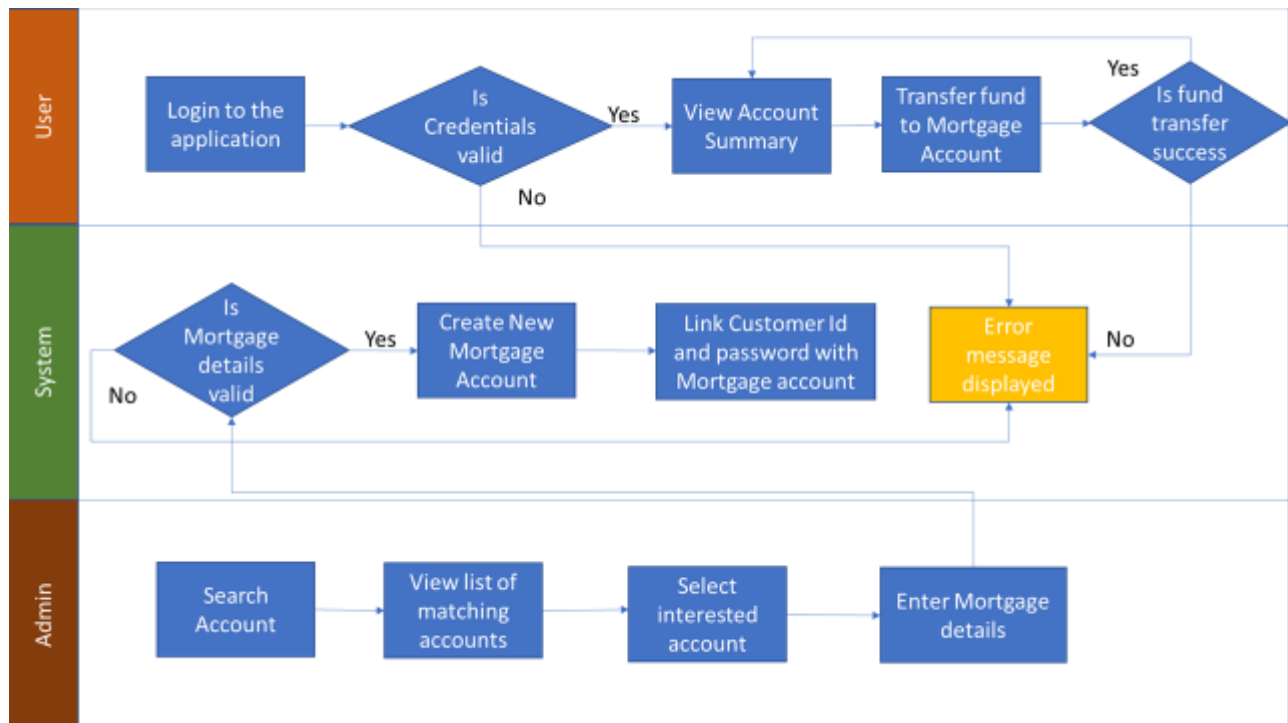


ABC Mortgage Banking

Mission

ABC Bank is looking to open the Mortgage Division. As part the new initiative, they are looking to build an application where existing customers can avail Mortgage loan for buying a new property. This loan facility is available only for the existing customer. Expectation from the resource is such that, build an application that can create a new Mortgage account (from the existing savings bank account details) without the necessity to enter duplicate information.

Process Flow:



General Requirements

1. Search Account:

As a admin user, I want to be able to search the existing account number along with the account details.

1.1. Acceptance Criteria

1.1.1. Given the partial or complete account number, I want to see the matching Savings accounts listed

2. Select Account:

As a admin user, I want to select an account from the list of Savings accounts.

