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**SIPNA COLLEGE OF  
ENGINEERING & TECHNOLOGY,  
AMRAVATI**

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**SIPNA COLLEGE OF ENGINEERING & TECHNOLOGY,  
AMRAVATI.**

Department of Computer Science and Engineering

Academic Year : 2023-2024

Semester: Sixth

A PROJECT REPORT ON  
**BANK ACCOUNT MANAGEMENT SYSTEM**

Submitted for  
**SOFTWARE ENGINEERING LAB**

Submitted in

**April 2024**

Under The Guidance Of

**Prof. S. N. Sawalkar**

**SIPNA COLLEGE OF ENGINEERING & TECHNOLOGY,  
AMRAVATI**

**CERTIFICATE**

This is to certify that this mini project report entitled

**“ BANK ACCOUNT MANAGEMENT SYSTEM ”**

has been completed by the following students in the partial fulfillment of project work of the Sixth semester, Department of Computer Science and Engineering, During the Academic Session of 2023-2024. This is the record of their work under my guidance and to my immense satisfaction.

Prof. S. N. Sawalkar

Project Guide

Dr. V.K. Shandilya

HOD

(Dept. Computer Science& Engineering)

## **ACKNOWLEDGEMENT**

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## **Abstract**

The **“Bank Account Management System”** is a Java-based application designed to streamline banking processes and enhance user experience. This software allows users to perform various banking tasks efficiently, offering functionalities beyond traditional banking systems. By automating tasks such as data entry, validation, confirmation, and updating, the system significantly reduces transaction time. The project focuses on effective requirements definition and management, ensuring compliance and customer satisfaction. Through careful analysis and system specifications, the software provides a user-friendly interface for both administrators and customers. By improving transaction efficiency and adhering to deadlines and budgets, this system delivers a high return on investment for organizations

## **Introduction**

The **“Bank Account Management System”** is an internet banking platform that allows customers to conduct various banking transactions from the comfort of their homes or offices using a PC or laptop. Users can create accounts, deposit/withdraw cash, and view account reports online. This system transforms traditional banking into a virtual, accessible model, ensuring global, round-the-clock banking services. The project emphasizes an adaptable design methodology to accommodate future expansions, employing a modular approach for application software development. Account holders can easily join the system by submitting personal details and account numbers. Effective bank management is crucial for maintaining customer trust and satisfaction. Efficient management not only ensures customer and staff contentment but also aids in strategic decision-making for the bank's growth. As the world becomes increasingly computerized, the need for streamlined bank management software is evident. The system enables online transactions within the same bank or internationally, eliminating the limitations of manual processes. It addresses the challenges of managing a bank efficiently in today's fast-paced, computer-oriented world.

## **Software Requirements**

The technology selected for implementing Bank Account Management System is JAVA, SWING, MYSQL. The Development was done in Visual Studio Code.

