NORTH SOUTH UNIVERSITY
Department of Electrical and Computer Engineering

PROJECT REPORT
CSE215L.12

Project Title: Bank Management System

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Introduction

In today's scenario user friendly approach is necessary in all sectors; in particular banking sectors are in competition among themselves how to develop software solutions and products so that it is more users friendly for customers. The Bank Management System provides a more secured approach for managing customer's information which strengthen the relationship between banks and their customer. The main purpose of this project is to develop a system for solving financial applications of a customer in banking environment in order to nurture the needs of an end banking user by providing various ways to perform banking tasks. The programming language used to develop this system is Java.

The Bank Management System is an application for maintaining a person's account in a bank. In this project, the main goal is to show the working of a banking management system and cover the basic functionality of a Bank Management System. The system is basically a computerized telecommunications device that provides the customers of a financial institution with access to financial transactions in a public space without the need for a human clerk or manpower. The system provides the facility of creating account in a bank to the customers. Customer can easily deposit, withdraw and transfer money through this system. So, a user-friendly approach has been made through this system and features of this project will save transaction time and therefore increase the efficiency of the system.

Project Structure

The project structure of our system is mentioned below with the information of Packages and Classes used in our project.

Project Name: Bank Management System

- Packages with corresponding Classes

  1. GUI
     - LoginWindow
     - SignUpWindow
     - AccountWindow
     - AccountView

  2. User
     - Account
     - UserInformation
     - CurrentAccount
     - SavingsAccount

  3. Data
     - UserDatabase

Features

The main features of the bank management system are:

- **User can create new account**
  The user needs to fill up the sign up form to create a new account through the system. So, a customer can easily create an account successfully by providing the required information of the system.
- **Log in option with account no. and PIN, and Log out option**
  After the sign up process, the user will be provided with and account number and a PIN number. Then, the user can log in to the system by providing the valid account number and PIN number. The user is also provided with a log out option.
- **User can view his details and can change his PIN**
  The customer has also given the flexibility of changing his/her PIN number according to their comfort. The customer can view his details in the system. For changing the PIN, the user needs to provide the old PIN and new PIN. After that, the PIN will be changed successfully and the new PIN with corresponding account number will be shown to the customer.
- **User can check his balance**
  The user can check his balance through the system. Firstly, log in your account with your account number and password. Then checking your balance doesn't require much work. You simply select balance check option and take a look at your balance.
- **User can deposit money**
  A simple user can access their account and can deposit money from their account. To deposit money to the user's account, the user only needs to enter the desired amount to be deposited in his/her account.
- **User can withdraw money**
  A user can easily withdraw money from their savings and current account but in our system the minimum withdrawal money limit for savings account is set to 500 Taka and maximum withdrawal money limit is 20,000 Taka and for current account minimum withdrawal money limit is set to 1000 Taka and maximum withdrawal money limit is 50,000 Taka.
- **User can transfer money**
  User can also transfer money from their account to any other person's bank account by providing valid account number. When you select Transfer money option, you'll be asked where to transfer the money to and from, and the amount. For transferring money to another account, the user will have to maintain an amount of 500 taka in his/her account.
- **User can pay bill**
  The user can also pay bills by entering the bill number and amount of the bill.

