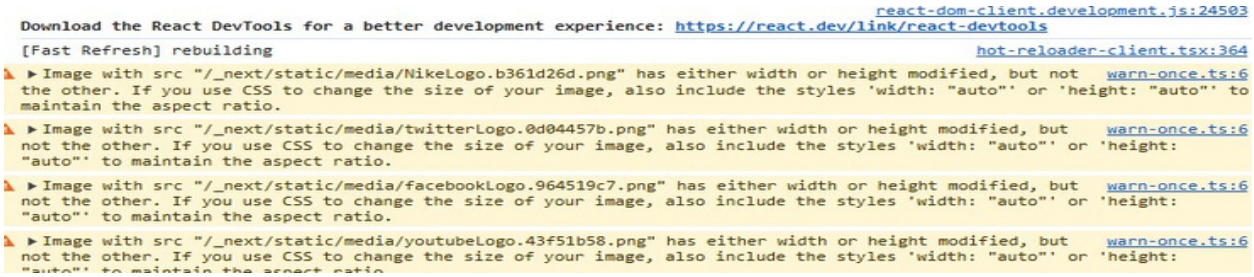
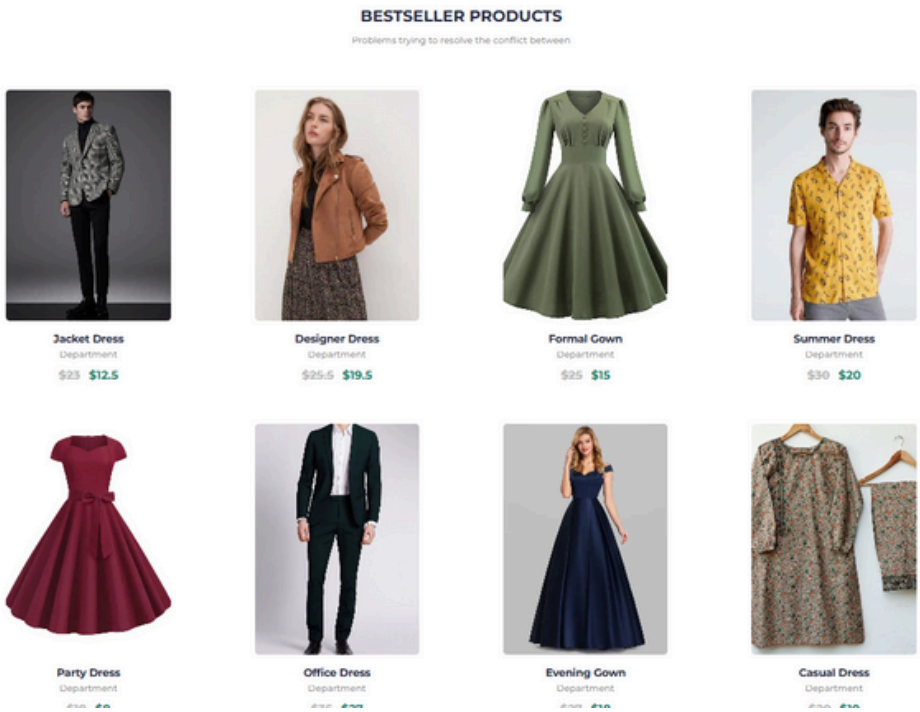


Resolution

The issue was resolved by fixing the network connectivity problem. Once the connection was restored, the list images started loading as expected, and the bandage pictures were displayed correctly on the page. After the fix, the test was repeated, and the images loaded successfully without any errors.



Product Search Functionality

The menu search feature performed as expected without any issues. When customers entered specific cloth names, the results accurately matched the search terms, displaying relevant items based on name, description, and category.

