Test Management - Soar Inc | User Stories

▶▶▶ Test Plan #US_001 - Registered User Login From a New Device

▶**Objective:** To verify the functionality and security of the "Registered User Login From a New Device" feature, ensuring that users can successfully log in from a new device, are logged out from other devices, and receive proper notifications.

▶**Risk Based Testing (RBT):**

ID	Description	Risk Score	Test Scenarios	Testing Focus
RBT-1	Validate the core functionality of the login, OTP verification, and device logout.	High	1. OTP functionality: Test if OTP is correctly generated and sent. 2. Login validation: Test if the login is successful after entering OTP. 3. Device logout: Test if the user is logged out from other devices after logging in from a new device.	Ensure that OTP is correctly sent and validated. Validate that after successful login, the user is logged out from all other devices.
RBT-2	Ensure the user experience is smooth and informative.	Medium	1. Successful login notification: Test if a message confirming successful login is displayed. 2. Redirection after login: Test if the user is redirected correctly to the home page after login. 3. Logout notification: Test if the system sends a notification about logging out from other devices.	Ensure that the user is notified about successful login and that the system correctly informs about the logout from other devices. Also, validate if the redirection works without issues.

▶▶ Test Cases:

▶**Acceptance Cases:**

Test Case ID	Test Case Description	Expected Outcome
TC-001	Enter valid phone number and password and receive OTP on login from a new device.	OTP is sent to the user's phone number.
TC-002	Validate OTP entered correctly and complete login.	User is logged in successfully, and redirected to the home page.

TC-003	Check if the system shows a successful login message and sends SMS notification after successful login from a new device.	A successful login message is displayed on screen, and an SMS notification is sent to the user's phone.
TC-004	Verify that the user is logged out from all other devices after logging in from the new device.	User is logged out from all other active sessions on different devices.
TC-005	Ensure user is redirected to the home page after successful login.	The user is redirected to the home page upon successful login.

▶Edge Cases:

Test Case ID	Test Case Description	Expected Outcome
TC-006	Enter incorrect phone number format (e.g., less than 10 digits or special characters).	The system should show an error message about invalid phone number format.
TC-007	Enter incorrect password with correct phone number.	The system should show an error message indicating the wrong password.
TC-008	Attempt login with an invalid OTP (expired or incorrect).	The system should show an error message for invalid or expired OTP.
TC-009	Simulate the situation of logging in from a new device while already logged in from another device.	The system should log the user out of the other device and allow login only from the new device.
TC-010	Attempt to log in without entering the OTP.	The system should show an error message indicating the OTP is required.
TC-011	Check behavior when the system fails to send an OTP (e.g., due to network failure).	The system should show an appropriate error message (e.g., "OTP could not be sent. Please try again.")
TC-012	Simulate high load (multiple users logging in from new devices at the same time).	System should handle multiple requests without performance degradation or errors.
TC-013	Verify the behavior of the system when the user's account is locked (e.g., after multiple failed login attempts).	The system should prevent login and show an appropriate message like "Account locked. Please contact support."
TC-014	Attempt to log in with blank fields for phone number and password.	The system should show error messages for each blank field (e.g., "Phone number is required", "Password is required").

| TC0-15 | Enter multiple incorrect OTP attempts in a row. | The system should lock the user out after a certain number of failed OTP attempts and show an appropriate message. |
| TC-016 | Simulate SMS notification failure (e.g., network failure or service outage). | The system should show an appropriate message indicating that the SMS could not be sent ("SMS Notification failed"). |

▶▶ Test Runs: (Approx. 4 runs)

▶ Test Run 1: Basic Functional Tests

- **Focus**: Ensure all basic functionality (login, OTP, logout from other devices) is working as expected.
- **Test Cases**: TC-001, TC-002, TC-003, TC-004, TC-005
- **Expected Result:** User should be able to log in successfully from a new device, receive OTP, get logged out from other devices, and be redirected to the home page.

▶ Test Run 2: Negative/Edge Case Tests

- **Focus**: Test edge cases like incorrect inputs, expired OTP, etc.
- **Test Cases**: TC-006, TC-007, TC-008, TC-009, TC-010, TC-011, TC-014, TC-15, TC-016
- **Expected Result:** System should handle all error scenarios gracefully and provide meaningful error messages to the user.

▶ Test Run 3: Load/Performance Testing

- **Focus**: Verify the system's behavior under heavy load, especially when multiple users are trying to log in simultaneously.
- **Test Cases:** TC-012
- **Expected Result:** System should handle multiple login attempts without significant delays or errors.

▶ Test Run 4: Security and Session Management

- **Focus**: Test the logout functionality and session handling across multiple devices.
- **Test Cases**: TC-009.
- **Expected Result:** The user should be logged out of all other devices after login from a new device.

