SCHOOL OF DIGITAL TRANSFORMATION

BACHELOR OF INFORMATION TECHNOLOGY (HONOURS)

STUDENT NAMES : SRI NELSON A/L PALNERSELVAM (14043)

COURSE TITLE: Programming Fundamentals

COURSE CODE: BIT6133

LECTURER NAME: MR. FEROZ

ASSIGNMENT TITLE: Java Bank System

I have designed a java bank system for this group assignment with required functionality where a user can deposit and take money from a specific account whenever they want. Adding in a validation input is present to allow only a certain amount of cash flows at any given time, as well with withdrawals if the balance is sufficient.

SOURCE CODE

```
import java.util.Scanner;
class BankDetails {
    private String accno;
    private String name;
    private String acc_type;
    private long balance;
    Scanner sc = new Scanner(System.in);
    //method to open new account
    public void openAccount() {
        System.out.print("Enter Your Account No: ");
        accno = sc.next();
        System.out.print("Enter Your Account type: ");
        acc_type = sc.next();
        System.out.print("Enter Your Name: ");
        name = sc.next();
        System.out.print("Enter Your Balance: ");
        balance = sc.nextLong();
    }
    //method to display account details
```

```
public void showAccount() {
    System.out.println("Name of account holder: " + name);
    System.out.println("Account no.: " + accno);
    System.out.println("Account type: " + acc_type);
    System.out.println("Balance: " + balance);
}
//method to deposit money
public void deposit() {
    long amt;
    System.out.println("Enter the amount you want to deposit: ");
    amt = sc.nextLong();
    balance = balance + amt;
}
//method to withdraw money
public void withdrawal() {
    long amt;
    System.out.println("Enter the amount you want to withdraw: ");
    amt = sc.nextLong();
    if (balance >= amt) {
        balance = balance - amt;
        System.out.println("Balance after withdrawal: " + balance);
    } else {
        System.out.println("Your balance is less than " + amt + "\tTransaction failed...!!" );
    }
```

```
    }
    //method to search an account number
    public boolean search(String ac_no) {
        if (accno.equals(ac_no)) {
            showAccount();
            return (true);
        }
        return (false);
    }
}



public class BankApp {
    public static void main(String[] args) {
       Scanner sc = new Scanner(System.in);
        //create initial accounts
        System.out.print("How many number of customers do you want to input? ");
        int n = sc.nextInt();
        BankDetails C[] = new BankDetails[n];
        for (int i = 0; i < C.length; i++) {
            C[i] = new BankDetails();
            C[i].openAccount();
        }
        // loop runs until number 5 is not pressed to exit
```

```
int ch;
do {
    System.out.println("\n **Banking System Application**");
    System.out.println("1. Display all account details \n 2. Search by Account number\n
3. Deposit the amount \n 4. Withdraw the amount \n 5.Exit ");
    System.out.println("Enter your choice: ");
    ch = sc.nextInt();
      switch (ch) {
        case 1:
          for (int i = 0; i < C.length; i++) {
            C[i].showAccount();
          }
          break;
        case 2:
          System.out.print("Enter account no. you want to search: ");
          String ac_no = sc.next();
          boolean found = false;
          for (int i = 0; i < C.length; i++) {
            found = C[i].search(ac_no);
            if (found) {
              break;
            }
          }
          if (!found) {
            System.out.println("Search failed! Account doesn't exist..!!");
```

```
    }
    break;
case 3:
    System.out.print("Enter Account no. : ");
    ac_no = sc.next();
    found = false;
    for (int i = 0; i < C.length; i++) {
        found = C[i].search(ac_no);
        if (found) {
            C[i].deposit();
            break;
        }
    }
    if (!found) {
        System.out.println("Search failed! Account doesn't exist..!!");
    }
    break;
case 4:
    System.out.print("Enter Account No : ");
    ac_no = sc.next();
    found = false;
    for (int i = 0; i < C.length; i++) {
        found = C[i].search(ac_no);
        if (found) {
```

```
                    C[i].withdrawal();
                    break;
                }
            }
            if (!found) {
                System.out.println("Search failed! Account doesn't exist..!!");
            }
            break;
        case 5:
            System.out.println("See you soon...");
            break;
        }
    }
    while (ch != 5);
  }
}
```

SCREENSHOT OUTPUT