

# JAVA MINI PROJECT

## Banking Management System

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Guided by : Bagesh Kumar Sir



Aim : To develop an application to help a bank manager manage customer accounts

# TEAM MEMBERS

Group Number : - 17



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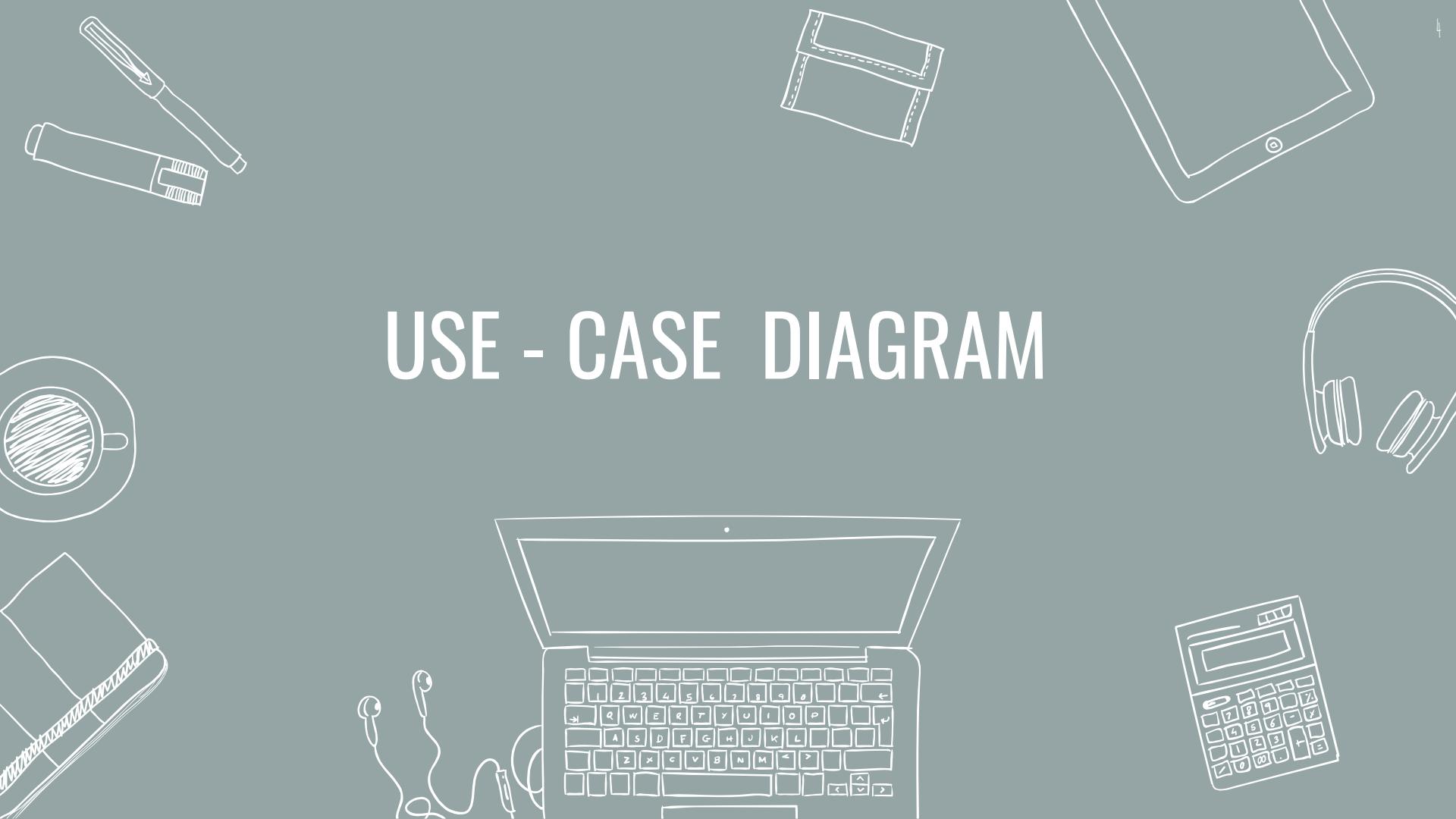