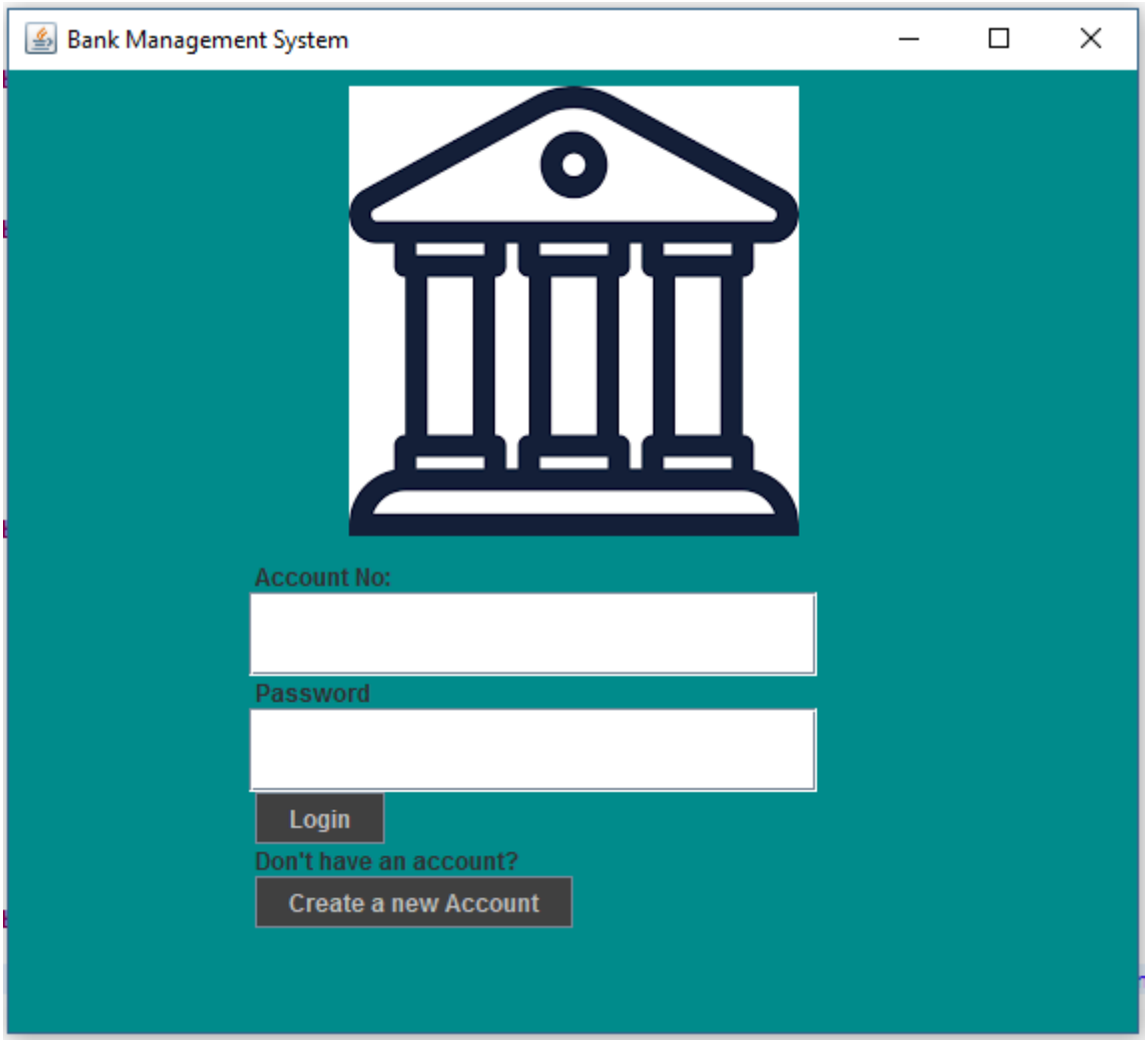

Figure 1: Customer Log in form.