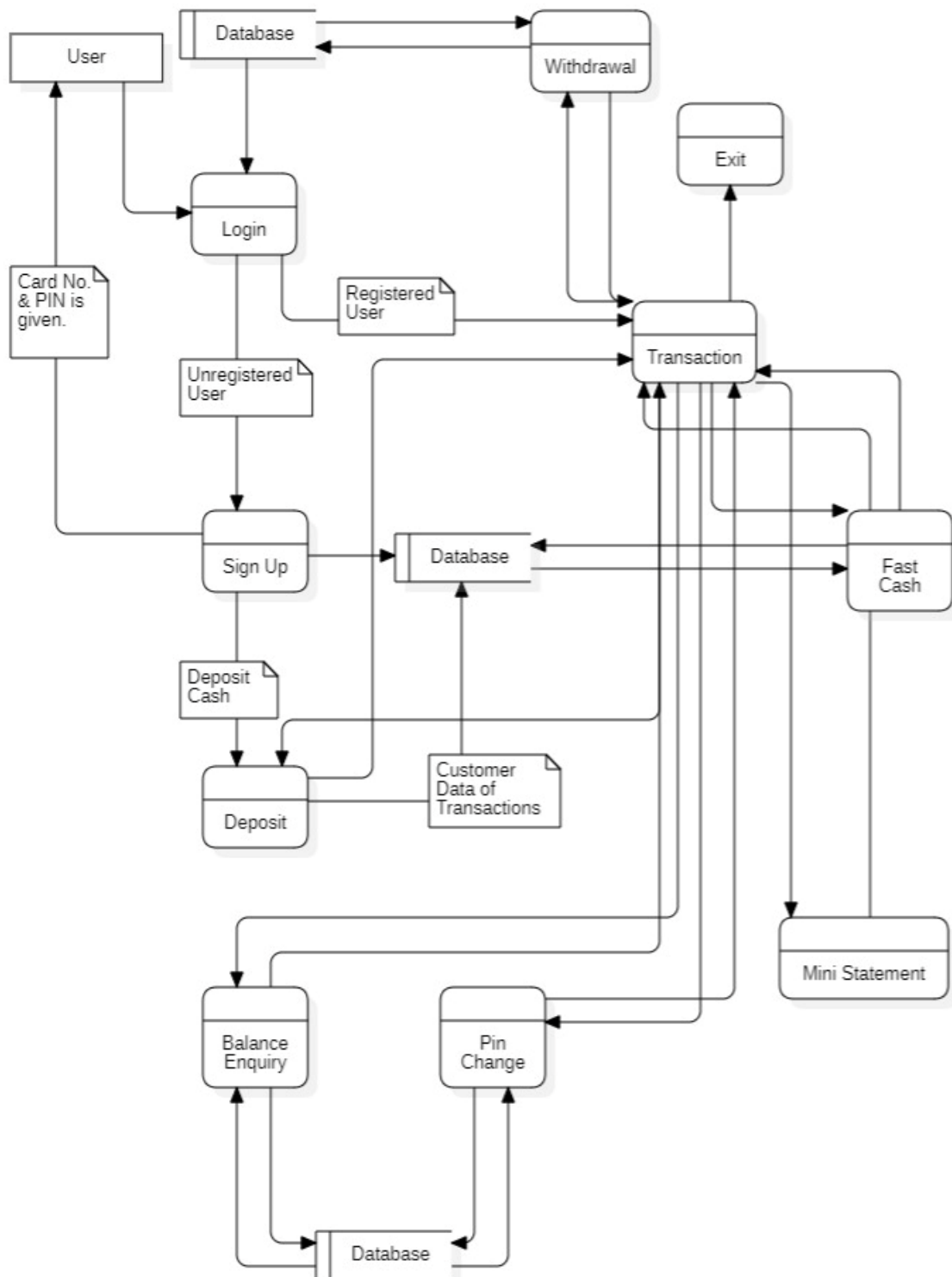
### Frontend Technologies :-

- **JAVA SWING** :- Java Swing is a GUI (Graphical User Interface) libraries for Java. You can use these libraries to create desktop applications with forms, tables, and other UI components. You can connect these applications to a database using JDBC (Java Database Connectivity) to perform CRUD (Create, Read, Update, Delete) operations.

