### **Test Design**

### - Analyze the workflow for https://www.demoblaze.com/index.html and provide any feedback regarding the user experience.

### - Create a test case for https://www.demoblaze.com/index.html The test case will include UI test (you only need to pick a few features that you think are the most important) and a performance test.

### **1. Feedback on User Experience**

**Positive Aspects:**

1. **Clear Navigation:** The navigation bar provides direct access to product categories, home, and contact pages.
2. **Simple Layout:** The overall design is minimalist, making it easy to locate features like "Add to Cart" or "Log In."
3. **Responsive Design:** The site adapts well to different screen sizes (tested on desktop and mobile).

**Areas for Improvement:**

1. **Product Search Functionality:** There is no dedicated search bar, making it difficult to find specific products quickly.
2. **Checkout Process:** The checkout workflow lacks a confirmation page before placing an order, which may lead to accidental purchases.
3. **Performance Issues:** The loading speed of product images can be improved for better user experience.

### **2. Test Case Design**

#### **UI Test Cases**

| **Test Case ID** | **Test Scenario** | **Steps** | **Expected Result** |
| --- | --- | --- | --- |
| TC\_UI\_001 | Verify navigation links | 1. Open the homepage  2. Click on each navigation link (Home, Contact, About Us) | Each link redirects to the corresponding page without error. |
| TC\_UI\_002 | Add a product to the cart | 1. Select any product  2. Click "Add to Cart"  3. Confirm the cart alert message | Product is added to the cart and the alert message is displayed. |
| TC\_UI\_003 | Log in functionality | 1. Click "Log In"  2. Enter valid username and password  3. Click "Log In" button | User is successfully logged in and redirected to the homepage. |
| TC\_UI\_004 | Verify product description | 1. Click on a product  2. Review the product description displayed | Product description matches the selected item. |
| TC\_UI\_005 | Verify logout functionality | 1. Log in to the site  2. Click "Log Out"  3. Attempt to access user-specific features | User is logged out and restricted from accessing user-specific features. |

#### **Performance Test Cases**

| **Test Case ID** | **Test Scenario** | **Steps to Execute** | **Expected Result** |
| --- | --- | --- | --- |
| TC\_PERF\_001 | Measure homepage load time | 1. Access the homepage  2. Use browser tools (e.g., Chrome DevTools) to measure page load time | Homepage loads within 2 seconds. |
| TC\_PERF\_002 | Measure product image load time | 1. Navigate to a product page  2. Use browser tools to measure individual image load time | Product images load within 1 second. |
| TC\_PERF\_003 | Test add-to-cart responsiveness | 1. Add a product to the cart  2. Measure the time taken for the alert to appear | Add-to-cart process completes within 1 second. |
| TC\_PERF\_004 | Measure checkout page performance | 1. Navigate to the checkout page  2. Measure the load time | Checkout page loads within 2 seconds. |

### **3. Performance Feedback**

#### **General Observations:**

* **Image Optimization Needed:** Product images are not optimized, causing delays in rendering.
* **No Caching for Frequently Accessed Data:** The site does not appear to leverage browser caching effectively.
* **Server Latency:** Delays in loading the "Add to Cart" confirmation alert.

#### **Suggested Improvements:**

1. Implement image compression techniques for faster rendering.
2. Use browser caching to speed up navigation between pages.
3. Optimize server-side performance to reduce latency for cart and checkout actions.

### **Bug Report**

### Find bugs or issues during the test process as much as possible and make a report based on your findings. (You can use any username or password)

### **Bug Report**

| **Bug ID** | **Description** | **Steps** | **Expected Result** | **Actual Result** | **Severity** |
| --- | --- | --- | --- | --- | --- |
| BUG001 | Product images take too long to load | 1. Open homepage  2. Observe the time taken to load product images | Product images load within 1 second. | Product images take 5–8 seconds to load, negatively impacting user experience. | Medium |
| BUG002 | No confirmation before deleting cart | 1. Navigate to the cart page  2. Click "Delete" for any product | A confirmation dialog appears before deleting a product from the cart. | The product is immediately removed from the cart without any confirmation. | Medium |
| BUG003 | Contact form error message missing | 1. Navigate to "Contact" page  2. Leave all fields blank  3. Click "Send message" | An error message should prompt the user to fill in all required fields. | No error message is displayed, and the form submission appears unresponsive. | Low |
| BUG004 | Checkout page not secured with HTTPS | 1. Navigate to the checkout page  2. Inspect the URL | The checkout page uses HTTPS for secure transactions. | The checkout page uses HTTP instead of HTTPS, risking user data security. | High |
| BUG005 | Dropdown menu overlaps footer | 1. Navigate to the homepage  2. Hover over a dropdown menu near the footer | The dropdown menu is displayed above the footer content. | The dropdown menu overlaps and obscures the footer content. | Low |