▶▶▶ Test Plan #US_002 - Individual Investor - Upgrade To Premium

▶**Objective:** To verify that the "Upgrade To Premium" functionality works correctly, allowing verified individual investors to upgrade their accounts to premium, and that all associated processes (document uploads, approvals, notifications) are handled properly.

▶**Risk Based Testing (RBT):**

ID	Description	Risk Score	Test Scenarios	Testing Focus
RBT-1	Validate the core functionality of the upgrade process.	High	1. Upgrade button functionality: Test if the "Upgrade to Premium" button works. 2. Option selection: Test if the user can choose one of the listed upgrade types. 3. Document upload: Test if the user can upload required documents. 4. Request approval: Test if the request is sent to the compliance team for approval & team is able to approve it. 5. Notification: Test if the user receives a notification after successful document upload.	Ensure the upgrade process functions correctly, document upload works, and approval request is sent. Ensure the user is notified upon successful document upload.
RBT-2	Ensure the system handles user interactions and notifications correctly.	Medium	1. Document ownership: Test if the user can prove ownership of documents. 2. Compliance team approval: Test if the system notifies the responsible relation manager upon approval.	Ensure that the user receives timely notifications regarding document upload success, Relation manager is informed of the request status, and upgrade process is complete.

▶▶ Test Cases:

▶**Acceptance Cases:**

Test Case ID	Test Case Description	Expected Outcome
TC-001	Verified Individual Investor clicks on the "Upgrade to Premium" button.	The user is redirected to the option selection page.

TC-002	Choose one of the following types to upgrade: 1. Assets worth 3 million SAR. 2. Work experience in finance. 3. Finance certificate.	User is able to select an option and proceed.
TC-003	User Uploads required documents according to the selection from TC002 and proves ownership.	The user is able to upload documents and prove ownership.
TC-004	Compliance department staff approves the upgrade request.	The request is marked as "approved" in the system.
TC-005	Relation manager receives notification from the compliance team about the request status.	The relation manager receives an email or system notification.
TC-006	User receives notification after documents are uploading successfully	The user receives a notification confirming successful upload.

▶Edge Cases:

Test Case ID	Test Case Description	Expected Outcome
TC-007	Try to upgrade without selecting an option.	The system should prompt the user to select one of the required options.
TC-008	Upload an invalid document type (e.g., unsupported format).	The system should reject the document and show an error message.
TC-009	Upload a document with incorrect information.	The system should prompt the user to upload the document with correct information.
TC-010	Try to submit the upgrade request with no documents uploaded.	The system should prompt the user to upload the required documents.
TC-011	Try to upgrade without being a verified individual investor.	The system should show an error message indicating that only verified users can upgrade or the button should be hidden fully
TC-012	Simulate a scenario where the compliance team fails to approve the request.	The system should handle the failed approval gracefully and send notification to the user.
TC-013	Simulate a scenario where the notification system fails to send the success message after document upload, but compliance team has approved the request	The system should log about the notification failure and a retry sending the notification again to the user
TC-014	Try upgrading after the user's account status has been changed (e.g., account frozen or suspended).	The system should prevent the upgrade and inform the user.

| TC-015 | Compliance team rejects the request after review. | The system should notify the user that the request was rejected and provide a reason. |

▶▶ Test Runs: (Approx. 3 runs)

▶ Test Run 1: Basic Functional Tests

- **Focus**: Ensure that the core functionality of the upgrade process (button, selection, document upload, request submission, notifications) is working as expected.
- **Test Cases**: TC-001, TC-002, TC-003, TC-004, TC-005, TC-006
- **Expected Result**: The user should be able to successfully upgrade to a premium account, upload the necessary documents, and receive the appropriate notifications.

▶ Test Run 2: Negative/Edge Case Tests

- **Focus**: Test edge cases such as invalid documents, missing selections, failed uploads, etc.
- **Test Cases**: TC-007, TC-008, TC-009, TC-010, TC-011, TC-012, TC-013, TC-014, TC-015
- **Expected Result**: The system should handle all error scenarios gracefully and provide meaningful error messages to the user.

▶ Test Run 3: Security and Compliance Testing

- **Focus**: Verify the security of document uploads, compliance approvals, and handling of sensitive user data.
- **Test Cases**: TC-003, TC-004, TC-006, TC-012
- **Expected Result**: The system should ensure proper handling of sensitive documents and user information, with compliance approval processes functioning securely.

▶▶▶ Test Plan #US_003 - Approvals Notifications | SMS

▶ **Objective:** To verify the functionality of the loan approval and rejection notification system, ensuring timely and accurate SMS notifications are sent to the loan requester and relevant stakeholders during the approval process.