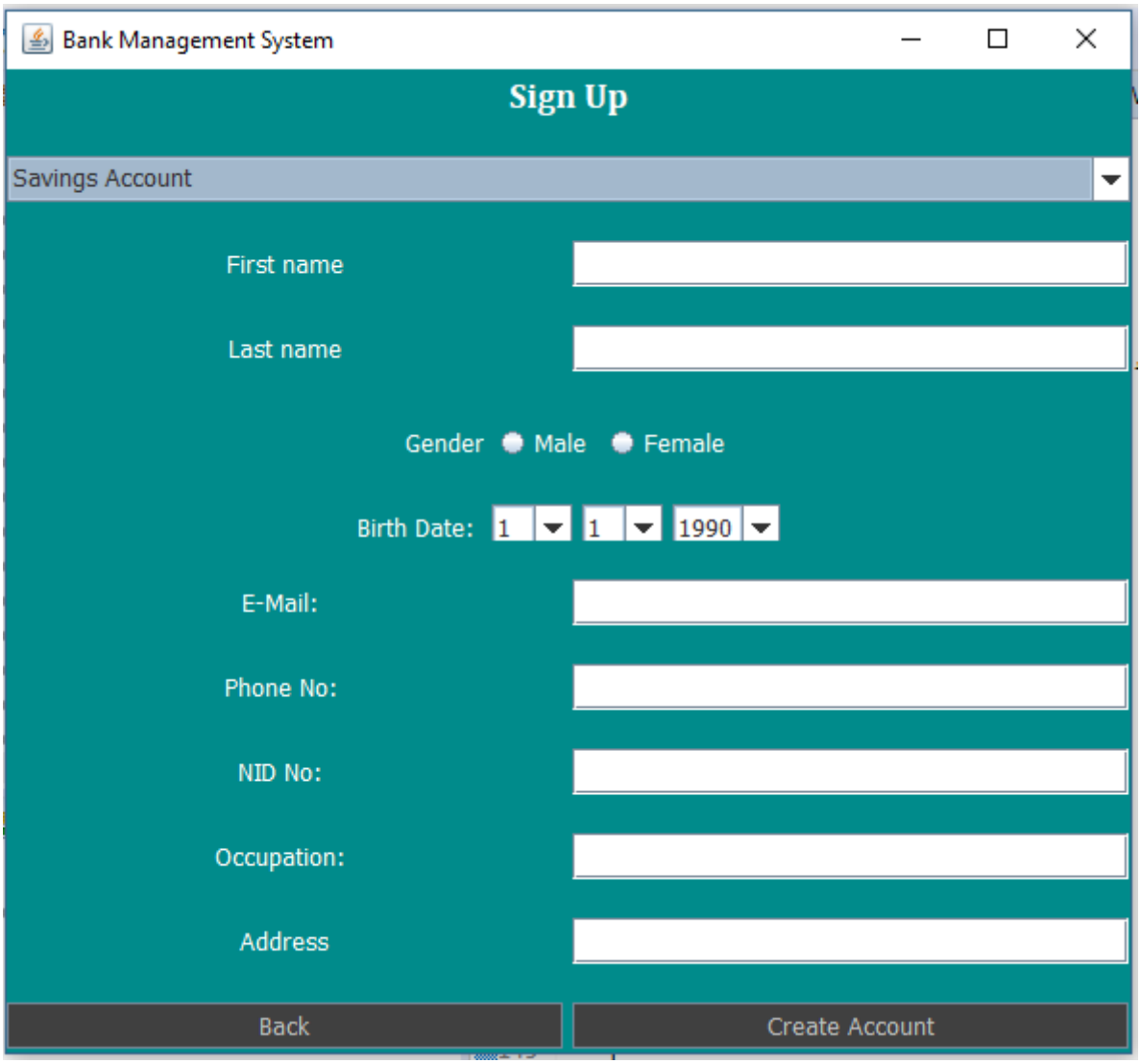

Figure 2: Customer Sign up form.

Figure 3: Customer account view.

Figure 4: User details view of a customer.

