Name : Devadharshini T K

E mail : tkdevadharshini31@gmail.com

Domain : Java Development Internship (1st march 2024)

Task 1 : ATM INTERFACE

```
package atminterface;

import java.util.*;

public class Atminterface

{

   public static double balance=10000;

   public static ArrayList<Transaction> transact_history=new ArrayList<>();

   public static void main(String[] args)

   {

       int ch;

      double amount;

      TransactionHis ob2=new TransactionHis();

      Withdrawl ob3=new Withdrawl();

      Dep ob4=new Dep();

      Transfer ob5=new Transfer();

     System.out.println("Welcome to ATM");

    Atm ob1=new Atm();

     ob1.authenticate();

     Scanner scan=new Scanner(System.in);

     Do{

     System.out.println("Atm menu");

     System.out.println("1.Transaction History\n2.Withdraw\n3.Deposit\n4.Transfer\n5.Quit");

     ch=scan.nextInt();

     switch(ch)

     {

        case 1:

            ob2.printHistory();

            break;
```

```
        case 2:
            System.out.println("Enter amount for withdrawl : ");
            amount=scan.nextDouble();
            ob3.withdraw(amount);
            ob2.addToHistory("Withdraw : $"+amount);
            break;
        case 3:
            System.out.println("Enter amount for deposit :");
            amount=scan.nextDouble();
            ob4.deposit(amount);
            ob2.addToHistory("Amount Deposited : $"+amount);
            break;
        case 4:
            System.out.println("Enter amount to transfer in another account");
            amount=scan.nextDouble();
            ob5.trans(amount);
            ob2.addToHistory("Amount Transferred : $ "+amount);
            break;
        case 5:
            System.out.println("Thanks for using this ATM");
            System.exit(0);
            break;
      }
      System.out.println("Enter to continue operation from 1 to 5");
      ch=scan.nextInt();
      }while(ch!=0);
    }
}
class Atm
{
    private static final String userid="student";
```

```
    private static  final String pass="12345";
    private static final Scanner scan=new Scanner(System.in);
    public static void authenticate()
    {
      System.out.println("Please enter user ID :");
      String user_id=scan.nextLine();
      System.out.println("Please enter password :");
      String password=scan.nextLine();
      if(user_id.equals(userid)&&password.equals(pass))
      {
         System.out.println("Authenticate successful");
         return;
      }
      else
      {
        System.out.println("Authenticate failed.please try again");
        authenticate();
      }
    }
}
class TransactionHis
{
   private ArrayList<String> transact_history;
   public TransactionHis(){
      this.transact_history=new ArrayList<String>();
   }
   public void addToHistory(String transaction){
      transact_history.add(transaction);
   }
   public void printHistory()
   {
```

```
      System.out.println("Transcation History ");
      for(String transaction:transact_history)
      {
         System.out.println(transaction);
      }
   }
}
class Dep
{
    Atminterface obj=new Atminterface();
   public void deposit(double amount)
   {
      obj.balance += amount;
      System.out.println("Amount"+amount+"Deposited successfully and the balance is : "+obj.balance);
   }
}
class Withdrawl
{
    Atminterface obj=new Atminterface();
   public void withdraw(double amount)
   {
      if(obj.balance>=amount){
           obj.balance -= amount;
          System.out.println("After withdraw the balance amount is : "+obj.balance);
      }
      else
         System.out.println("Insufficient balance");
   }
}
class Transfer
{
```

```
    Atminterface obj=new Atminterface();
    int acc_num=127637;
    public boolean trans(double amount)
    {
     double receiver_accbal=0;
     if(amount>obj.balance)
     {
        System.out.println("You dont have sufficient balance for transfer : "+receiver_accbal);
        return false;
     }
     else
     {
        receiver_accbal=amount;
        obj.balance -= amount;
        System.out.println("money transferred to "+acc_num+ " and the balance in that acc is :
  "+receiver_accbal);
        System.out.println(" balance money in your account :"+obj.balance);
        return true;
      }
   }
}
```