Bank Account Management System

Submitted to Manipal University, Jaipur

Towards the partial fulfillment for the Award of the Degree of

MASTER OF COMPUTER APPLICATIONS

2023-2025

by

Devesh Sharma

23FS20MCA00058



Under the guidance of

Dr. Govind Murari Upadhyay

Department of Computer Applications

School of AIML, IoT&IS, CCE, DS and Computer Applications

Faculty of Science, Technology and Architecture

Manipal University Jaipur

Jaipur, Rajasthan

2025

GLOBEWICK

About the Organization

GlobeWick Is An Award Winning Marketing Agency based out in Jaipur with almost 7+ years of expertise in the Digital marketing Area. With Professional expertise in Social Media and Digital Marketing, Our Agency provides 360- degree Digital Marketing Services in Jaipur, Including SEO, Google And Facebook Ads, Social Media Marketing, Content Marketing, Influencer Marketing, Digital Marketing Services, Shopify Development, WordPress Development, Web Development, and more.

Globewick's history and roots originate from a similar place, just as every success story has a ton of effort, focus, and learning behind it. We are one of India's Top Digital Marketer's and Instagram Influencers. Our Founder Hritik Sharma, He is a Brand Consultant, Digital Marketing Trainer, Keynote Speaker. The Complete Team of Globewick works under the direction of the prodigy himself to research, plan, strategize, and implement excellent (and of course, lucrative) Digital Marketing Campaigns that assist companies in establishing a solid online presence and foundation.

We represent ourselves as the best Digital Marketing Agency In Jaipur because of our Team's potential of work diligently and create Successful Digital Marketing Solutions for Every market Niche! The Success stories of our clients say it all!

We invest out best resources and efforts in your company as a full-service digital marketing agency in Jaipur to help it stand out from the competition. Our Team of young, innovative professionals, who play significant role in the country's Digital World, will ensure you fulfill your digital marketing aspirations. Get in touch with us today if you are a brand attempting to upgrade your company's Digital Presence.

URL: https://globewick.com/

I. Introduction

The "Bank Account Management System" project is a model Internet Banking Site. This site enables the customers to perform the basic banking transactions by sitting at their office or at homes through PC or laptop. The system provides the access to the customer to create an account, deposit/withdraw the cash from his account, also to view reports of all accounts present. The customers can access the banks website for viewing their Account details and perform the transactions on account as per their requirements. With Internet Banking, the brick and mortar structure of the traditional banking gets converted into a click and portal model, thereby giving a concept of virtual banking a real shape. Thus, today's banking is no longer confined to branches. E-banking facilitates banking transactions by customers round the clock globally.

The primary aim of this "Bank Account Management System" is to provide an improved design methodology, which envisages the future expansion, and modification, which is necessary for a core sector like banking. This necessitates the design to be expandable and modifiable and so a modular approach is used in developing the application software.

Anybody who is an Account holder in this bank can become a member of Bank Account Management System. He has to fill a form with his personal details and Account Number.

Bank is the place where customers feel the sense of safety for their property. In the bank, customers deposit and withdraw their money. Transaction of money also is a part where customer takes shelter of the bank. Now to keep the belief and trust of customers, there is the positive need for management of the bank, which can handle all this with comfort and ease.

Smooth and efficient management affects the satisfaction of the customers and staff members, indirectly. And of course, it encourages management committee in taking some needed decision for future enhancement of the bank.

Now a day's, managing a bank is tedious job up to certain limit. So software that reduces the work is essential. Also, today's world is a genuine computer world and is getting faster and faster day-by-day. Thus, considering above necessities, the software for bank management has become necessary which would be useful in managing the bank more efficiently.

All transactions are carried out online by transferring from accounts in the same Bank or international bank. The software is meant to overcome the drawbacks of the manual system.

II. Motivation

1. Motto- Our motto is to develop a software program for managing the entire bank process related to Administration accounts customer accounts and to keep each every track about their property and their various transaction processes efficiently.

Hereby, our main objective is the customer's satisfaction considering today's faster in the world.

- **2. Customer Satisfaction**: Client can do his operations comfortably without any risk or losing of his privacy. Our software will perform and fulfill all the tasks that any customer would desire.
- **3. Saving Customer Time**: Client doesn't need to go to the bank to do small operation.
- **4. Protecting the Customer:** It helps the customer to be satisfied and comfortable in his choices, this protection contains customer's account, money and his privacy.
- **5. Transferring Money:** Help client transferring money to/or another bank or country.