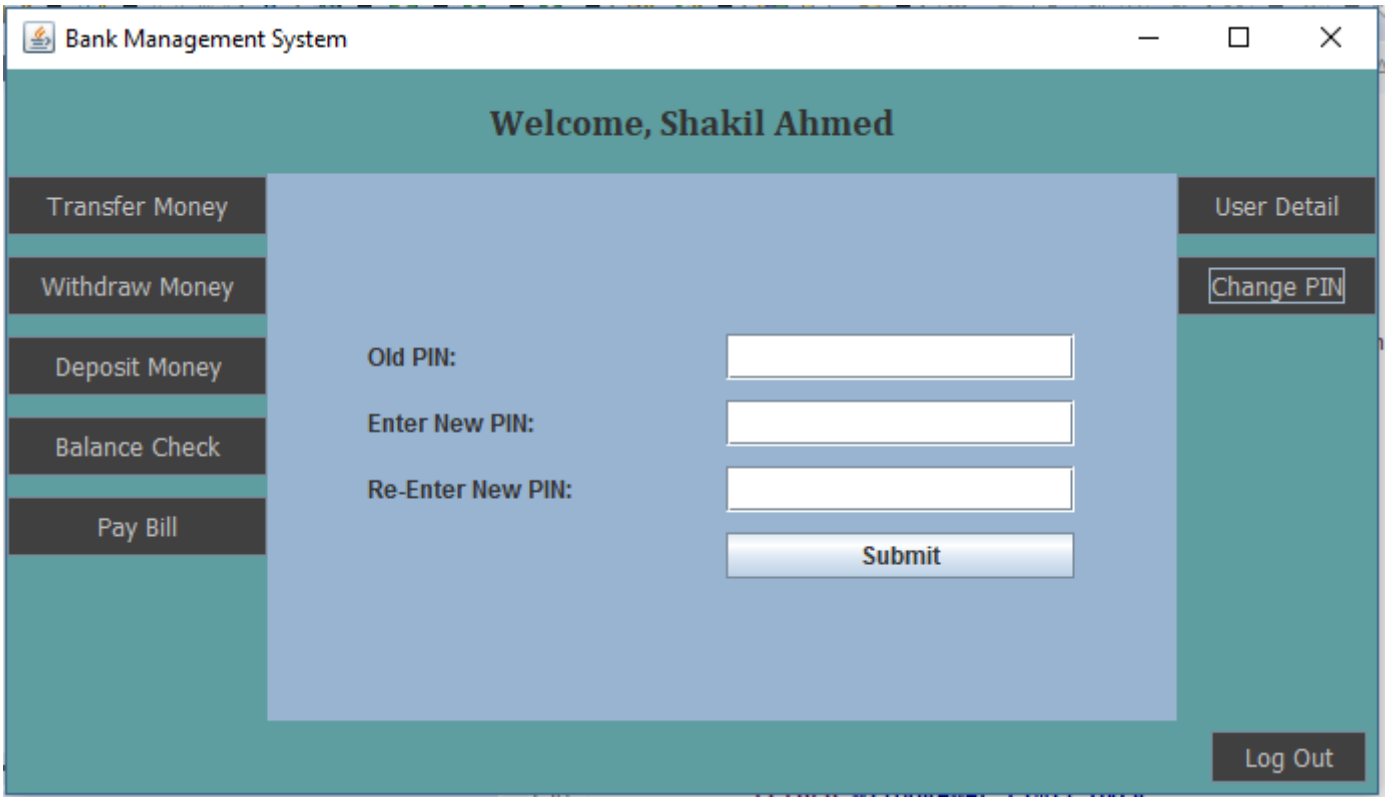

Figure 5: Change PIN option of a customer account.