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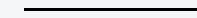
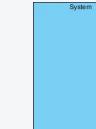
# USE - CASE DIAGRAM



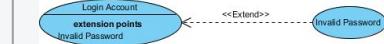
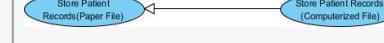
## Purpose of Use Case:

- Specify the context of a system
- Capture the requirements of a system
- Validate a systems architecture
- Drive implementation and generate test cases
- Developed by analysts together with domain experts

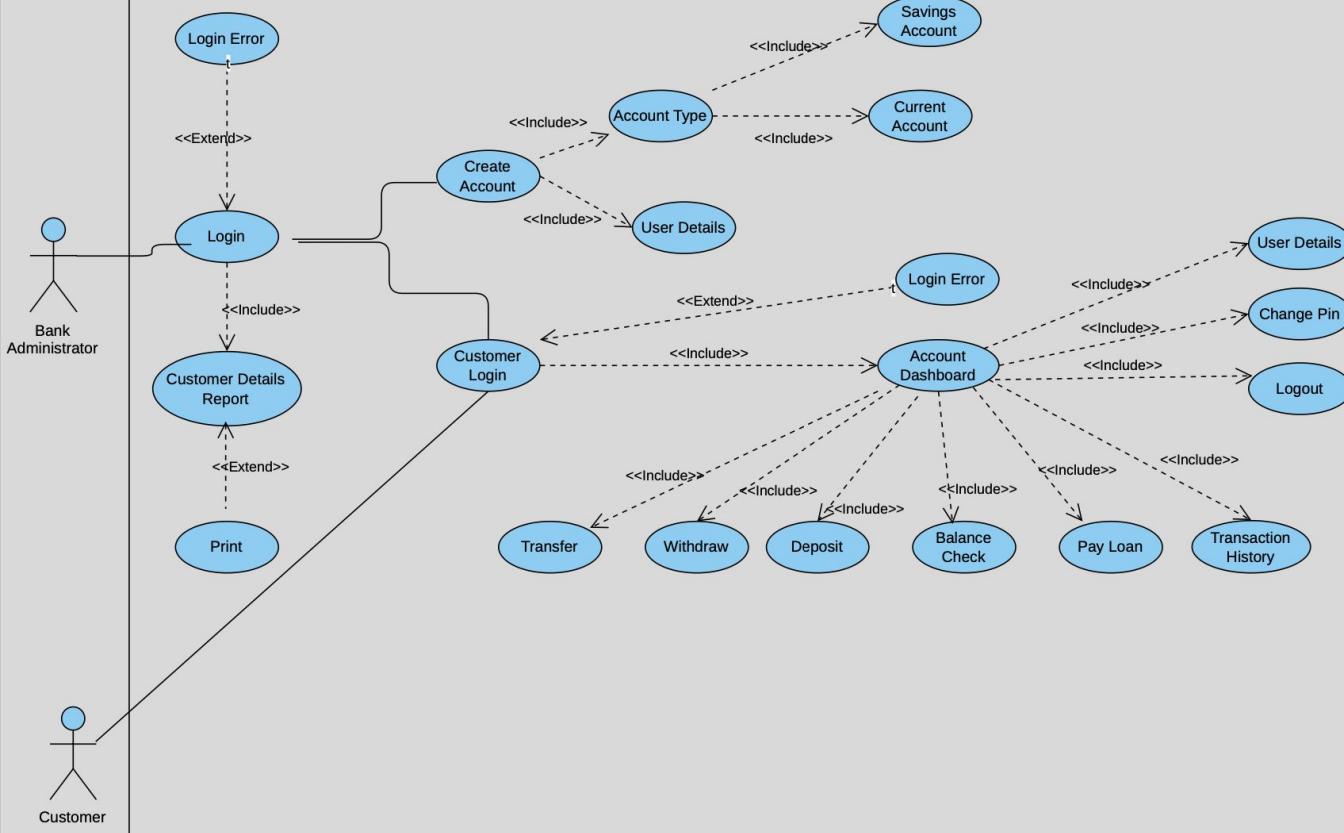
## Visual Representations Used

Actor	Someone interacts with use case (system function).	
Use Case	System function (process - automated or manual.	
Communication Link	The participation of an actor in a use case is shown by connecting an actor to a use case by a solid link.	
Boundary of the System	The system boundary is potentially the entire system as defined in the requirements document	

## Visual Representations Used

Name	Description	Visual Representation
Include	When a use case is depicted as using the functionality of another use case, the relationship between the use cases is named as include or uses relationship	
Extends	subject to specified in the extension) the behavior specified by base use case	
Generalization	A generalization relationship is a parent-child relationship between use cases.	

# BANKING MANAGEMENT SYSTEM



# Use Cases Explained

<u>Use Cases</u>	<u>Description of Use Cases</u>
<b>Customer:</b>	
Create Account	Allows User to Create a New Account
Login	Allows User to login
Verify	To Verify Valid Credentials Entered by the user
Login Error	Display an error if unable to login
Account Dashboard	Allows Users to Access Personal Details, Update Profile, Change Pin, View Account Balance, Account Number, And IFSC Code.