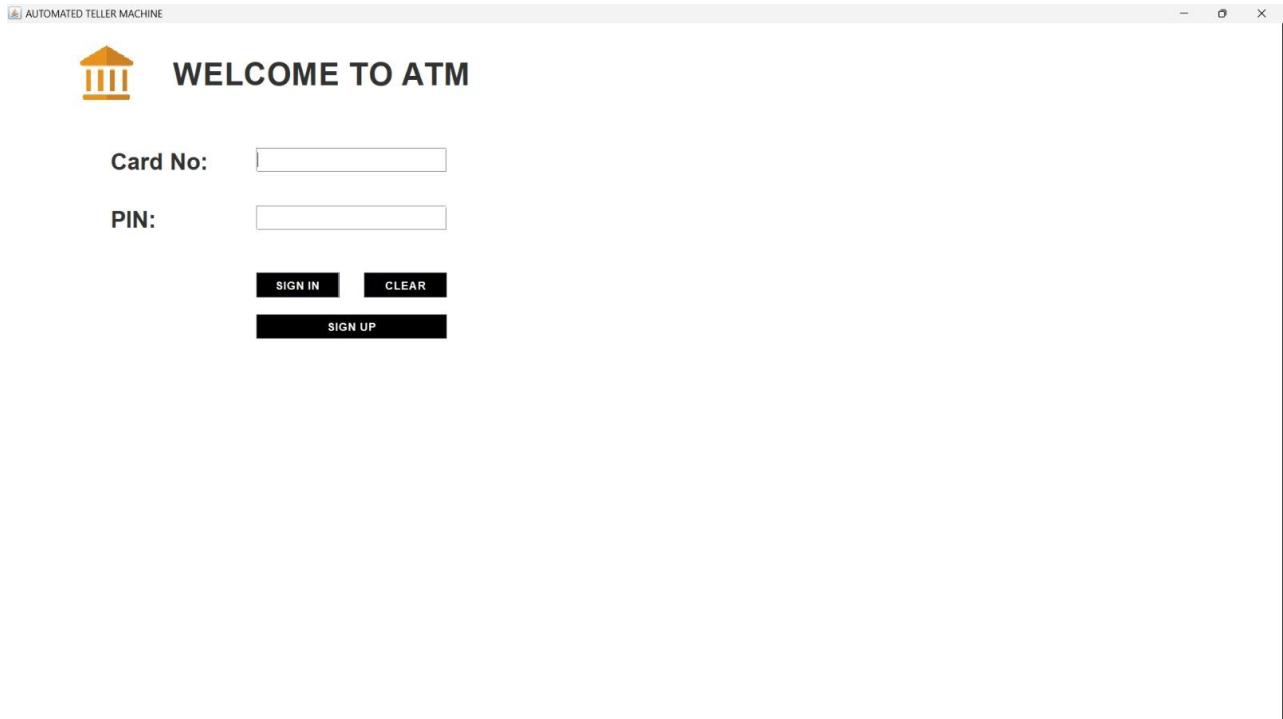
### Backend Technologies :-

- **JAVA SWING** :- Java Swing is a GUI (Graphical User Interface) libraries for Java. You can use these libraries to create desktop applications with forms, tables, and other UI components. You can connect these applications to a database using JDBC (Java Database Connectivity) to perform CRUD (Create, Read, Update, Delete) operations.
- **MYSQL** :- MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language. A relational database organizes data into one or more data tables in which data types may be related to each other; these relations help structure the data.

