**JAVA MAJOR PROJECT**

import java.util.Scanner;

class BankCustomer {

String name;

int accountNumber;

double balance;

// Constructor

public BankCustomer(String name, int accountNumber, double balance) {

this.name = name;

this.accountNumber = accountNumber;

this.balance = balance;

}

// Deposit money

public void deposit(double amount) {

balance += amount;

System.out.println("Deposit successful. Current balance: " + balance);

}

// Withdraw money

public void withdraw(double amount) {

if (balance >= amount) {

balance -= amount;

System.out.println("Withdrawal successful. Current balance: " + balance);

} else {

System.out.println("Insufficient funds. Withdrawal failed.");

}

}

// Calculate and add interest

public void addInterest(double rate) {

double interest = balance \* rate / 100;

balance += interest;

System.out.println("Interest added. Current balance: " + balance);

}

}

class BankEmployee {

int employeeId;

String name;

String position;

// Constructor

public BankEmployee(int employeeId, String name, String position) {

this.employeeId = employeeId;

this.name = name;

this.position = position;

}

}

class BankAdmin {

// View customer profile

public void viewCustomerProfile(BankCustomer customer) {

System.out.println("Customer Profile - Name: " + customer.name +

", Account Number: " + customer.accountNumber + ", Balance: " + customer.balance);

}

// View employee profile

public void viewEmployeeProfile(BankEmployee employee) {

System.out.println("Employee Profile - Name: " + employee.name +

", Employee ID: " + employee.employeeId + ", Position: " + employee.position);

}

}

public class BankManagementSystem {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Customer registration

System.out.println("Customer Registration");

System.out.print("Enter your name: ");

String customerName = scanner.nextLine();

System.out.print("Enter your account number: ");

int accountNumber = scanner.nextInt();

System.out.print("Enter initial balance: ");

double initialBalance = scanner.nextDouble();

BankCustomer customer = new BankCustomer(customerName, accountNumber, initialBalance);

// Employee login

System.out.println("\nEmployee Login");

System.out.print("Enter employee ID: ");

int employeeId = scanner.nextInt();

scanner.nextLine(); // Consume the newline

System.out.print("Enter employee name: ");

String employeeName = scanner.nextLine();

System.out.print("Enter employee position: ");

String employeePosition = scanner.nextLine();

BankEmployee employee = new BankEmployee(employeeId, employeeName, employeePosition);

// Admin login

BankAdmin admin = new BankAdmin();

// Customer operations

System.out.println("\nCustomer Operations");

System.out.print("Enter deposit amount: ");

double depositAmount = scanner.nextDouble();

customer.deposit(depositAmount);

System.out.print("Enter withdrawal amount: ");

double withdrawalAmount = scanner.nextDouble();

customer.withdraw(withdrawalAmount);

// Interest calculation

System.out.print("Enter interest rate: ");

double interestRate = scanner.nextDouble();

customer.addInterest(interestRate);

// Admin view profiles

System.out.println("\nAdmin View Profiles");

admin.viewCustomerProfile(customer);

admin.viewEmployeeProfile(employee);

scanner.close();

}

}

**SAMPLE OUTPUT OF THE PROGRAM:**

Customer Registration

Enter your name: John Doe

Enter your account number: 123456

Enter initial balance: 1000

Employee Login

Enter employee ID: 101

Enter employee name: Jane Employee

Enter employee position: Manager

Customer Operations

Enter deposit amount: 500

Deposit successful. Current balance: 1500

Enter withdrawal amount: 700

Withdrawal successful. Current balance: 800

Enter interest rate: 2.5

Interest added. Current balance: 820.0

Admin View Profiles

Customer Profile - Name: John Doe, Account Number: 123456, Balance: 820.0

Employee Profile - Name: Jane Employee, Employee ID: 101, Position: Manager

[NOTE:SAVE THE FILE NAME AS “BankManagementSystem. java” for execution of a program without error]