III. Problem Statement

The Traditional way of maintaining details of a user in a bank was to enter the details and record them. Every time the user needs to perform some transactions he has to go to bank and perform the necessary actions, which may not be so feasible all the time. It may be a hard-hitting task for the users and the bankers too.

The project gives real life understanding of Online Banking System and activities performed by various roles in the supply chain. Here, we provide automation for banking system through Internet.

Online Banking System project captures activities performed by different roles in real life banking which provides enhanced techniques for maintaining the required information upto-date, which results in efficiency. The project gives real life understanding of Online Banking System and activities performed by various roles in the supply chain.

1. Manual Data Entry & Maintenance

- Traditional banking systems require manual entry and maintenance of user details.
- This process is time-consuming, prone to human errors, and difficult to manage at scale.

2. Physical Presence Requirement

- Customers need to visit the bank for transactions, account updates, or inquiries.
- This can be inconvenient, especially for individuals with mobility issues, those living in remote areas, or those with busy schedules.

3. Limited Banking Hours

- Banks operate within fixed hours, making it difficult for customers to perform transactions outside working hours.
- Emergency transactions may be delayed due to non-availability of banking services.

4. Inefficiency & Long Queues

- Physical banking operations lead to long queues and waiting times, causing frustration among customers.
- Bank staff must manually verify and process transactions, leading to operational inefficiencies.

5. Security & Data Management Issues

- o Paper-based records are vulnerable to loss, damage, or unauthorized access.
- Manual processes increase the risk of fraud, mismanagement, and security breaches.

6. Lack of Accessibility & Convenience

- Customers may find it difficult to access account details or perform transactions from remote locations.
- Traditional banking methods do not provide real-time updates or notifications about transactions.

Solution: Online Banking System

The proposed **Online Banking System** addresses these challenges by offering:

- Automated Data Management: Secure, digital storage and retrieval of user data.
- **Anywhere, Anytime Access:** Users can access banking services 24/7 from anywhere.
- **Faster Transactions:** Online fund transfers, bill payments, and account management without visiting the bank.
- **Improved Security Measures:** Multi-factor authentication, encryption, and fraud detection mechanisms.
- **Enhanced Customer Experience:** Reduced waiting times, instant notifications, and self-service options.

IV. Mssethodology/ Planning of work:

Methods

- · We need to be able to generate an account number
- · Account types: Savings or Current Account
- · Maintain/update Balance
- · Open/Close Account
- · Withdraw/Deposit

A simple user can access their account and can deposit/withdraw money from their account.

User can also transfer money from their account to any other bank account. User can see their transaction report and balance enquiry too.

- 1- User login, use PIN system
- 2- Creating/open new account registration
- 3- Funds transfer (local/international/domestic)
- 4- View statements transaction
- 5- User account details
- 6- Change Password and Pin

V. Requirements for proposed work:

1. Software Requirements:

• **OS:** Windows, macOS, or Linux

• Java: JDK 8 or later

• IDE (Optional): Eclipse, IntelliJ, or NetBeans

• **Database:** MySQL (to store user data)

• JDBC Driver: MySQL Connector/J (for database connection)

• Libraries Used: Swing (for GUI), AWT, JDateChooser (for date selection)

2. Hardware Requirements:

• **Processor:** Intel Core i3 or better

• RAM: At least 4GB (8GB recommended)

• Storage: 500MB free space

• **Display:** 1024x768 resolution or higher

3. Features (What the project does):

- User Registration (Signup)
- Deposit Money
- Check Balance
- Database Storage for Transactions

VI. Bibliography/References

1. YouTube – Various tutorials and video lectures on Java, MySQL, and banking system development.

Website: https://www.youtube.com

2. Javatpoint – Learning resources for Java, JDBC, and MySQL.

Website: https://www.javatpoint.com

3. ChatGPT – AI-powered assistance for programming queries, debugging, and concept explanations.

Website: https://chat.openai.com

4. Stack Overflow – Community-driven solutions for Java programming, debugging, and database management.

Website: https://stackoverflow.com

5. E-Banking and Its Role in Today's Society

Veneeva, V. (2006), Ezine Articles