2.1. Acceptance Criteria

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- 2.1.1. As a admin user, I want to see my account details selected
- 2.1.2. As a admin user, I should see the following fields: (Field names with sample data)
 - 2.1.2.1. Account Number
 - 2.1.2.2. Account Type
 - 2.1.2.3. Customer Id
 - 2.1.2.4. Customer Name
 - 2.1.2.5. Date of Birth
 - 2.1.2.6. Gender

3. Create Mortgage account:

As a admin user, I should be able to create a Mortgage Account and associate with the Savings Account

3.1. Acceptance Criteria

- 3.1.1. As a admin user, I should be able to see the details of the Savings account customer details
- 3.1.2. As a admin user, I should enter the mortgage details and able to enter below details
 - 3.1.2.1. Mortgage type Buy new property (Auto populated by default)
 - 3.1.2.2. Property cost
 - 3.1.2.3. Deposit amount (deposit should be $\geq 20\%$ of Property cost)
- 3.1.3. As a admin user, I should generate the following fields for further login:
 - 3.1.3.1. Mortgage Account Number
 - 3.1.3.2. Password
- 3.1.4. As a admin user, I should be able to create the Mortgage account with balance as negative of Property cost – deposit
- 3.1.5. As a admin user, I should be able to update the Savings account with balance as Property cost – deposit
- 3.1.6. As a admin user, I should link the newly generated customer id with both Savings account and Mortgage account

4. Customer Login:

As a user, I want to be able to login to the application using my credential, so that I can see my account summary or do a fund transfer.

Fields to be captured from UI

Customer id

Password

4.1. Acceptance Criteria

- 4.1.1. As a user, I should be able to login to the application on entering valid credentials
- 4.1.2. As a user, I should to see the error message displayed on empty or invalid credentials

5. Account Summary:

As a user, I want to be able to view the account summary of my Savings and Mortgage accounts.

5.1. Acceptance Criteria

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5.1.1. As a user, I want to view the following details in my account summary for my Savings and Mortgage accounts

- 5.1.1.1. Account Number
- 5.1.1.2. Account Type (Savings, Mortgage)
- 5.1.1.3. Available Balance
- 5.1.1.4. Last Transaction Date

6. Transfer fund to Mortgage Account:

As a user, I want to be able to transfer funds from my Savings to Mortgage account.

6.1. Acceptance Criteria

6.1.1. As a user, I want to transfer fund from my Savings to Mortgage accounts

6.1.2. As a user, I want to see the following fields while transferring funds

- 6.1.2.1. From Account: Auto populated as Savings account number (disabled)
- 6.1.2.2. To Account: Auto populated as Mortgage account number (disabled)
- 6.1.2.3. Amount: Textbox to enter the amount
- 6.1.2.4. Instructions: Textbox for comments/ remarks

General directions:

1. Mandatory

- 1.1. Proper validation of the fields.
- 1.2. Basic performance related consideration to handle large data.
- 1.3. Fully Integrated working solution with front-end properly communicating to back-end.
- 1.4. Give thought to write unit test for at least few parts (Based on priority)

2. Nice to Have

- 2.1. CSS customizations and design principles

3. Assumptions

- 3.1. Savings account has enough balance available
- 3.2. Admin user will be able to create a Mortgage account for any customer
- 3.3. The newly generated password can be used by customer to login and view details of Savings and Mortgage account

4. Guidelines

- 4.1. It's better to demonstrate one thing working well than it is to demonstrate everything half-complete
- 4.2. Use your product owners
- 4.3. Be open and honest with your stakeholders and yourselves; if you're not going to make it, change direction or negotiate scope with your product owners.

Review

ABC Mortgage Banking

Don't underestimate the importance of preparing for the review. Each team will have 15 minutes to demonstrate what they have done. Consider finishing development 15 minutes before reviews are scheduled so you have time to do a practice run.

Technology Specification

Technology Layer	Specification	Usage
User Interface	Angular / React JS	Build Front End by integrating with Service Layer
Service Layer	Spring Boot, Spring data JPA	Build API's <ul style="list-style-type: none">• Integrate with Solr for getting the existing account Details• Integrate with Database for Mortgage Flow
Data Model	MySQL	Create necessary tables and data for Mortgage flow. Create some dummy records that exist in Solr layer