▶ Risk-Based Testing (RBT):

ID	Description	Risk Score	Test Scenarios	Testing Focus

| RBT-1 | Validate the core functionality of sending SMS notifications for loan approval status. | High | 1. Test if SMS is sent to the loan requester after final approval. | Ensure SMS notifications for approval are sent accurately and promptly to the loan requester. |
| RBT-2 | Validate rejection notifications with reasons provided. | High | 1. Test if rejection reasons are communicated to the relation manager during the process. 2. Test if SMS is sent to the loan requester after final rejection with reasons. | Ensure rejection notifications include proper reasons and SMS is sent after final rejection. |

►►Test Cases:

►Acceptance Cases:

Test Case ID	Test Case Description	Expected Outcome
TC-001	Verify if SMS notification is sent after loan approval.	Loan requester receives an SMS indicating loan approval status.
TC-002	Verify if rejection reasons are sent to the relation manager during department approvals.	Relation manager is notified with the reasons for rejection and he is to sort with the loan requester to resolve the issue
TC-003	Verify if final rejection SMS is sent to the loan requester with the reasons provided by the relation manager.	Loan requester receives an SMS with the specified rejection reasons.

►Edge Cases:

Test Case ID	Test Case Description	Expected Outcome
TC-004	Simulate SMS service failure during approval notification.	The system should log the failure and retry sending the notification.
TC-005	Simulate SMS service failure during rejection notification.	The system should log the failure and retry sending the notification.
TC-006	Verify behavior when multiple rejection reasons are provided at different stages.	The system should send the final rejection reasons specified by the relation manager to the loan requester.
TC-007	Attempt to send SMS without valid contact information.	The system should log the failure and notify the relevant team to resolve.

▶▶ Test Runs: (Approx. 3 runs)

▶ Test Run 1: Functional Testing

- **Focus:** Ensure basic functionality for approval and rejection notifications.
- **Test Cases:** TC-001, TC-002, TC-003
- **Expected Result:** Notifications are sent accurately for approvals and rejections with the correct content.

▶ Test Run 2: Negative/Edge Case Testing

- **Focus:** Test scenarios where notification sending fails or unexpected data is encountered.
- **Test Cases:** TC-004, TC-005, TC-006, TC-007
- **Expected Result:** System handles failures gracefully and ensures appropriate logging or retries.

▶ Test Run 3: Workflow Validation

- **Focus:** Verify the notification workflows for approvals and rejections.
- **Test Cases:** TC-002, TC-003
- **Expected Result:** Notifications are sent correctly, and workflows proceed without disruption.

▶▶▶ Test Plan #US_004 - Departments Approval

▶**Objective**: To verify the functionality of departmental loan request approvals, ensuring that department staff members can review and approve loan requests, and the approval details are displayed accurately.

▶ Risk-Based Testing (RBT):

ID	Description	Risk Score	Test Scenarios	Testing Focus

| RBT-1 | representatives to approve loan requests. | High | is in review and clicking "Approve" correctly marks the request as approved for the department. | department representatives is smooth and accurate. |
| RBT-2 | Validate the functionality of displaying department approvals for loan requests. | Medium | 1. Test if the system displays all approved departments along with staff details and timestamps, including approvals by multiple departments. | Ensure accurate display of approval history, including department name, approving staff, and timestamps. |

►►Test Cases

►Acceptance Cases:

Test Case ID	Test Case Description	Expected Outcome
TC-001	Verify if the "Approve" button is visible & enabled for a department representative reviewing a loan request.	"Approve" button is visible & enabled for department representatives in the review stage.
TC-002	Test the functionality of clicking the "Approve" button to mark the request as approved.	The loan request is marked as approved for the department, and the status is updated in the system.
TC-003	Verify if the system displays the list of departments that have approved the loan request.	A section showing all approved departments, approving staff, and timestamps is visible to the user. .

►Edge Cases:

Test Case ID	Test Case Description	Expected Outcome
TC-004	Test if the "Approve" button is hidden when the loan request is not in review stage.	"Approve" button is not visible when the loan request is not in review.
TC-005	Validate system behavior when two or more departments approve the loan request simultaneously.	The system processes simultaneous approvals without errors, and the approval details are updated accurately.
TC-006	Test the system's behavior when a department approval is retracted or edited.	Changes to approval status are reflected in the system, and the approval details section is updated accordingly.
TC-007	Test if the timestamp for approvals reflects the correct time zone and approval time.	Approval timestamps are displayed correctly with accurate time zone settings.

