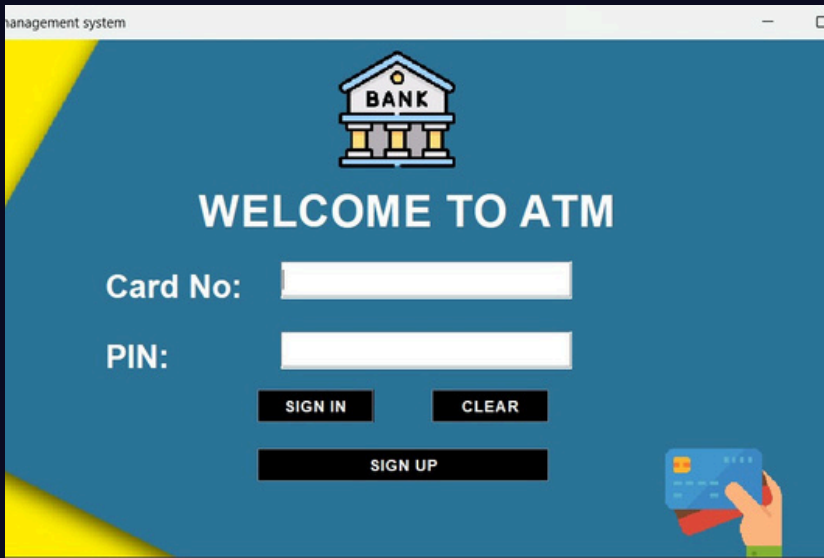


Bank Management System: A Java Swing Application

This Java-based desktop application simplifies bank operations. It uses Swing for the GUI and MySQL for the database. Users can sign up, log in, deposit, withdraw, and check balances. This project showcases Java OOP, GUI design, and database connectivity. Our goal is to create a seamless banking experience.





Login Class: User Authentication

1 Handle Authentication

Verifies user credentials against the MySQL database securely.

2 GUI for Login

Features text fields for username and password, with a login button.

3 Secure Data Handling

Includes password encryption for enhanced security.

4 Access Control

Grants application access upon valid credentials.

Signup Class: New User Registration



Enable Registration

Allows new users to create accounts easily.



Collect Details

Gathers personal information and security questions.



Secure Storage

Stores user data securely in the MySQL database.



Validate Inputs

Ensures all entered data is valid and correct.

APPLICATION FORM NO. 3308

Page 1
Personal Details

Name :

Father's Name :

Gender : ☐ Male ☐ Female

Date of Birth :

Email Address :

Marital Status : ☐ Married ☐ Unmarried ☐ Other

Address :

City :

State :

Pin Code :

Next

Page 2 :-
Additional Details

Religion :

Category :

Income :

Educational :

Occupation :

PAN Number :

Aadhar Number :

Senior Citizen : ☐ Yes ☐ No

Existing Account : ☐ Yes ☐ No

Next

Page 3:
Account Details

Account Type:

☐ Saving Account ☐ Fixed Deposit Account

☐ Current Account ☐ Recurring Deposit Account

Card Number: XXXX-XXXX-XXXX-4841
(Your 16-digit Card Number)

PIN: XXXX
(4-digit Password)

Services Required:

☐ ATM CARD ☐ Internet Banking

☐ Mobile Banking ☐ EMAIL Alerts

☐ Cheque Book ☐ E-Statement

☒ I hereby declares that the above entered details correct to the best of my knowledge.

Submit **Cancel**

Deposit Class: Fund Deposits



Enter Amount

User inputs the desired deposit amount.



Validate Input

Ensures the entered amount is valid.