Personal details	To View Personal Details like Phone Number, Address, Email ID, Account Number, and Debit / Credit Card Details.

Change Pin	Allows Users to change their log in pin or Debit / Credit card pin by entering OTP received on their Mobile and Email ID.
Account	Allows the user to access the Withdraw, Balance Enquiry, Deposit, Transfer, and Transaction history methods
Pay Loan	An method through which a customer can repay a bank loan
Savings Account	An Interest-bearing deposit account
Deposit	Allows the customer to deposit money
Withdraw	Allows the customer to withdraw money

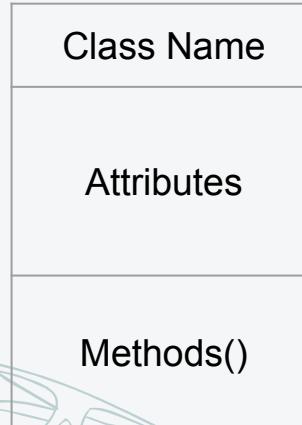
Balance Enquiry	Allows the customer to see the current account Balance
Transfer	Allows the customer to transfer money to another account
Transaction History	Give User information about their previous transactions
Print Details	Allows the customer to print a report of the current balance and the transaction history.
<b>Bank Administrator:</b>	
Authorized Login	Allows the Bank Administrator to login
Customer Information	Allows the Bank Administrator to Fetch customer information
Account Details	Allows the Bank Administrator get Information About Account Type and related Details
Print Report	Allows the bank administrator to print a report of all customers and their current account balances

# CLASS DIAGRAM

## Purpose of Class Diagram :

- Shows static structure of classifiers in a system
- Diagram provides a basic notation for other structure diagrams prescribed by UML
- Helpful for developers and other team members too
- Business Analysts can use class diagrams to model systems from a business perspective