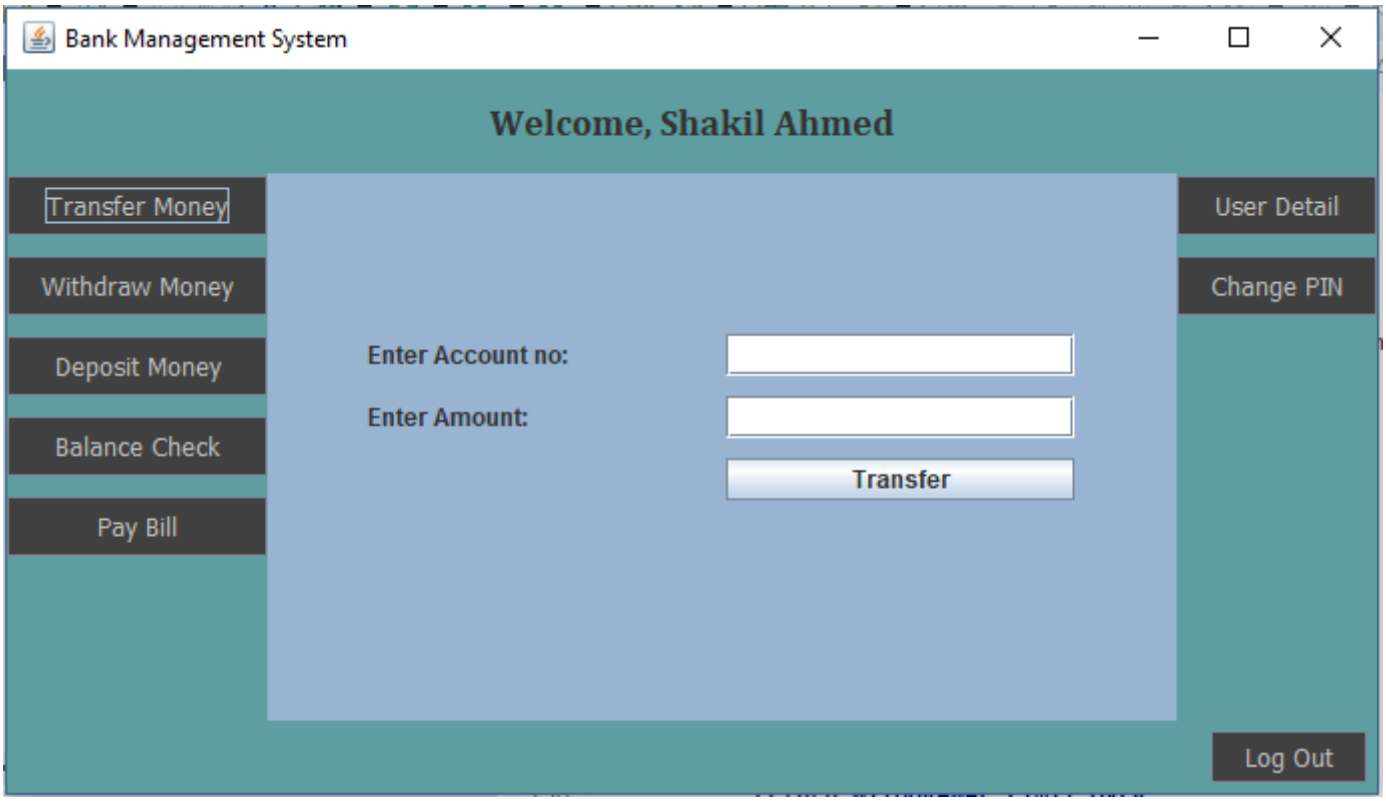

Figure 6: Transfer money option of a customer account.

