Test Plan for KrishiMarket Web Application

Test Plan ID: TP_KrishiMarket_001

Introduction: This test plan outlines the strategy for manually testing the KrishiMarket web application, focusing on its functionality, security, performance, and compatibility. As an agricultural marketplace, ensuring a seamless and secure user experience for farmers, buyers, and sellers is crucial.

➢ **Application Overview:** KrishiMarket is an online platform dedicated to connecting farmers, buyers, and suppliers in Bangladesh. It provides an online marketplace where users can list, search, and purchase agricultural products directly from suppliers.

➢ **Purpose:** The primary objective of this testing effort is to validate the quality, reliability, and security of the KrishiMarket application. The goal is to ensure that all features function as intended, the platform is secure, and users have a positive experience.

Test Items: The following modules of the KrishiMarket application will be tested:

- **User Management:** Registration, Login, Profile Management

- **Product Management:** Product Listing, Categories

- **Search Functionality:** Product Search, Filter Options

- **Order Management:** Add to Cart, Update Cart, Remove Items, Checkout Process

- **Payment Processing:** Integration with local payment methods

- **Seller Management:** Listing Products, Managing Orders, Communications

- **Communication:** Buyer-Seller Messaging, Contact Support

- **Global Components:** Navigation Bar, Footer, Responsive Design

References: The test plan and execution will adhere to the following standards:

- IEEE 829 Test Documentation Standard

Features to be Tested: This section enumerates the application features to be validated during testing:

- User authentication and profile management

- Product listing and management by sellers

- Product search and filtering capabilities

- Order placement and checkout process

- Payment gateway integration

- Buyer-seller communication mechanisms

- Overall user interface and responsiveness

Features Not to be Tested: Specifies what will be excluded from testing:

- Third-party integrations not directly related to core functionalities

- Content accuracy in user-generated product descriptions

Test Approach: The testing approach will involve the following phases:

1. **Requirement Analysis:** Review application requirements and specifications.

2. **Test Planning:** Develop the test plan and identify resources.

3. **Test Case Development:** Create detailed test cases for each module.

4. **Test Environment Setup:** Prepare the testing environment with necessary configurations.

5. **Test Execution:** Perform functional, security, performance, and compatibility testing.

6. **Defect Reporting:** Log and track defects to closure.

7. **Regression Testing:** Re-test after defect fixes to ensure stability.

Entry Criteria:

- Finalized and approved requirements documentation

- Developed and reviewed test cases

- Configured and stable test environment

Exit Criteria:

- Execution of all critical test cases

- Resolution of high-severity defects

- Completion of test summary report

Suspension Criteria:

- Encountering blocker defects that halt testing progress

- Issues with test environment stability

Roles and Responsibilities:

- **Test Lead:** Plan, monitor, and report on testing activities

- **QA Engineers:** Execute test cases and document defects

- **Developers:** Address and resolve reported defects

Schedule:

- **Test Planning:** Week 1

- **Test Case Development:** Week 2

- **Test Execution:** Weeks 3-4

- **Defect Fixing & Regression Testing:** Week 5

Training:

- **Domain Training:** Understanding agricultural e-commerce workflows and user interactions

- **Process Training:** Manual testing methodologies and best practices

Test Environment:

- **Hardware:** Windows/Linux machines with 8GB RAM, SSD storage

- **Software:** Latest versions of Chrome, Firefox, Edge browsers

Test Deliverables:

- Test Plan Document

- Test Cases and Test Data

- Defect Reports

- Test Summary Report

Approvals:

- QA Lead, Project Manager, Development Team

Glossary:

- **QA:** Quality Assurance

- **PM:** Project Manager