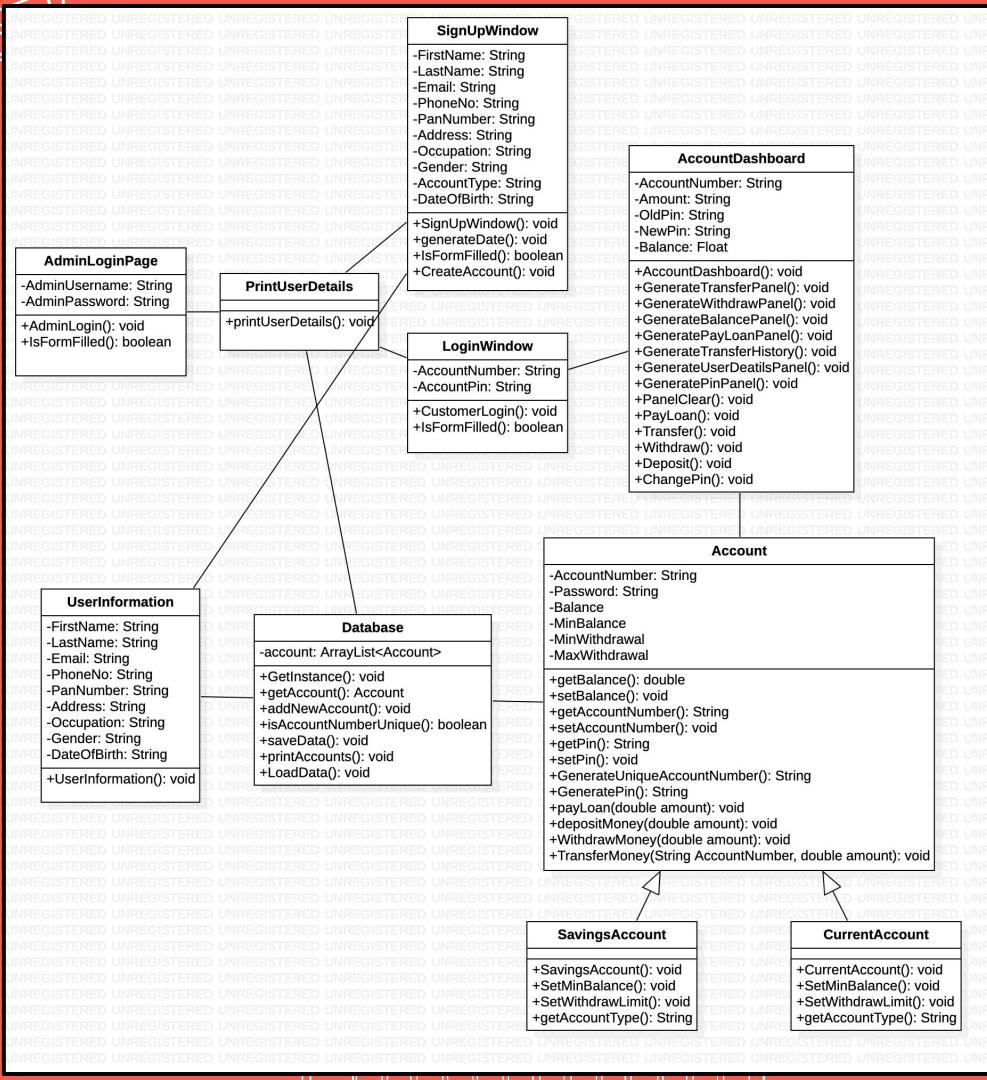
## Visual Representations Used



+ : denotes public attributes or methods

# : denotes protected attributes or methods

- : denotes private attributes or methods



## Class Description

Class Name	Description
AdminLoginPage	It allows the admin to login its account.
SignUpWindow	It takes user details as input and make new accounts for the user.
LoginWindow	It takes user credentials, verify it and allows the user to login if correct or else show credentials incorrect message.
AccountDashboard	It allows the user to view profile, change pin and choose from different account operations such as deposit, withdraw and transfer.
Account	It allows the user to perform different account operations such as deposit, withdraw, transfer, pay loan EMI etc.

## Class Description

Class Name	Description
SavingsAccount	It is a subclass of Account class. With some minimum and maximum withdraw limit.
CurrentAccount	It is a subclass of Account class. With some minimum and maximum withdraw limit.
Database	It stores all the informations about all the users.
UserInformation	It stores all the information about a user.
PrintUserDetails	It allows the bank admin to print details of all the users along with their balances.