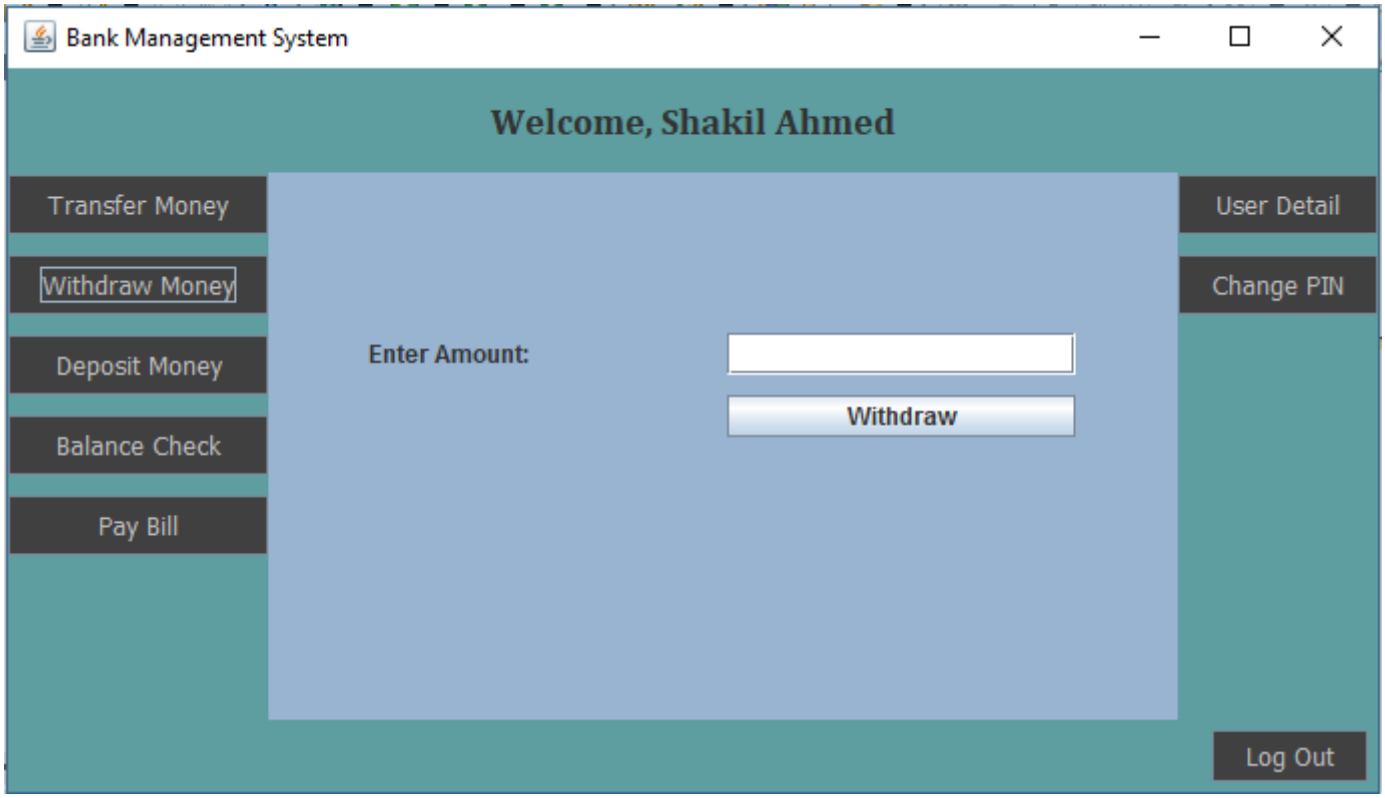

Figure 7: Withdraw money option of a customer account.