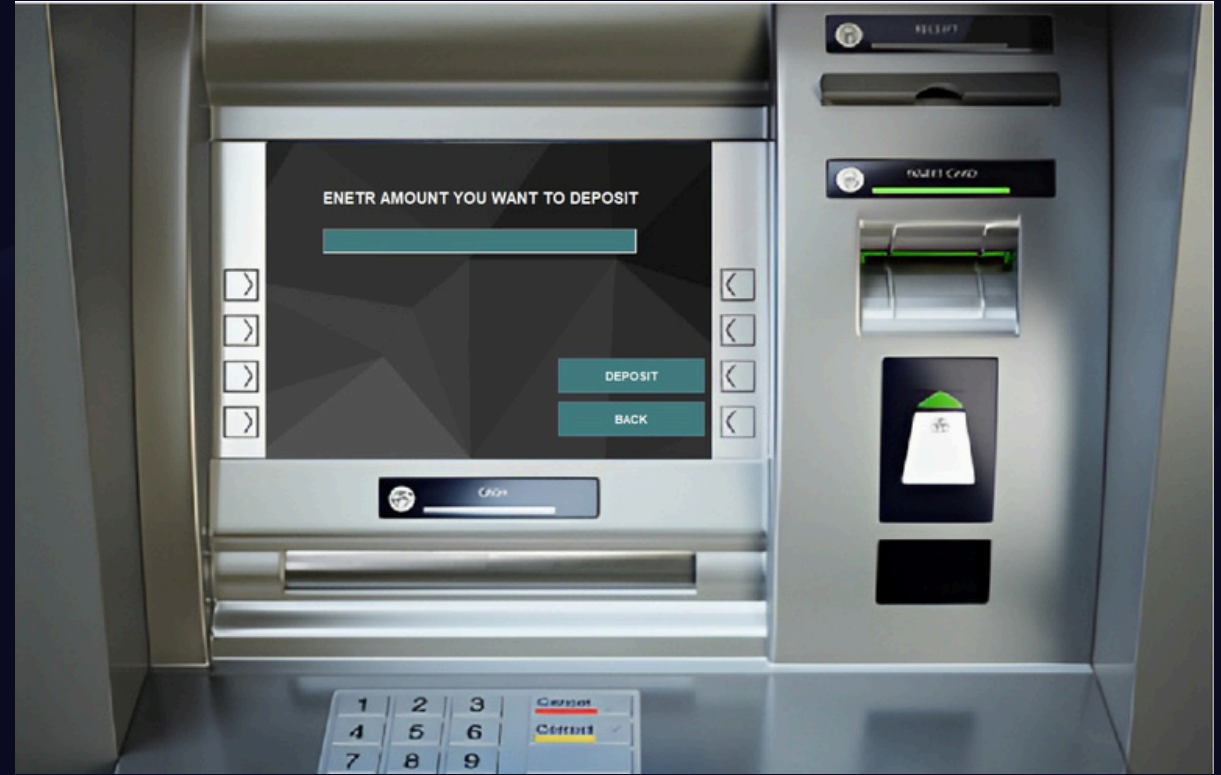
Update Balance

Account balance is updated in the database.



Confirm Transaction

Provides confirmation for the successful deposit.



FastCash Class: Quick Withdrawals

Predefined Amounts

Offers quick withdrawal buttons for common amounts.

Instant Balance Update

Updates account balance immediately after withdrawal.

Transaction Limits

Enforces daily and per-transaction limits for security.

Streamlined Workflow

Simplifies withdrawals for user convenience.



BalanceEnquiry Class: Account Balance Check

User Request

User initiates a balance inquiry.

Retrieve Data

Account balance is fetched from the MySQL database.

Display Balance

The current balance is shown on the GUI in real-time.



Conclusion: Key Benefits and Future Enhancements

Key Benefits

- Secure banking operations ensured.
- User-friendly GUI for easy navigation.
- Efficient database management system.

Future Enhancements

- Integrate mobile banking features.
- Implement advanced security protocols.
- Add more banking services and options.

```
1 package BankManagementSystem;
2
3 import java.sql.*;
4
5 public class Connn {
6     Connection connection; 2 usages
7     Statement statement; 17 usages
8     public Connn(){
9         try{
10             connection = DriverManager.getConnection( url: "jdbc:mysql://localhost:3306/bankSystem",
11 user: "root", password: "Mohit123");
12             statement = connection.createStatement();
13         }catch (Exception e){
14             e.printStackTrace();
15         }
16
17 }
```

```
2 • use bankingSystem;
3 • create table signup(form_no varchar (38), name varchar (100), father_name varchar(100), gend
4 • select * from signup;
5
6
7 • create table signuptwo(form_no varchar (38), Religion varchar (100), Category varchar(100), :
8 • select * from signuptwo;
9
10 • create table signuptthree(form_no varchar (38),account_type varchar(30),card_number varchar(30
11 • select * from signuptthree;
12
13 • create table login(form_no varchar(30),card_number varchar(30),pin varchar(30));
14 • select * from login;
15
16 • create table bank(pin varchar(10),date varchar(60),type varchar(30),amount varchar(20));
17 • select * from bank;
18
```

Thank You