# CRC DIAGRAM

## Purpose of CRC Diagram:

CRC cards are frequently employed during the design phase of system and software development to transition use-case descriptions into class diagrams, allowing a smoother transition with a greater overview and permitting developers to implement solutions with low binding and high cohesion.

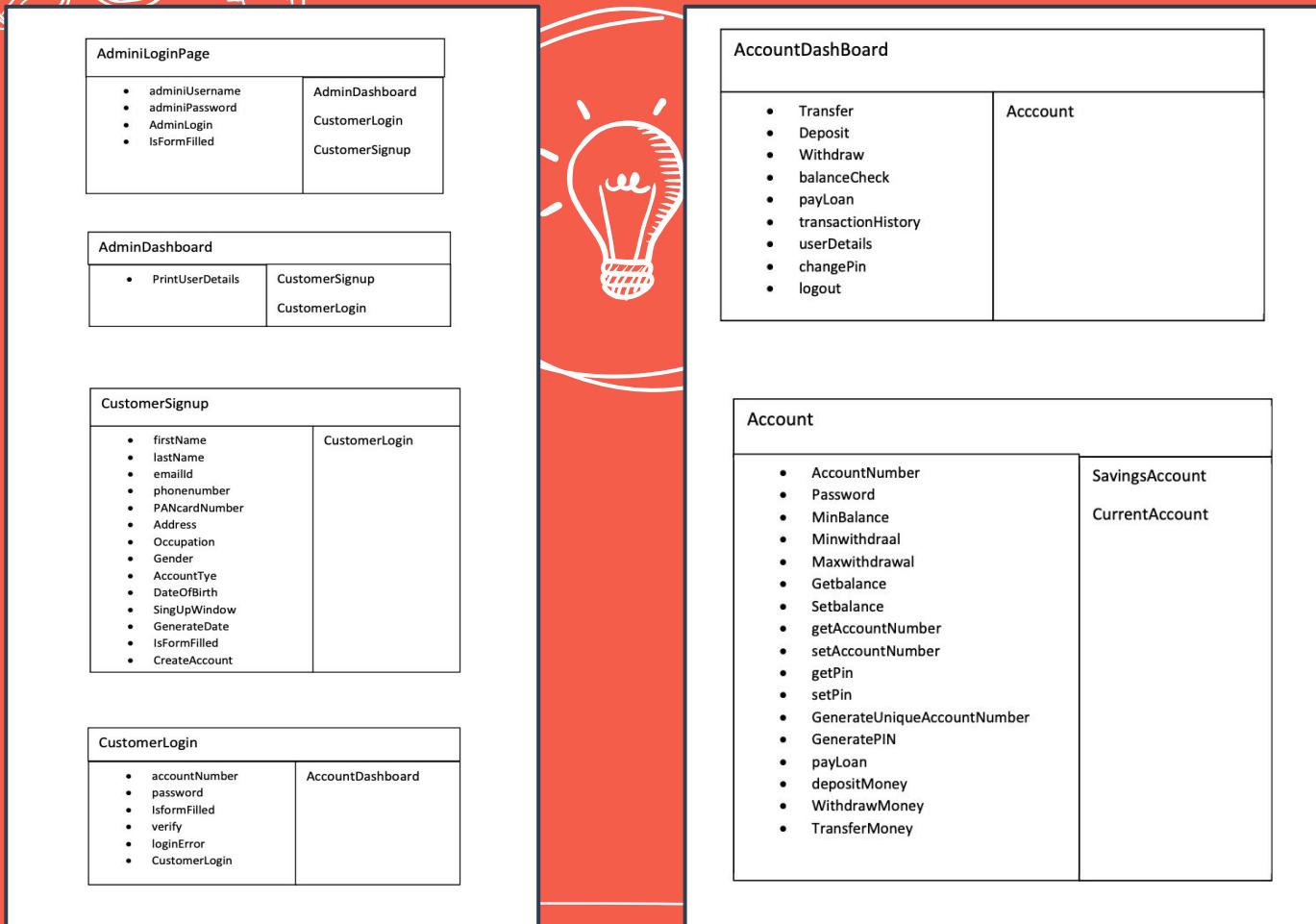
### Visual Representations Used

Class Name	
Responsibilities	Collaborators

Class name : Name of the class

Responsibilities : It contains all the methods which that class performs

Collaborators : These are the classes with whom the class collaborates



# Project Screenshots



Admin Login Page

Admin Username:

Password:



Customer Login Page

Account Number:  OR  Create A New Account



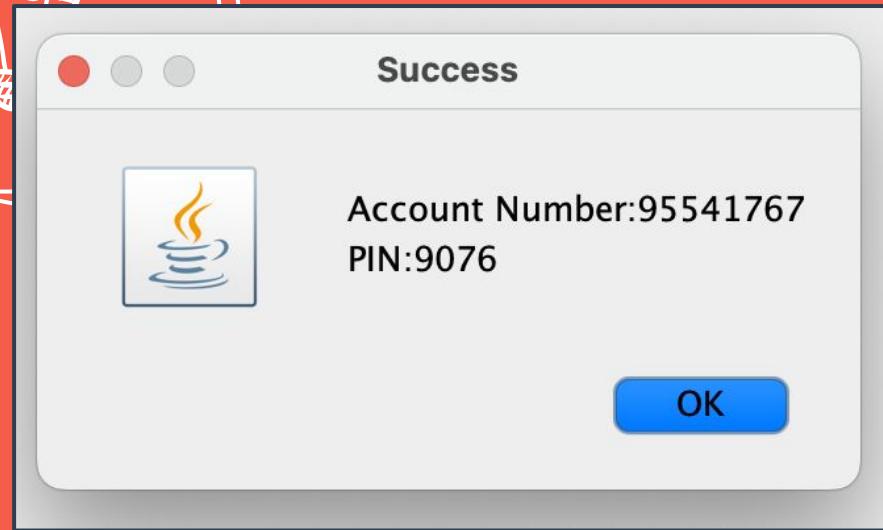
Fill up the Form below

Savings Account

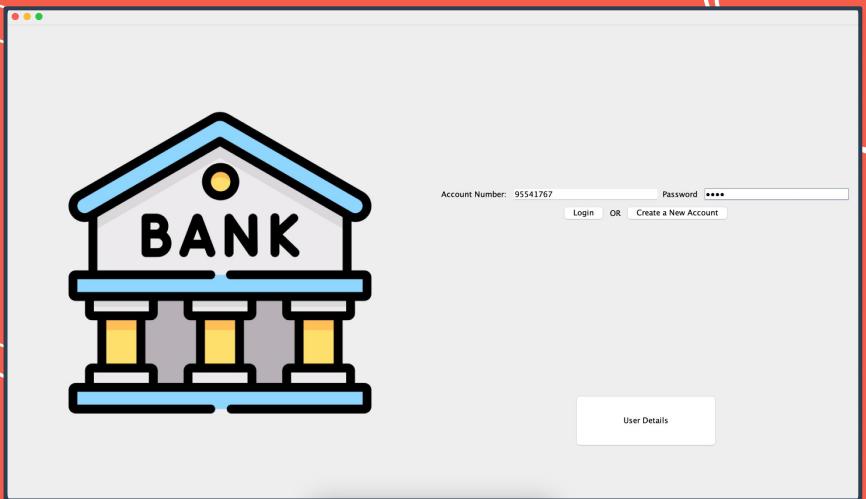
First name:	jay
Last name:	mandal
<input checked="" type="radio"/> Male	<input type="radio"/> Female
Birth Date:	1 <input type="button" value="C"/> 1 <input type="button" value="C"/> 1900 <input type="button" value="C"/>
E-Mail:	jay@gmail.com
Phone No.:	8235254880
PAN Card Number:	8976HCFJ8970
Occupation:	student
Full Address:	IIT Allahabad