## DFD - Diagram

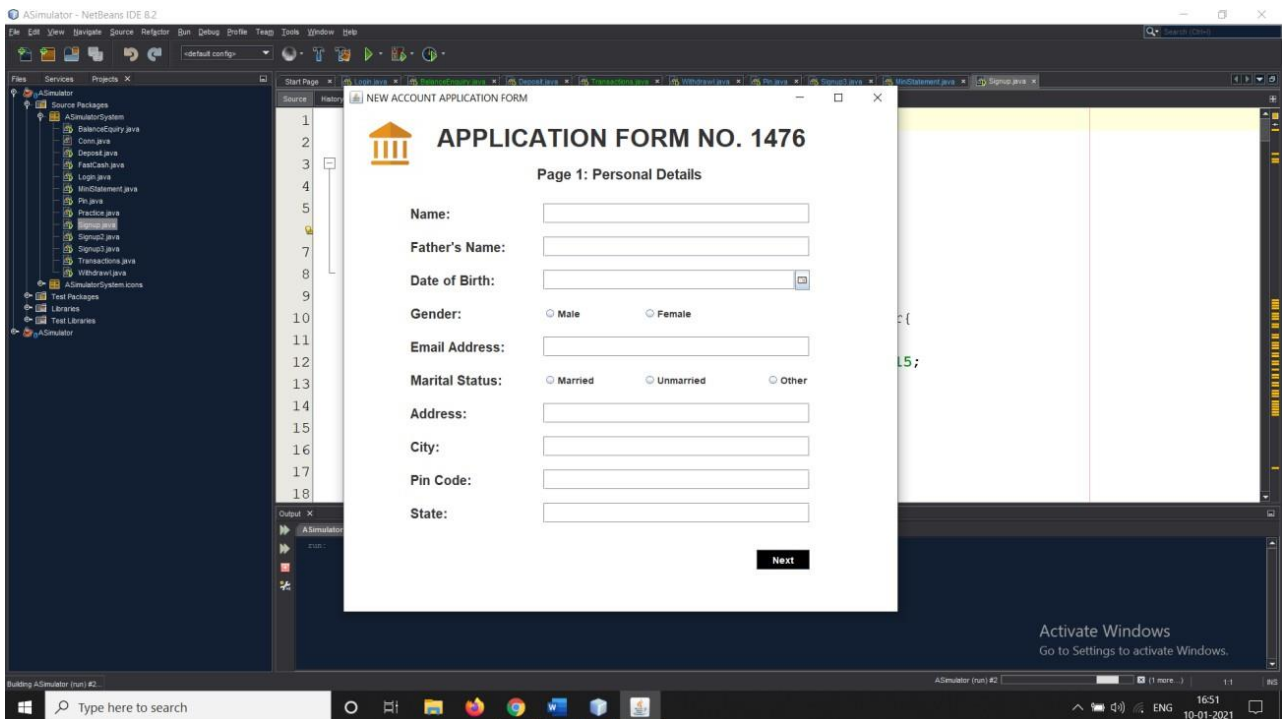


## Snapshots :-



A screenshot of an Automated Teller Machine (ATM) interface. The window title is "AUTOMATED TELLER MACHINE". It features a logo of a building with three columns and the text "WELCOME TO ATM". Below this, there are two input fields: "Card No:" and "PIN:". Under the "PIN:" field, there are three buttons: "SIGN IN", "CLEAR", and "SIGN UP".

### 1. Sign In/Sign Up Page



A screenshot of the "NEW ACCOUNT APPLICATION FORM" in the ASimulator IDE. The form is titled "APPLICATION FORM NO. 1476" and "Page 1: Personal Details". It contains the following fields and options:

- Name:
- Father's Name:
- Date of Birth:
- Gender: ☐ Male ☐ Female
- Email Address:
- Marital Status: ☐ Married ☐ Unmarried ☐ Other
- Address:
- City:
- Pin Code:
- State:

A "Next" button is located at the bottom right of the form. The background shows the ASimulator IDE interface with a file explorer on the left and a taskbar at the bottom.

### 2. Application Form Page





## Page 2: Additional Details

Form No:

Religion:

Category:

Income:

Educational Qualification:

Occupation:

PAN Number:

Aadhar Number:

Senior Citizen: ☐ Yes ☐ No

Existing Account: ☐ Yes ☐ No

**Next**

## 3. Additional Details Page



## Page 3: Account Details

Form No:

Account Type:

☒ Saving Account ☐ Fixed Deposit Account

☐ Current Account ☐ Recurring Deposit Account

Card Number: XXXX-XXXX-XXXX-4184  
(Your 16-digit Card number) It would appear on ATM Card/Cheque Book and Statements

PIN: XXXX  
(4-digit password)

Services Required:

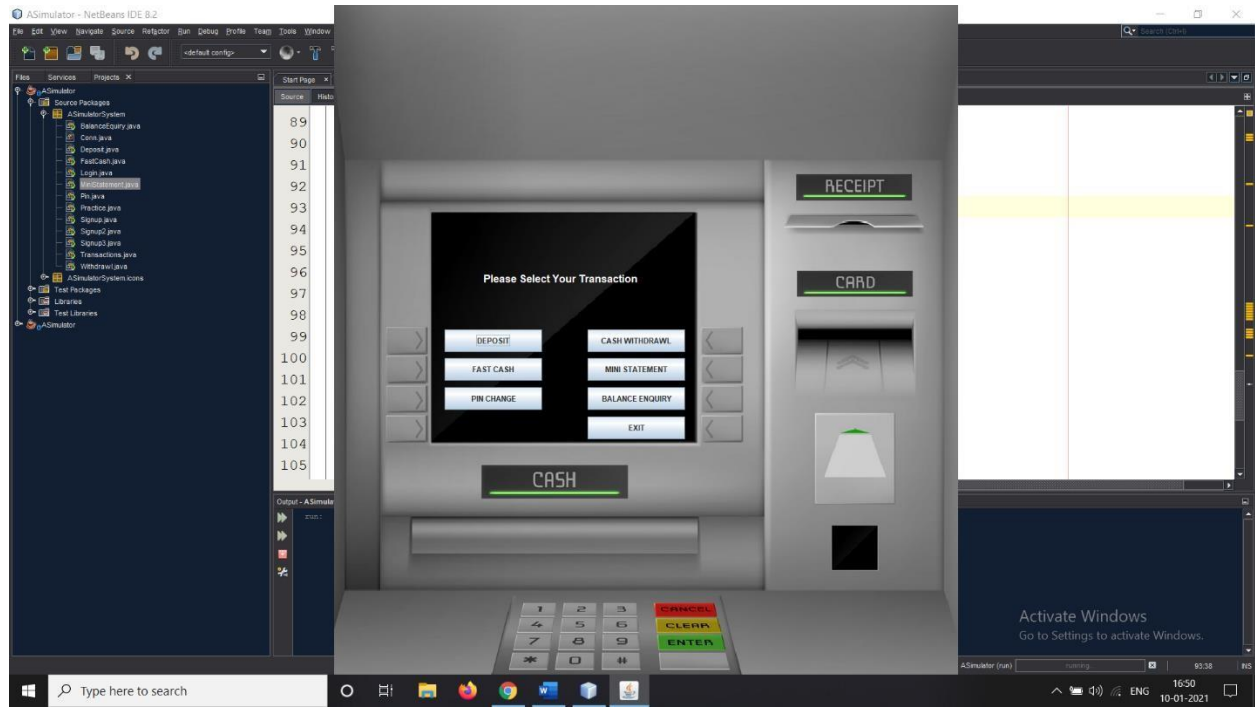
☐ ATM CARD ☐ Internet Banking

☐ Mobile Banking ☐ EMAIL Alerts

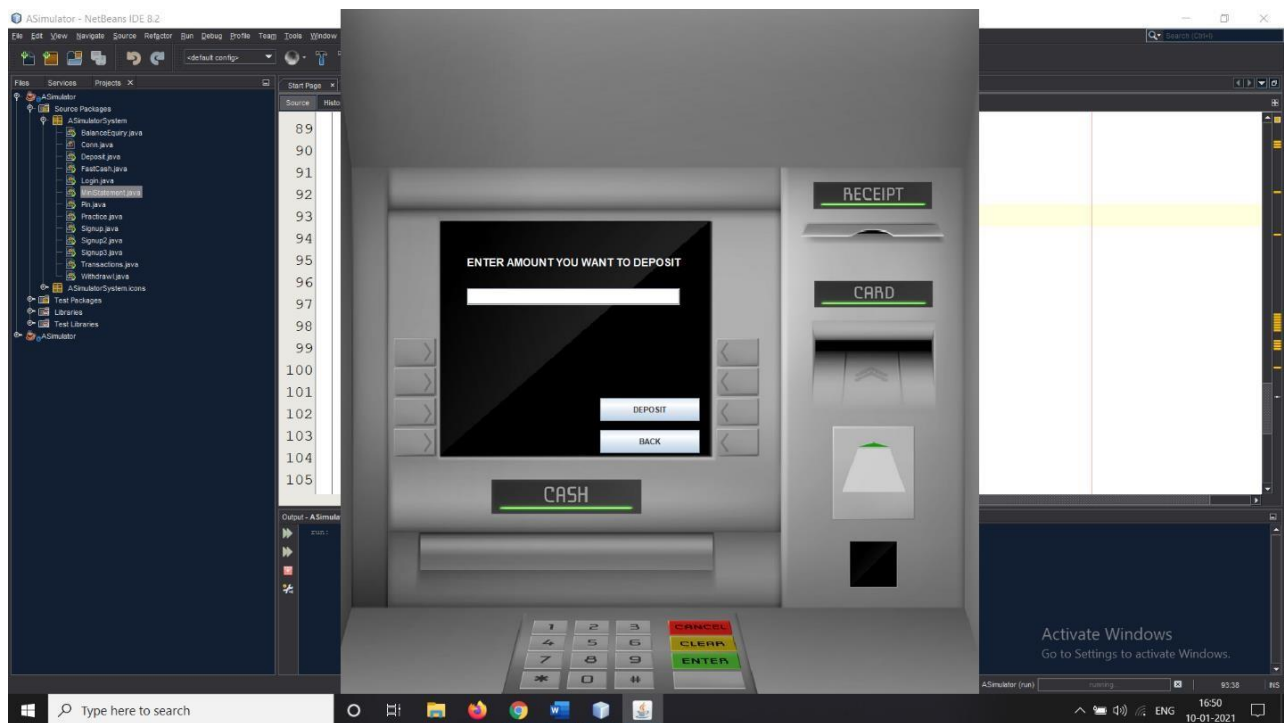
☐ Cheque Book ☐ E-Statement

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

## 4. Account Details Page



5. Transaction Page



6. Amount Deposit Page

## **Conclusion**

The "Bank Account Management System" is a Java-based application integrating Java Swing for frontend and MySQL for backend, enabling users to perform online banking tasks seamlessly. With its intuitive interface and robust functionality, it empowers users to create accounts, manage transactions, and access financial reports effortlessly. By automating processes and ensuring secure data handling, the system enhances banking efficiency and customer satisfaction, setting new standards for modern banking experiences.