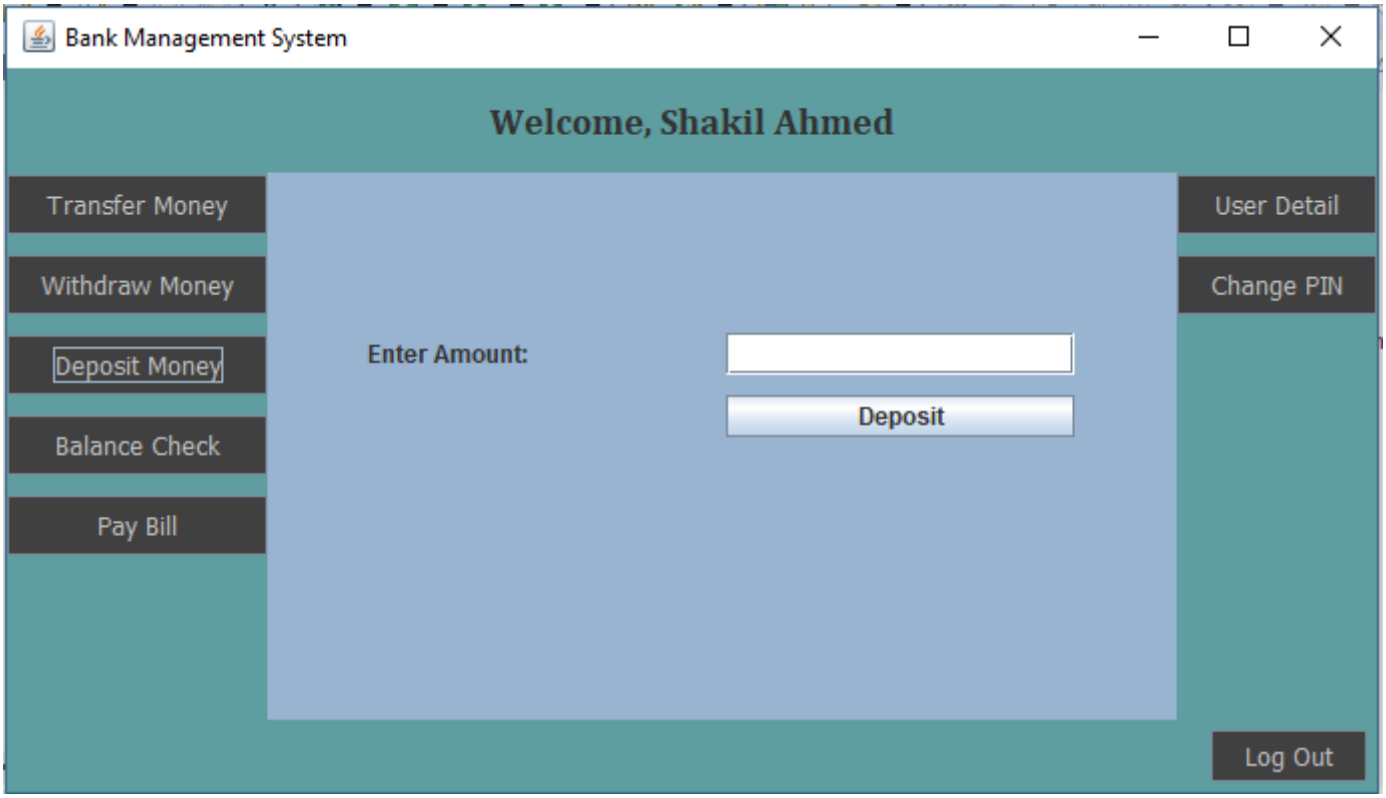

Figure 8: Deposit money option of a customer account.

Figure 9: Balance check option of a customer account.