[Back](#) [Create Account](#)

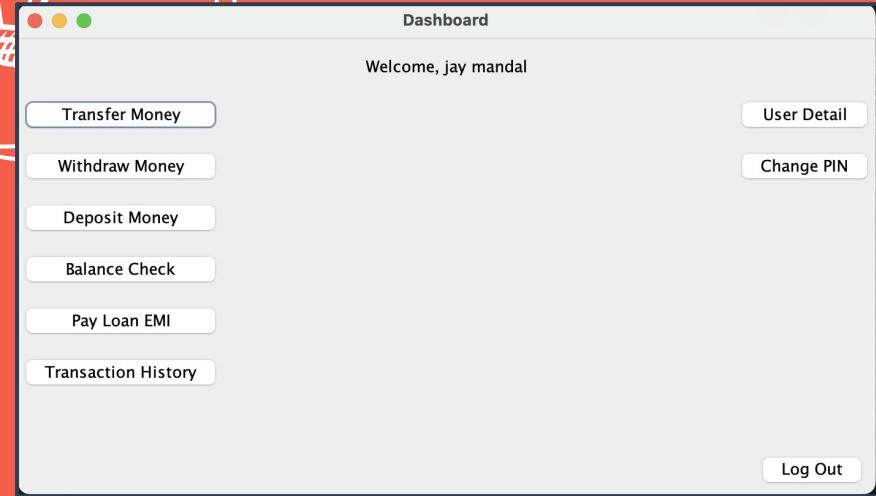
Customer Signup Page



Account No. & PIN



Customer Login Page



Account Dashboard

Dashboard

Welcome, jay mandal

Transfer Money

Withdraw Money

Deposit Money

Balance Check

Pay Loan EMI

Transaction History

User Detail

Change PIN

Enter Account Number:

Enter Amount:

Transfer

Log Out

## Transfer Money Section

Dashboard

Welcome, jay mandal

Transfer Money

Withdraw Money

Deposit Money

Balance Check

Pay Loan EMI

Transaction History

User Detail

Change PIN

Enter Amount:

Withdraw

Log Out

## Withdraw Money Section

**Dashboard**

Welcome, jay mandal

**Transfer Money**

**Withdraw Money**

**Deposit Money**

**Balance Check**

**Pay Loan EMI**

**Transaction History**

Enter Amount:

**Deposit**

**User Detail**

**Change PIN**

**Log Out**

Deposit Money Section

**Dashboard**

Welcome, jay mandal

**Transfer Money**

**Withdraw Money**

**Deposit Money**

**Balance Check**

**Pay Loan EMI**

**Transaction History**

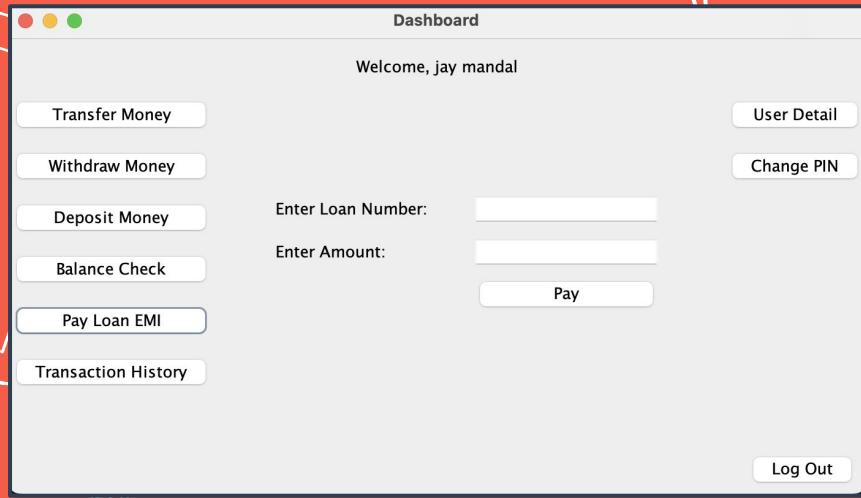
Current Balance: 500.00

**User Detail**

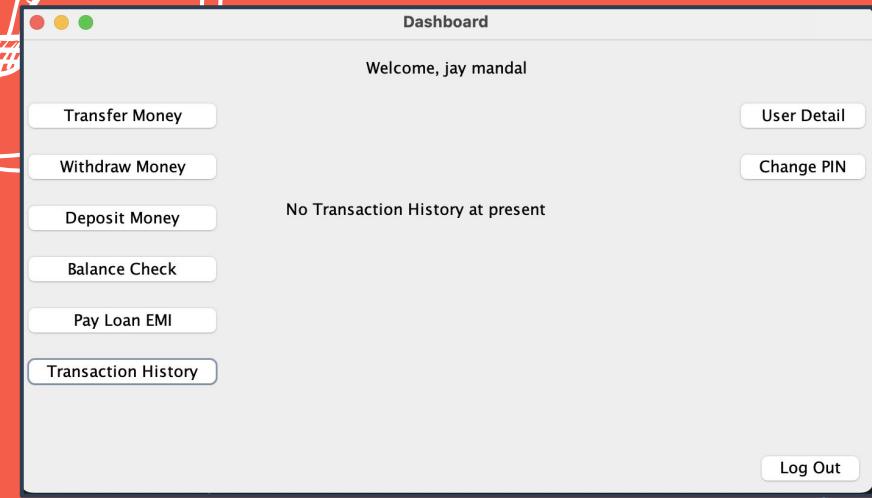
**Change PIN**

**Log Out**

Balance Check Section



Pay Loan EMI Section



Transaction History Section

**Dashboard**

Welcome, jay mandal

**Transfer Money**

**Withdraw Money**

**Deposit Money**

**Balance Check**

**Pay Loan EMI**

**Transaction History**

Old PIN:

Enter New PIN:

Re-Enter New PIN:

Submit

User Detail

Change PIN

Log Out

**Dashboard**

Welcome, jay mandal

**Transfer Money**

**Withdraw Money**

**Deposit Money**

**Balance Check**

**Pay Loan EMI**

**Transaction History**

Full Name: jay mandal

Sex: male

Date of Birth: 1/1/1900

Email: jay@gmail.com

Phone No.: 8235254880

Pan Card Number: 8976HGFJ8970

Address: IIT Allahabad

Occupation: student

User Detail

Change PIN

Log Out

Change PIN Section

Customer Personal Details

1	99220008	9638	500.0	tushar	singh	tushar@gmail.com	743583547124
2dead	adadda	sadsaas	male	Sat Feb 01 00:00:00 IST 38...false	1	90231319	
9254	500.0	jay	mandal	jay@123	8235254880	jfbshfvdsfnf	daadadad
ddasdad	male	Sat Feb 01 00:00:00 IST 38...false	1	99851744	9152	500.0	
zzzz	zzz	zzzz	zz	zzz	zz	zzz	male
Sat Feb 01 00:00:00 IST 38...false	1	95541767	9076	500.0	jay	mandal	
jay@gmail.com	8235254880	8976HGFJ8970	IIT Allahabad	student	male	Sat Feb 01 00:00:00 IST 38...false	
<a href="#">Back</a>	<a href="#">Print</a>						

## All Customer Personal Details



## Limitations and Future Scope

- If two users fill all the details exactly same unable to show that this user already exists.

## Technologies Used

- Java
- Java Swing
- File Handling



## ACKNOWLEDGEMENT

We would like to show our gratitude towards prof. O.P. Vyas sir, Dr. Rahul Kala Sir and Dr. Sonali Agarwal Mam who gave us the opportunity to work on this project under the guidance of Bagesh Kumar Sir and learn new things. We would like to show special thanks to Bagesh Sir for his awesome guiding efforts towards us.

THANKS 😊

