Registration_Form

Acceptance Test Plan

Version 1.0

October 02, 2024

Prepared by:

1. Imon Shahriar Ifti.

2. Afif Hossain Irfan.

3. Shovan Bhattacharjee.

Table of Contents

1. Introduction

1.1 Purpose

1.2 Project Overview

2. Test Strategy

2.1 Test Objectives

2.2 Test Assumptions

2.3 Scope and Levels of Testing

3. SDLC Process - V-Model

3.1 Requirement Analysis

3.2 System Design

3.3 High-Level Design

3.4 Low-Level Design

3.5 Unit Testing

3.6 Integration Testing

3.7 System Testing

3.8 Acceptance Testing

4. Execution Strategy

4.1 Entrance Criteria

4.2 Exit Criteria

4.3 Test Cycles

5. Test Management Process

5.1 Test Management Tools

1. Introduction

1.1 Purpose:

The purpose of this test plan is to define the approach for testing the Registration Form that captures user details including personal, identity, address, and family information. The plan aims to ensure that the form functions as expected, aligns with business requirements, and maintains high quality in terms of usability, accuracy, and security.

1.2 Project Overview:

The registration form is a critical component of the platform's onboarding process. It allows users to enter essential information, including full name, date of birth, email address, mobile number, gender, occupation, and identity details. The form must also validate address and family details and ensure that the data is submitted to the backend system correctly and securely. Testing will be performed to verify all aspects of functionality, including field validation, form submission, and user interaction.

2. Test Strategy

2.1 Test Objectives:

The objectives of the testing process are to:

- Ensure that all form fields and buttons are functioning correctly.
- Validate form field input data for correctness, completeness, and adherence to specified formats.
- Verify proper error handling, ensuring appropriate error messages are shown when incorrect or missing data is entered.
- Ensure the form's user interface (UI) is consistent across multiple platforms, browsers, and devices.
- Confirm successful submission of data to the backend.
- Test the security of sensitive data, especially during the form submission process.

2.2 Test Assumptions:

- A fully functional form and backend are available in the test environment.
- Form validation criteria and input field requirements have been defined in the system requirements.
- Test data simulating real-world use cases will be provided.
- Adequate time will be allocated for functional and non-functional testing.

2.3 Scope and Levels of Testing:

Testing will cover the following types:

- Exploratory Testing: Quick and informal testing to identify initial issues.
- Functional Testing: Detailed verification of individual features like form fields, validations, error messages, and form submission.
- Regression Testing: Ensure recent changes do not introduce new defects in the form functionality.
- Integration Testing: Ensure data submission is integrated properly with the backend systems.
- User Acceptance Testing (UAT): Allow end users to review the registration form, ensuring it meets their expectations before going live.
- Security Testing: Ensure encryption of sensitive data during form submission and check for vulnerabilities in data handling.

3. SDLC Process—V-Model

The V-Model will be used to align testing with the development process. This model is structured as follows:

Left Side - Development Phases:

- **Requirement Analysis:** In this phase, requirements for the registration form are gathered and documented. This includes defining the form fields, validation rules, and submission requirements.
- **System Design:** The architecture of the form is planned, including how the UI will interact with the backend systems.
- **High-Level Design:** In this phase, we define the structure of the form and how it will capture data and handle submissions.
- **Low-Level Design:** Detailed design for each form component (input fields, buttons, validation logic) is specified.

Right Side - Testing Phases:

- **Unit Testing:** Testing individual components of the registration form, such as input validation functions, form buttons, and submission triggers.
- **Integration Testing**: Testing the integration of the registration form with the backend system, ensuring data is submitted correctly.
- **System Testing**: Comprehensive testing of the entire registration process, including validation of field inputs, form submission, and error handling.
- **Acceptance Testing:** User Acceptance Testing (UAT) will be conducted to ensure the form meets business requirements.

This V-Model ensures that testing activities correspond directly with each development phase, enhancing validation at every step.

4. Execution Strategy

4.1 Entrance Criteria:

- The registration form is fully developed, with all fields and validation mechanisms implemented.
- Unit testing has been completed by the development team.
- Test data is available for testing, simulating various input cases (valid and invalid).
- The test environment is set up, including integration with the backend system.
- Functional requirements and test cases are reviewed and approved.

4.2 Exit Criteria:

- 100% of planned test cases have been executed.
- All critical and high-severity defects are resolved or deferred with proper justification.
- A pass rate of at least 95% is achieved for test cases.
- A Go/No-go meeting has been held with stakeholders, and approval is given for deployment.

4.3 Test Cycles:

- **Cycle 1:** Focus on identifying and resolving blocking, critical, and high-severity defects.
- **Cycle 2:** Validate fixes from Cycle 1 and ensure stability before proceeding to UAT.

5. Test Management Process

5.1 Test Management Tools:

- **TestLink:** Used for managing test cases, executing them, and tracking results.
- **ClickUp:** Used for tracking and reporting defects encountered during testing.

5.2 Test Design Process:

- Testers will design test cases based on the requirements, focusing on the functional aspects of each field, validation rules, and form submission.
- A traceability matrix will map test cases to requirements to ensure complete coverage.
- Test cases will be reviewed and approved by the business analyst and development teams before execution.

5.3 Test Execution Process:

- Testers will execute each test case and record results in TestLink.
- If any issues arise, defects will be logged in ClickUp, categorised by priority (critical, high, medium, low).
- Once defects are resolved by the development team, testers will re-test and update the status.

6. Test Environment

6.1 Client and Server Platform:

- **Browsers:** Chrome, Firefox, Edge (latest versions).
- **Devices:** Desktop and mobile devices.
- **Test Environment:** Local and staging environments will be used to execute tests.

6.2 Testing Server Details:

- Local server for initial testing and issue reproduction.
- Staging server to ensure the form functions as expected in a production-like environment.

7. Milestones and Deliverables

7.1 Test Schedule:

- Test Planning Completion: October 4, 2024
- Test Case Design Completion: October 5, 2024
- Test Execution Start: October 6, 2024
- Test Execution Completion: October 10, 2024
- Final Report Delivery: October 12, 2024

7.2 Deliverables:

- **Test Plan Document:** This document, outlining the test strategy and process.
- **Test Cases:** A detailed list of test cases for all features of the registration form.
- **Defect Reports:** Documented issues found during testing, along with their status.
- **Test Summary Report:** A final report summarising the test results, including the pass/fail rate, defect status, and recommendations for release.

8. Automation Testing

8.1 Scope of Automation Testing:

- Basic validation checks will be automated, including field-level validations (e.g., email, date of birth formats) and successful form submission.
- Cross-browser automation scripts will be run to ensure compatibility across different browsers and devices.