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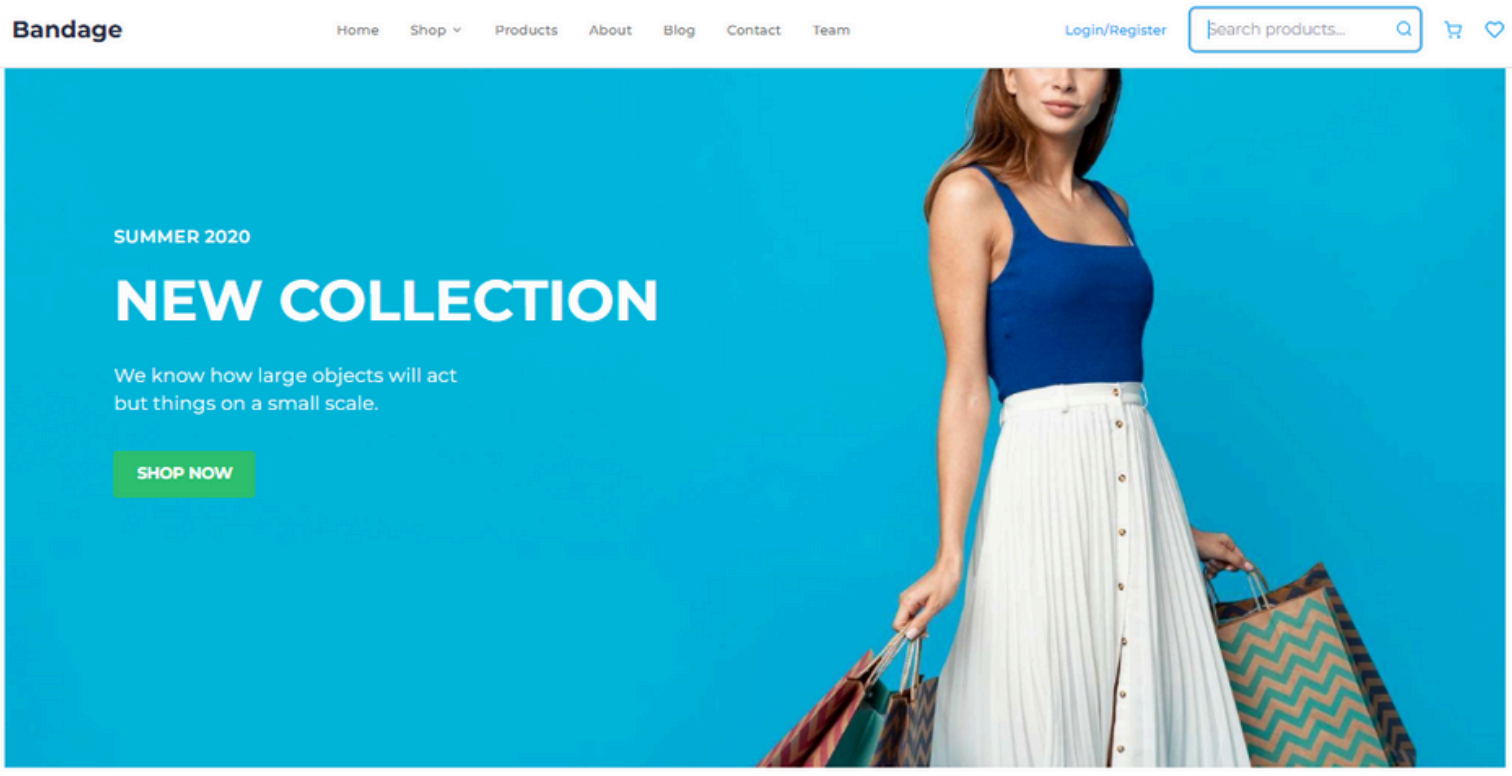
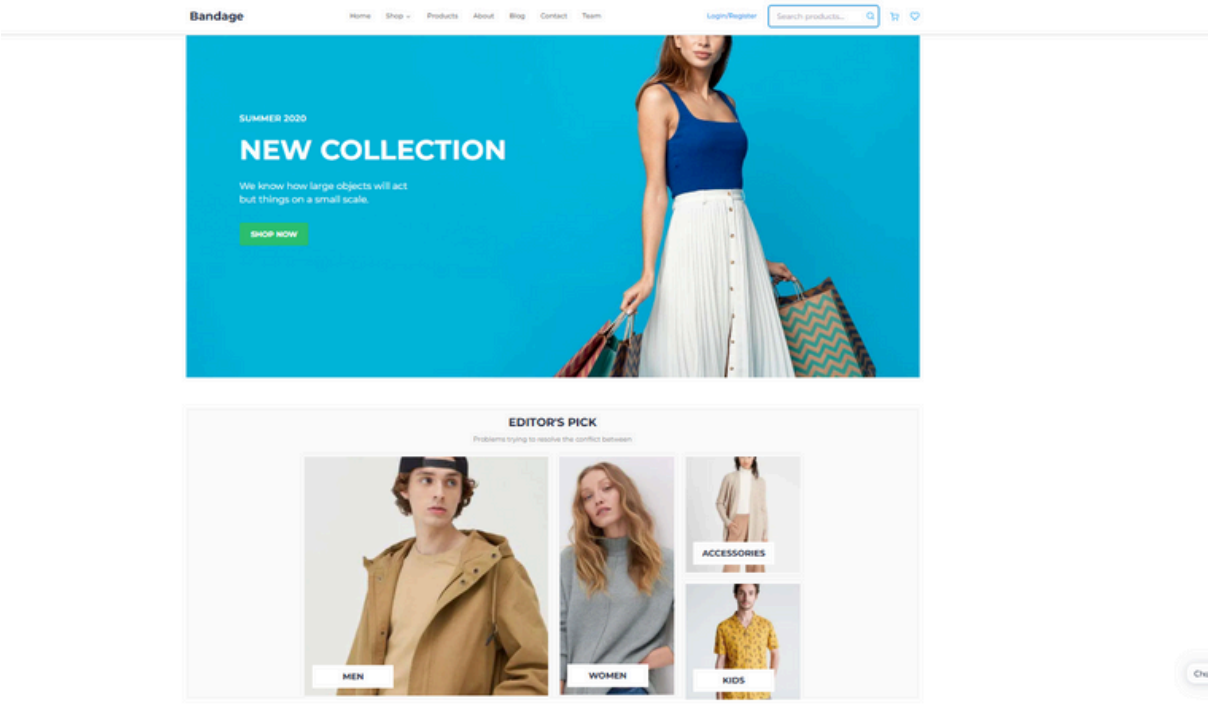
No errors were encountered during the testing of the menu search functionality. The feature performed optimally, displaying menu in a quick and responsive manner. The user interface was clean, and the search results were displayed without delays.



