### ****Test Plan for Daraz E-Commerce Website****

**Test Plan Identifier:** Daraz\_Ecommerce\_Test\_Plan\_2025

### 1. ****Introduction:****

This document outlines the test strategy and approach for the Daraz E-Commerce website. The purpose of the plan is to ensure that all key functionalities and features of the website meet the required standards of quality, performance, security, and usability. The testing will cover critical e-commerce components such as browsing products, user registration, checkout, payment processes, order tracking, and customer support.

### 2. ****Test Items:****

The major components to be tested within the Daraz E-Commerce website are as follows:

1. **Homepage and Navigation:** User interface elements for browsing products, categories, and promotions.
2. **Search Functionality:** Product search with filters and sorting options.
3. **Product Details Page:** Displays detailed product information including images, specifications, pricing, and user reviews.
4. **Add to Cart & Wishlist:** Functionality to add products to the cart or wishlist.
5. **User Registration & Login:** Account creation, login process, password recovery, and profile management.
6. **Checkout & Payment Gateway:** Payment options, order confirmation, and transaction processing.
7. **Order Tracking:** Order status updates and tracking functionality.
8. **Customer Support:** Access to chat support, FAQ, and contact forms.
9. **Product Reviews and Ratings:** User-generated reviews and ratings for products.

### 3. ****Features to Be Tested:****

1. **User Registration and Login:** Ensuring smooth registration, login, and password recovery.
2. **Search and Filter:** Verifying product search capabilities, including effective filter and sorting options.
3. **Product Details Page:** Validating the accuracy of product information (description, pricing, stock status, etc.).
4. **Add to Cart/Wishlist:** Testing the cart functionality, including adding/removing items and wishlist management.
5. **Checkout Process:** Verifying order summary accuracy, taxes, shipping calculations, and user-friendly navigation.
6. **Payment Process:** Validating multiple payment methods (credit card, debit card, e-wallet, etc.) and secure transaction processing.
7. **Order Confirmation & Tracking:** Ensuring correct order confirmation messages and real-time tracking functionality.
8. **Mobile Compatibility:** Testing the website’s responsiveness and usability across different devices and screen sizes.
9. **Performance Testing:** Conducting load testing to ensure optimal website performance under high traffic conditions.
10. **Security Testing:** Validating the security of user data, login credentials, and payment transactions.
11. **Accessibility Testing:** Ensuring compliance with accessibility standards (WCAG 2.1) for users with disabilities.

### 4. ****Features Not to Be Tested:****

* **Payment through EMI (Installment Payment):** Not within the scope of this test cycle.
* **Third-party Integrations:** External plugins and integrations that do not directly affect the core functionality of the website.

### 5. ****Testing Approach:****

The testing will be conducted using both **manual** and **automated** methods:

* **Manual Testing:** Focused on functional testing of UI elements, user flows, and cross-browser/device compatibility.
* **Automated Testing:** Utilized for regression testing and performance load tests, using tools such as Selenium (for functional tests) and LoadRunner (for performance tests).
* **Security Testing:** Conducted using tools like OWASP ZAP and Burp Suite to identify vulnerabilities.
* **Performance Testing:** Utilizing load testing tools to simulate various traffic volumes and analyze website behavior under load.

### 6. ****Pass/Fail Criteria:****

* **Pass Criteria:**
  + Functional requirements are met without critical defects.
  + All user interface elements (buttons, links, forms) perform as expected.
  + Payment processing and security meet established standards.
  + Performance benchmarks for load and response times are achieved.
* **Fail Criteria:**
  + Major functionality failures, such as the inability to register, log in, or process orders.
  + Critical bugs that cause the website to crash or malfunction.
  + Security vulnerabilities that jeopardize user data or transaction security.
  + Performance issues such as long load times or site crashes under high traffic.

### 7. ****Suspension Criteria:****

Testing will be suspended if:

* Critical blocking issues are identified that prevent further testing (e.g., site crashes, major functionality failure).
* Test environments are not stable or are inaccessible.
* Unresolved issues with external dependencies (e.g., payment gateway or third-party APIs) halt test progress.

### 8. ****Test Deliverables:****

* **Test Plan:** This document outlining the testing strategy, scope, and approach.
* **Test Cases:** Detailed test cases covering all identified features and scenarios.
* **Bug Reports:** Documenting any defects or issues encountered during testing.
* **User Guide (if applicable):** Detailed instructions on how end-users should navigate and use the site.
* **Release Notes:** Information on the final state of the release, including new features, fixes, and known issues.

### 9. ****Testing Tasks:****

* **Test Case Development:** Design and document test cases based on the requirements.
* **Test Execution:** Conduct tests across various browsers and devices.
* **Regression Testing:** Re-test after defects are fixed to ensure no new issues are introduced.
* **Performance & Load Testing:** Simulate user traffic to validate the site's capacity under peak conditions.
* **Bug Reporting:** Document and report any identified defects to the development team for resolution.

### 10. ****Environmental Needs:****

* **Test Environment:**
  + Testing will be conducted on development and staging servers.
  + Supported browsers include Chrome, Firefox, Safari, and Edge.
  + Devices: Android and iOS mobile devices for mobile testing.
  + Tools: Selenium for functional automation, LoadRunner for performance testing, JIRA for bug tracking, Postman for API testing.

### 11. ****Responsibilities:****

* **Test Manager:** Responsible for overseeing the testing process, ensuring proper resource allocation, and tracking progress.
* **Test Engineers:** Write, execute, and report on test cases, including defect identification and reporting.
* **Developers:** Fix defects found during testing, provide necessary support for environment setup.
* **Business Analysts:** Ensure all business requirements are covered and review test cases for completeness.

### 12. ****Training Needs:****

* **Test Tool Training:** Ensure testers are proficient with tools like Selenium and LoadRunner.
* **Security Best Practices:** Ensure the team is well-versed in secure coding practices and security testing tools.
* **Performance Testing Training:** Training on performance testing tools and techniques to simulate and evaluate heavy traffic conditions.

### 13. ****Schedule:****

* **Test Planning:** January 4, 2025 – January 10, 2025
* **Test Case Development:** January 11, 2025 – January 20, 2025
* **Test Execution:** January 21, 2025 – January 30, 2025
* **Bug Fixing & Regression Testing:** January 31, 2025 – February 5, 2025
* **Final Testing & Report:** February 6, 2025 – February 10, 2025

### 14. ****Risk & Contingencies:****

* **Risk:**
  1. Delays in development could result in delayed testing.
  2. Test environment instability could hinder testing progress.
  3. Limited access to test data (e.g., payment gateway sandbox) could impact testing.

1. **Contingency Plans:**
   1. Close communication with the development team to address delays promptly.
   2. Ensure alternate environments are available for testing, if necessary.
   3. Prioritize the testing of core functionalities to ensure critical issues are caught early.

### 15. ****Approvals:****

* **Test Plan Approval:**
  1. Test Manager: Sakib Siddique.
  2. Project Manager: Mohoshi Haque.
  3. Stakeholders: Bug Resistance Ltd.

By approving this test plan, all stakeholders acknowledge and agree to the testing strategy, scope, and schedule. The plan serves as a foundation for the systematic execution of the testing process.