Test Case Report: Day 4 - Dynamic Frontend Components

Project Name: [Q-Commerce Market Place]
Date: [Date of Testing]
Tester Name: [Muhammad Asif]

Test Environment

- **Frontend Framework:** Next.js
- **Backend/CMS:** Sanity CMS
- **Browser:** Chrome v120 / Firefox v115
- **Device:** Desktop (1920x1080) / Mobile (iPhone 12)
- **API Status:** Connected

Test Cases

Below are the test cases for key components:

1. Product Listing Component

Test Case ID	Description	Steps	Expected Result	Actual Result	Status (Pass/Fail)	Comments
TC-01	Verify products are fetched dynamically from Sanity CMS/API.	1. Load the product listing page.	Products display with images, names, prices, and stock status.			
TC-02	Validate responsive grid layout on mobile/desktop.	1. Resize the browser window.	Grid adjusts to 1 column (mobile) or 3 columns (desktop).			
TC-03	Check "Out of Stock" visibility for unavailable products.	1. Filter products with available: false in Sanity CMS.	"Out of Stock" label appears on relevant product cards.			

2. Product Detail Component

Test Case ID	Description	Steps	Expected Result	Actual Result	Status (Pass/Fail)	Comments
TC-04	Verify dynamic routing for product pages.	1. Click a product card on the listing page.	User is redirected to /product/[slug] with correct product details.			
TC-05	Validate product description, price, and variants (sizes/colors).	1. Open a product with size/color options.	All variants are displayed and selectable.			

3. Search Bar & Filters

Test Case ID	Description	Steps	Expected Result	Actual Result	Status (Pass/Fail)	Comments
TC-06	Test search functionality by product name.	1. Type "Burger" in the search bar.	Only products with "Burger" in the name are displayed.			
TC-07	Validate category filter (e.g., "Fast Food").	1. Check the "Fast Food" category checkbox.	Only products in the "Fast Food" category are shown.			
TC-08	Test price range slider.	1. Set the price range to $10-10-20$.	Products within the selected price range are displayed.			

4. Cart Component

Test Case ID	Description	Steps	Expected Result	Actual Result	Status (Pass/Fail)	Comments
TC-09	Verify "Add to Cart" button functionality.	1. Click "Add to Cart" on a product card.	Product appears in the cart with correct quantity and price.			
TC-10	Test cart persistence on page reload.	1. Add items to the cart. 2. Refresh the page.	Cart retains all items (using localStorage/context).			
TC-11	Validate total price calculation.	1. Add multiple items to the cart.	Total price = Sum of all item prices.			

5. Responsiveness & Accessibility

Test Case ID	Description	Steps	Expected Result	Actual Result	Status (Pass/Fail)	Comments
TC-12	Check mobile responsiveness.	1. Use Chrome DevTools to simulate mobile view.	All components render correctly without horizontal scrolling.			
TC-13	Validate screen reader compatibility.	1. Use NVDA/JAWS to navigate the product grid.	All product details are announced correctly.			

Bugs/Issues Found

1. **Bug ID-01**: Price filter slider does not update product list dynamically.
   - o **Severity**: High
   - o **Steps to Reproduce**: Adjust the price slider → No UI update.
   - o **Fix**: Added useEffect to trigger re-render on slider change.
2. **Bug ID-02**: Cart badge count incorrect after removing items.
   - o **Severity**: Medium
   - o **Steps to Reproduce**: Add 3 items → Remove 1 → Badge shows "3".
   - o **Fix**: Updated cart state logic to decrement quantity.

Test Summary

- **Total Test Cases**: 13

- **Passed**: 11
- **Failed**: 2
- **Critical Bugs**: 1
- **Recommendations**:
    - Improve error handling for API failures.
    - Add loading states for slower connections.