Title: Approval Notifications | SMS

Test Plan

Objective: Ensure that loan requesters receive timely and accurate SMS notifications for both approvals and rejections, along with necessary reasons.

Scope:
1. Functional Testing:
    a. Validate SMS notifications for both approval and rejection scenarios.
    b. Verify accurate processing and communication of rejection reasons to both the relation manager and the requester.
2. Non-functional Testing:
    a. Performance testing for timely SMS delivery.
    b. Security testing to ensure sensitive information in the SMS is secure.

Entry Criteria:
1. The feature is developed and deployed in the test environment.
2. Completion of dev documentation.
3. SMS gateway integration is complete in the test environment.
4. Test data for approval/rejection scenarios is prepared.

Exit Criteria:
1. All high-severity defects are resolved.
2. Test cases for all acceptance and edge cases pass successfully.

Risk-Based Testing (RBT)

1. Approval Notification:
    a. Risk: Delayed or undelivered SMS after final approval.
    b. Mitigation: Test system triggers and SMS delivery timelines.
2. Rejection Notification:
    a. Risk: Incorrect or incomplete reasons provided in rejection SMS.
    b. Mitigation: Validate reason handling across different rejection stages.
3. Role-based Communication:
    a. Risk: Delayed or incorrect information sent
    b. Mitigation: Validate notifications.

Possible Test Cases

Acceptance Criteria Test Cases

Scenario 1: Approval Notification
1. Verify that the loan requester receives an SMS once all departments and the relation manager approve the loan request.
2. Ensure the SMS contains the correct approval status and necessary details (e.g., loan amount, reference ID).

Scenario 2: Rejection Notification with Reasons

1. Validate that the relation manager receives a notification when a loan request is rejected at any stage.
2. Verify the accuracy of rejection reasons communicated to the relation manager.
3. Ensure that the loan requester receives an SMS after the relation manager finalizes the rejection.
4. Validate that the SMS contains only the reasons specified by the relation manager.

Edge Cases

1. Test scenarios where the SMS gateway is down and verify retry mechanisms.
2. Validate behavior when the requester's phone number is invalid or inactive.
3. Test rejection scenarios with incomplete or invalid rejection reasons.
4. Verify the system behavior when the relation manager fails to act on a rejection.
5. Validate that SMS notifications are sent within an acceptable time frame after final approval/rejection.
6. Test simultaneous approvals/rejections for multiple loan requests.
7. Ensure SMS content does not expose sensitive data like account numbers or personal identifiers.
8. Test access restrictions to the SMS system to prevent unauthorized actions.

Test Runs
Run 1: Functional Test Run
Run 2: Performance Test Run
Run 3: Security Test Run
Run 4: Regression Test Run