DemoBlaze Test Plan Document

Project Name: DemoBlaze
Version: v1.0
Test Plan ID: DMBTP251224
Test Lead: Rafsan Ul Karim
Date: 26 Dec 2024

1. Test Scope and Objectives

1.1 Test Scope

The scope of testing for this project covers the following core functionalities:

1. **User Registration/Login:**
   - Verify the Sign Up functionalities of DemoBlaze website.
2. **User Login:**
   - Verify the Login functionalities of DemoBlaze website.
3. **Product Catalog Navigation:**
   - Verify the Product Catalog Navigation functionalities of DemoBlaze website.
4. **Shopping Cart Operations:**
   - **Adding products to cart:** Ensure that products can be successfully added to the cart.
   - **Removing products from cart:** Verify that items can be removed from the cart.
   - **Cart total calculation:** Ensure accurate calculation of cart total after adding/removing products.
5. **Checkout Process:**
   - Validate the entire checkout flow including entering shipping information, payment details, and order confirmation.
6. **Product Categories Filtering:**
   - Verify that product categories filter correctly based on user selections (e.g., by price).
7. **Contact Message Functionality:**
   - Test the functionality of the contact form, ensuring messages are sent and received correctly.

1.2 Test Objectives

- **Validate functionality:** Ensure that all core functionalities perform as expected based on the requirements.
- **Verify usability:** Confirm that the features are user-friendly and intuitive.
- **Ensure data accuracy:** Ensure that user data, product prices, and cart totals are accurate.
- **Detecting defects:** Identify any defects early in the testing process to prevent issues in production.
- **Provide feedback:** Improve the product based on test findings before it goes live.

2. Testing Strategy

2.1 Testing Types

- **Functional Testing:** Test the core functionalities such as registration/login, cart operations, and checkout.
- **Usability Testing:** Validate the ease of use for actions like adding/removing products, navigating categories, and filtering products.
- **Regression Testing:** Ensure that existing functionalities continue to work after changes or additions.
- **Performance Testing:** Measure system performance, especially during the checkout process or when navigating a large product catalog.

- **Security Testing:** Verify secure handling of user credentials, personal data, and payment information.
- **Compatibility Testing:** Ensure the system works across different browsers and devices.

2.2 Test Approach
- **Manual Testing:** Primarily for functional tests, especially for user registration/login, shopping cart operations, and the checkout process.
- **Automated Testing:** For repetitive tests like regression testing on cart operations, checkout, and product filtering.
- **Exploratory Testing:** Conducted by testers to verify the user experience during product catalog navigation, cart operations, and contact message functionality.

3. Entry and Exit Criteria
3.1 Entry Criteria
Testing can begin when the following criteria are met:
- **Development is complete** for the core functionalities (user registration/login, product catalog, cart operations, checkout, etc.).
- **Test environment is set up and stable** with all necessary hardware, software, and network configurations.
- **Test data is ready**, including test accounts, product details, and payment information.
- **Test cases have been reviewed** and are ready for execution.

3.2 Exit Criteria
Testing will be considered complete when:
- All test cases have been executed and results documented.
- **Critical and major defects** have been resolved and retested.
- All high-priority test cases have passed successfully.
- The system has been verified for expected functionality and performance.
- The product meets the acceptance criteria defined by the stakeholders.

4. Test Scenarios and Test Cases
4.1 Test Scenarios
Below are the **test scenarios link** based on the core functionalities provided:
- ⬛ DemoBlaze Test Cases

4.2 Test Cases
Below are the **test scenarios link** based on the core functionalities provided:
- ⬛ DemoBlaze Test Cases

5. Expected Results and Actual Results
5.1 Expected Results
For each test case, the **Expected Results** will be as described above in the "Expected Result" column.

5.2 Actual Results
For each test case, the **Expected Results** will be as described above in the "Expected Result" column.

5.3 Status
The test case status will be updated to either "Pass" or "Fail" based on whether the **Actual Result** matches the **Expected Result**.

6. Test Environment Requirements
6.1 Hardware Requirements
- **Test Machines:** Testers will need machines with at least 8GB RAM and 2.5 GHz processor.
- **Servers:** Server environment for the application hosting.
- **Devices:** Desktop, tablet, and mobile devices for compatibility testing.

6.2 Software Requirements
- **Operating Systems:** Windows, macOS, and Linux for desktop testing.
- **Browsers:** Chrome, Firefox, Safari, and Edge.
- **Testing Tools:** Selenium (for automation), JIRA (for defect tracking), TestRail (for test case management).

6.3 Network Requirements
- **Bandwidth:** Minimum of 10 Mbps for testing web application performance.

7. Risk Assessment and Mitigation Strategies
7.1 Risks
- **Risk:** Late delivery of code affecting testing timelines.
    - **Mitigation:** Clear communication with development to avoid delays and manage timelines.
- **Risk:** Incomplete test data for shopping cart and checkout scenarios.
    - **Mitigation:** Pre-create comprehensive test data for a variety of test cases.
- **Risk:** Test environment instability (e.g., server crashes).
    - **Mitigation:** Set up robust monitoring and alert systems for early detection.

8. Test Execution Schedule
8.1 Testing Phases and Timeline

Phase	Start Date	End Date	Responsible
Test Planning	22 Dec 2024	23 Dec 2024	Test Lead
Test Case Execution	24 Dec 2024	25 Dec 2024	Test Team
Test Environment Setup	26 Dec 2024	27 Dec 2024	DevOps/IT Team
Test Execution	28 Dec 2024	29 Dec 2024	Testers
Defect Reporting	30 Dec 2024	31 Dec 2024	Testers
Test Closure	01 Jan 2025	02 Jan 2025	Test Lead

9. Sign-Off

By signing this document, all stakeholders agree to the plan and commit to the outlined objectives, schedules, and responsibilities.

- **Test Lead:** Rafsan Ul Karim, 25 Dec 2024
- **Project Manager:** [Name], [Date]
- **Development Lead:** [Name], [Date]
- **QA Manager:** [Name], [Date]