

Test Plan for User Story: Corporate Investor - Commercial Registration Verification Via [X]

1. Test Plan

1.1 Objective: The objective of this test plan is to ensure that the system correctly verifies the commercial registration of corporate investors using the third-party service [X], and handles valid and invalid data appropriately, including conditions based on the company's start date.

1.2 Scope:

- Verification of commercial registration number through the third-party service [X].
- Handling of valid and invalid commercial registration numbers.
- Validation of the company's start date and subsequent actions.

1.3 Assumptions:

- The system is successfully integrated with the third-party service [X].
- The third-party service [X] provides accurate and timely responses.
- Corporate investors have access to their commercial registration numbers.

1.4 Roles and Responsibilities:

- Test Manager: Oversee the testing process.
- Test Engineer: Create and execute test cases.
- Developer: Fix issues reported during testing.
- Business Analyst: Clarify requirements and acceptance criteria.

1.5 Tools:

- Test Management Tool (e.g., JIRA, TestRail)
- Automation Tools (e.g., Selenium, Cypress)
- Third-Party Service [X] for verification

1.6 Schedule:

- Test Case Development: 3 days
- Test Execution: 4 days
- Bug Fixing and Retesting: 2 days

2. Risk Based Testing (RBT)

2.1 Risk Identification:

- Incorrect handling of invalid commercial registration numbers.
- Delays or errors from the third-party service [X].
- Incorrect validation of the company's start date.
- System downtime or unavailability during the verification process.

2.2 Risk Assessment:

- High: Incorrect validation of start date, delays/errors from third-party service [X].
- Medium: Handling of invalid commercial registration numbers.
- Low: Minor UI inconsistencies during the verification process.

2.3 Mitigation Plan:

- High risks will be prioritized in testing and bug fixing.
- Regular monitoring and logging of third-party service [X] responses.
- Implement retries and fallback mechanisms for third-party service [X].

3. Test Cases

3.1 Acceptance Test Cases:

- **Test Case 1: Valid Commercial Registration Number**
 - **Pre-condition:** Integration with third-party service [X] is functional.
 - **Steps:**
 1. Enter a valid commercial registration number.
 2. Submit the number for verification.
 3. Receive a valid response from third-party service [X].
 - **Expected Result:** The system proceeds to the next step of the validation process.
- **Test Case 2: Invalid Commercial Registration Number**
 - **Steps:**
 1. Enter an invalid commercial registration number.
 2. Submit the number for verification.

- 3. Receive an invalid response from third-party service [X].
 - **Expected Result:** The system prompts the user to enter a valid number and restarts the verification process with the new number.
- **Test Case 3: Validation for Company Start Date - Negative Case**
 - **Pre-condition:** Verification with third-party service [X] is successful.
 - **Steps:**
 1. The system receives the company's start date from third-party service [X].
 2. Validate if the start date is less than two years.
 - **Expected Result:** The system notifies the user that they cannot proceed.
- **Test Case 4: Validation for Company Start Date - Positive Case**
 - **Pre-condition:** Verification with third-party service [X] is successful.
 - **Steps:**
 1. The system receives the company's start date from third-party service [X].
 2. Validate if the start date is more than two years.
 - **Expected Result:** The system proceeds to the next step.

3.2 Edge Test Cases:

- **Test Case 5: Empty Commercial Registration Number Field**
 - **Steps:**
 1. Leave the commercial registration number field empty.
 2. Submit the form.
 - **Expected Result:** The system displays an error message prompting the user to enter a valid number.
- **Test Case 6: Delayed Response from Third-Party Service [X]**
 - **Steps:**
 1. Enter a valid commercial registration number.
 2. Submit the number for verification.
 3. Experience a delayed response from third-party service [X].
 - **Expected Result:** The system displays a timeout error and suggests retrying the verification process.

4. Test Runs

4.1 Initial Test Run:

- Execute all acceptance test cases to validate basic functionality.

4.2 Regression Test Run:

- Execute edge test cases and any impacted test cases after fixing bugs.

4.3 Smoke Test Run:

- Run critical test cases to ensure major functionalities work before release.

4.4 Performance Test Run:

- Test the system's response time and behavior under different loads, especially during the verification process.