Mobile Responsiveness

The Bandage Online Store successfully passed the responsiveness test. When evaluated across various screen sizes, the layout adjusted seamlessly, ensuring all elements (product listings, filters, and purchase buttons) were displayed properly. Components such as buttons, images, and text remained well-aligned, with no content being truncated or misplaced

No errors were encountered during responsiveness testing. The website was fully responsive on popular devices, including desktop (Chrome), tablet and mobile.



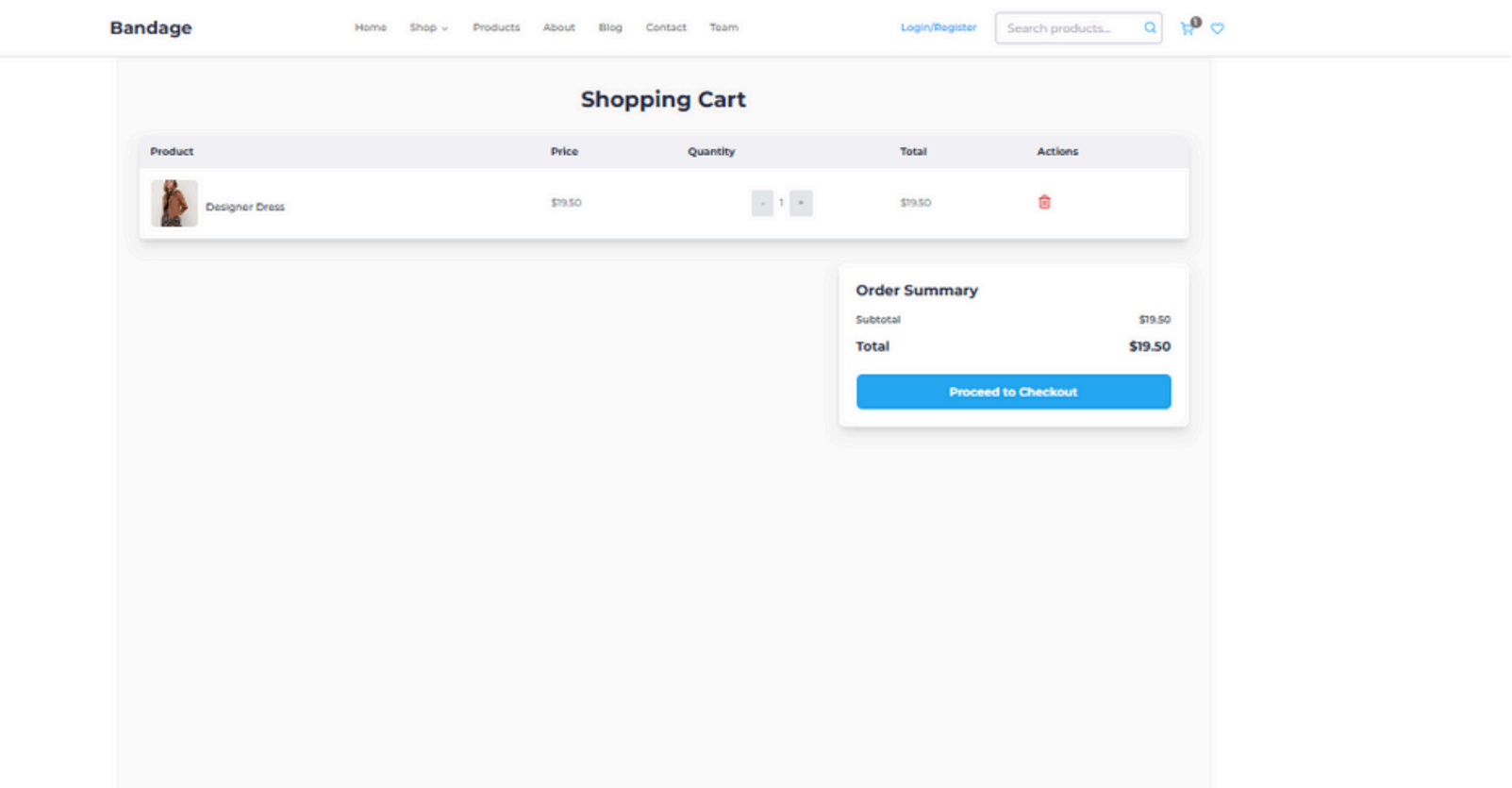
Order Process

Issue Encountered

During testing, it was noticed that when customers tried to proceed to the checkout page with an empty cart, the system did not prevent them from moving forward.

Resolution

To address this, a validation step was introduced to verify whether the cart contains any items before allowing access to the order page. If the cart is empty, the user is now shown a clear message, such as "Your cart is empty." After implementing the fix, the order process was retested with an empty cart, and the system correctly displayed the error message, preventing customers from proceeding.