▶▶ Test Runs: (Approx. 3 runs)

▶ Test Run 1: Basic Functional Tests

- **Focus**: Ensure all core functionalities, such as approval actions and display of approval details, work as expected.
- **Test Cases**: TC-001, TC-002, TC-003, TC-007
- **Expected Result**: Loan requests are approved correctly, and approval details are displayed accurately.

▶ Test Run 2: Negative/Edge Case Tests

- **Focus**: Validate the system's behavior under uncommon or edge scenarios, such as retracted approvals or simultaneous actions.
- **Test Cases**: TC-004, TC-005, TC-006
- **Expected Result**: System handles all edge cases without errors and reflects correct data.

▶ Test Run 3: Performance Testing

- **Focus**: Test system performance during concurrent approvals by multiple departments.
- **Test Cases**: TC-005
- **Expected Result**: The system processes multiple approvals efficiently without delays or performance degradation.

▶▶▶ Test Plan #US_005 - Corporate Investor - Commercial Registration Verification Via [X]

▶**Objective**: To ensure the system accurately verifies the commercial registration of corporate investors via third-party service [X], processes valid and invalid inputs effectively, and handles business rules based on the start date of the company.

▶ Risk-Based Testing (RBT)

ID	Description	Risk Score	Test Scenarios	Testing Focus

RBT-1	Validate integration with third-party service [X] for commercial registration verification.	High	1. Test if the system sends the commercial registration number to [X]. 2. Validate if the system retrieves accurate information for valid commercial registration inputs.	Ensure third-party integration is functional and data retrieval for valid registrations works as expected.
RBT-2	Ensure accurate handling of invalid commercial registration numbers.	High	1. Test if the system prompts the user to re-enter the commercial registration number upon invalid input. 2. Validate if the system restarts the verification process with the new number.	Ensure the system provides clear prompts for invalid entries and successfully restarts verification.
RBT-3	Validate business rule implementation for the company start date retrieved from [X].	Medium	1. Test if the system notifies the user if the company start date is less than two years. 2. Validate if the user proceeds to the next step for start dates older than two years.	Ensure start date rules are accurately validated and enforced during the verification process.

▶▶**Test Cases**

▶**Acceptance Cases:**

Test Case ID	Test Case Description	Expected Outcome
TC-001	Verify the system sends the commercial registration number to [X].	The system sends the commercial registration number to [X] successfully.
TC-002	Validate system behavior when a valid commercial registration number is verified by [X].	The system retrieves valid corporate data and allows the user to proceed.
TC-003	Test system behavior when an invalid commercial registration number is entered.	The system prompts the user to re-enter a valid number and restarts verification.
TC-004	Verify the system handles company start dates less than two years correctly.	The system notifies the user they cannot proceed due to insufficient company age.
TC-005	Verify the system allows users to proceed when the company start date is greater than two years.	The user proceeds to the next step without issues.
TC-006	Simulate third-party service [X] unavailability during verification.	The system shows an error message indicating the third-party service is unavailable & to retry after sometime

▶ Edge Cases:

Test Case ID	Test Case Description	Expected Outcome
TC-007	Test if the system handles empty or null commercial registration numbers.	The system should prompt the user to enter a valid commercial registration number.
TC-008	Test for very large or very small registration numbers (edge values).	The system should validate and reject unrealistic commercial registration numbers.
TC-009	Simulate slow response or timeout from third-party service [X].	The system should display a timeout or service unavailable message.
TC-010	Test if the system handles duplicate commercial registration numbers entered in quick succession.	The system should avoid duplicate requests and process the first valid input only.
TC-011	Test with an expired certificate or invalid credentials when authenticating with the third-party service [X].	The system should reject the verification request and prompt for re-authentication.

▶▶ Test Runs: (Approx. 3 runs)

▶ Test Run 1: Basic Functional Tests:

- **Focus:** Validate successful and unsuccessful commercial registration number verifications.
- **Test Cases:** TC-001, TC-002, TC-003.
- **Expected Outcome:** The system processes valid numbers and provides accurate prompts for invalid entries.

▶ Test Run 2: Business Rule Validation:

- **Focus:** Validate company start date rules.
- **Test Cases:** TC-004, TC-005.
- **Expected Outcome:** The system enforces start date conditions effectively.

▶ Test Run 3: Error Handling:

- **Focus:** Test scenarios where third-party service [X] is unavailable.
- **Test Cases:** TC-006, TC-009.

- Expected Outcome: The system handles third-party failures gracefully and informs the user.

▶Test Run 4: Negative/Edge Case Tests:

- Focus: Test the system's robustness against edge cases like invalid inputs, empty fields, and timeouts.
- Test Cases: TC-007, TC-008, TC-010, TC-011.
- Expected Outcome: The system reacts appropriately to edge cases with clear error messages.