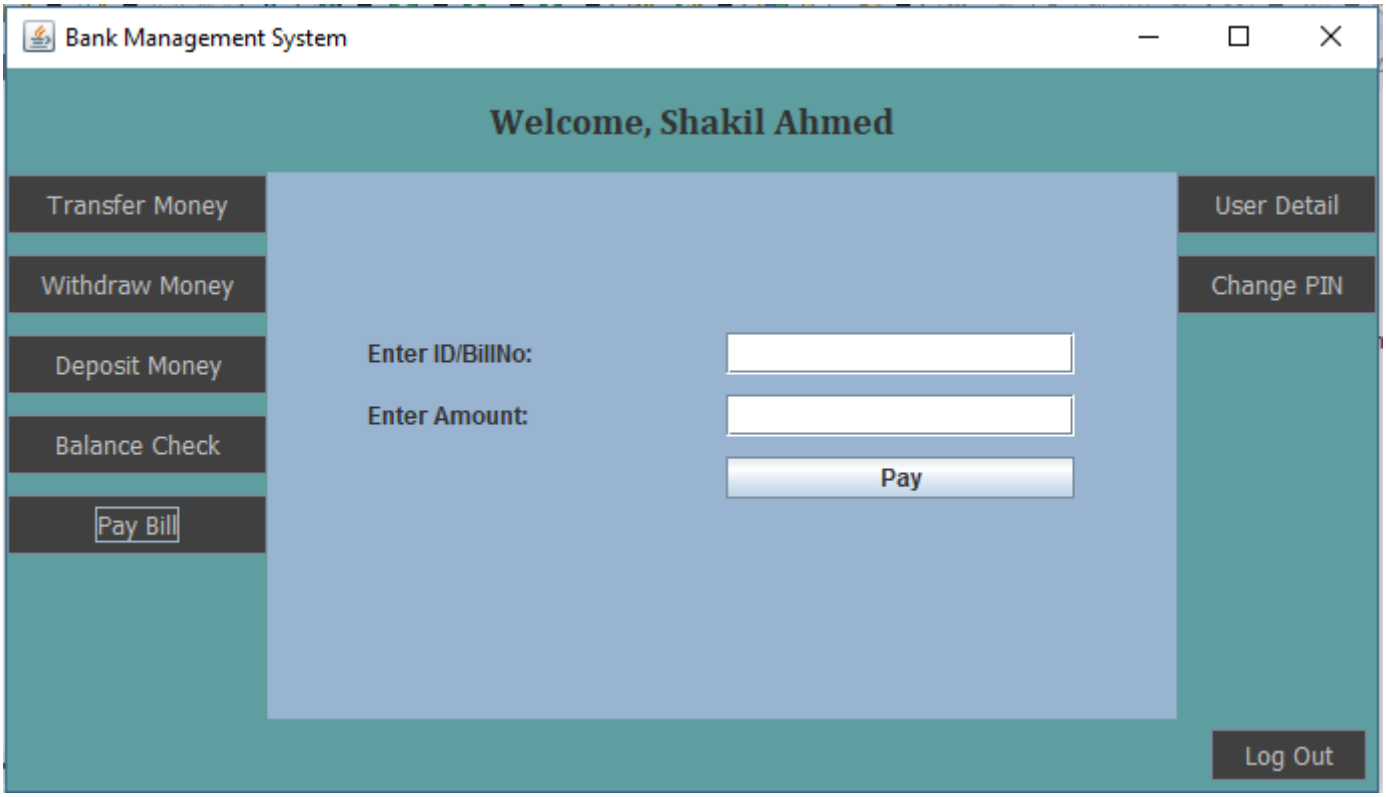

Figure 10: Pay bill option of a customer account.

Future goals

Future goal of this project will still be much enhanced than the current version. Writing and depositing checks are perhaps the most fundamental ways to move money in and out of a checking account, but advancements in technology have added ATM and debit card transactions. All banks have rules about how long it takes to access your deposits, how many debit card transactions you're allowed in a day, and how much cash you can withdraw from an ATM. Access to the balance in your checking account can also be limited by businesses that place holds on your funds. Banks are providing internet banking services also so that the customers can be attracted. So, all these addition in our present system can be added to make the system more efficient for the customers.

Conclusion

This project is developed to nurture the needs of a user in a banking sector by embedding all the tasks of transactions taking place in a bank Bank management system is an infrastructure of

transactions in banking system. The banking system are used manual working but when we used online banking system it is totally a digital process which avoid manual process and converts it in automatic process.

Thousands of bank performs millions of transactions every day and thousands of users used banking system in day to day life. As we know that, if number of users increases, we need more banks and more staff, it means increasing manual work also we put more amount of money in bank that is more risky and not much secure. If we develop advanced computerized based banking system, so there will be no need to open more branches as well the manpower is reduced and maximum information are stored automatically in banking server.

The system has made an easy way to create an account in a bank for the customers. The system has also provided a user-friendly interface to transfer, deposit and withdraw money very quickly. Bank management system is saving the time with accuracy than bank manual system.