Security- Input Validation for Email Field

Problem Faced

During security testing, it was discovered that the email input field in the reservation form lacked adequate validation to prevent incorrect entries. This could potentially allow customers to input invalid email addresses.

Resolution

The issue was resolved by adding proper validation for the email field in the reservation form. After the validation was implemented, the system correctly rejected any invalid email addresses and prevented malicious scripts from being submitted.

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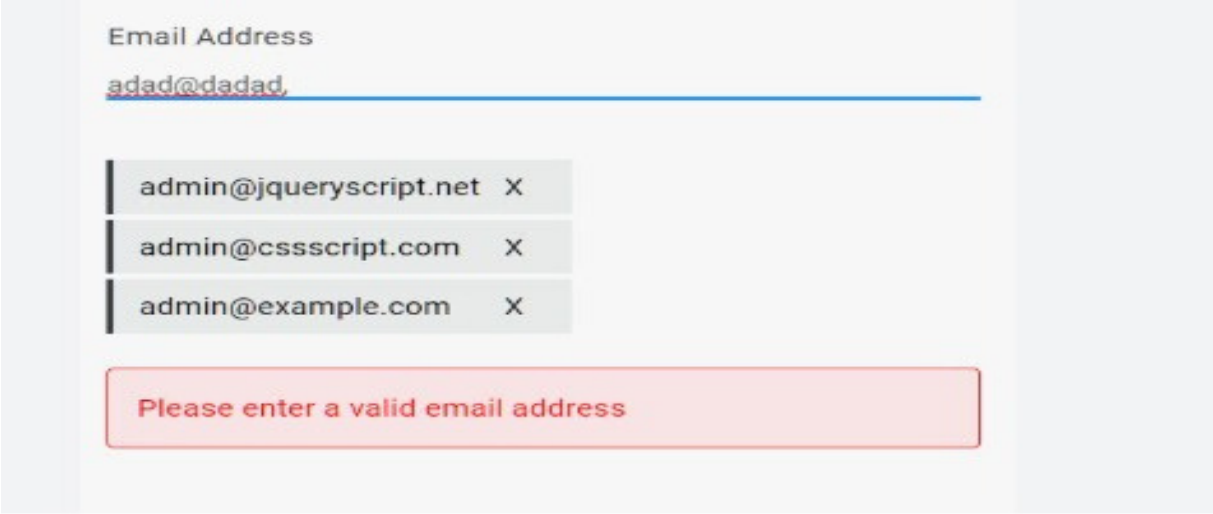

Conclusion

In conclusion, Day 5 of testing, error handling, and backend integration improvements effectively resolved several critical issues, ensuring the Bandage Online Store platform is ready for a smooth, user-friendly, and secure launch. The key focus areas included validating essential features, enhancing the dining experience, and strengthening security measures.

- Functional Testing.
- Error Handling.
- Security Enhancements.
- Performance Optimization and Responsiveness.
- Cross-Browser and Device Testing.