EduBridge

A Project

Report On

ATM INTERFACE

Project

By

Batch: 2022 – 7671

Center: C h e n n a i c h r o m p e t

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INTRODUCTION

1.1 Purpose

This document describes the software requirements for an automated teller machine network(ATM). It is intended for the designer, developer and maintainer of the ATM.

1.2 Scope

The function of the ATM is to support a computerized banking network.

1.3 Overview

The remainder of this document is organized as follows: There will be some definitions of important terms. Section 2 contains a general description of the ATM. Section 3 specific functional requirements, the external interfaces and performance requirements of the ATM.

Definitions

Account a single account in a bank against which transactions can be applied. Accounts may be of various types with at least checking and savings. A customer can hold more than one account.

ATM

A station that allows customers to enter their own transactions using cash cards as identification. The ATM interacts with the customer to gather transaction information, sends the transaction information to the central computer for validation and processing, and dispenses cash to the customer. We assume that an ATM need not operate independently of the network .

Bank

A nancial institution that holds accounts for customers and that issues cash cards

authorizing access to accounts over the ATM network .

MODULES

- Customer module
- Transaction module

2. User Characteristics

There are several users of the ATM network:

Customer

The customer interacts with the ATM network via the ATM. It must be very easy for them to use the ATM. They should be supported by the system in every possible way. Customer the holder of one or more accounts in a bank. A customer can consist of one or more persons or corporations; the correspondence is not relevant to this problem. The same person holding an account at a different bank is considered a different customer.

Maintainer

It should be easy to maintain the whole system. The maintainer should be the only person that is allowed to connect a new ATM to the network. Transaction a single integral request for operations on the accounts of a single customer. We only specied that ATMs must dispense cash, but we should not preclude the possibility of printing checks or accepting cash or checks. We may also want to provide the exibility to operate on accounts of different customers, although it is not required yet. The different operations must balance proper.

Specific Requirements

3.1 Functional Requirements

The functional requirements are organized in two sections: First requirements of the ATM and second requirements of the bank.

3.1.1 Requirements of the automated teller machine

The requirements for the automated teller machine are organized in the following way: General requirements, requirements for authorization, requirements for a transaction.

GENERAL DESCRIPTION:

The ATM network doesn't work independently. It has to work together with the computers/software owned by banks. There are clearly defined interfaces for the different systems.

Product Functions

The software should support a computerized banking network. Each bank provides its own computer to maintain its own accounts and process transactions against them. Automatic teller machines communicate with the banks' computers. An automatic teller machine accepts a cash card, interacts with the user, communicates with the bank computer to carry out the transaction, dispenses cash and prints receipts. The system requires appropriate record keeping and security provisions. The system must handle concurrent access to the same account correctly. The banks will provide their own software for their own computers. The cost of the shared system will be apportioned to the banks according to the number of customers with cash cards.

I have developed this Application in Java, Junit5,Maven, and MySQL. It’s a web-based projects . The main feature of the project is to use ATM interface. You can Use it from anywhere and everywhere.

In Customer module, Customer can register and Login into application And view product by there category. And the can see the user interface and Public interface in application. In Transaction module, transaction can have the details about transaction of the Project can this access can be managed by admin when the submit the report.

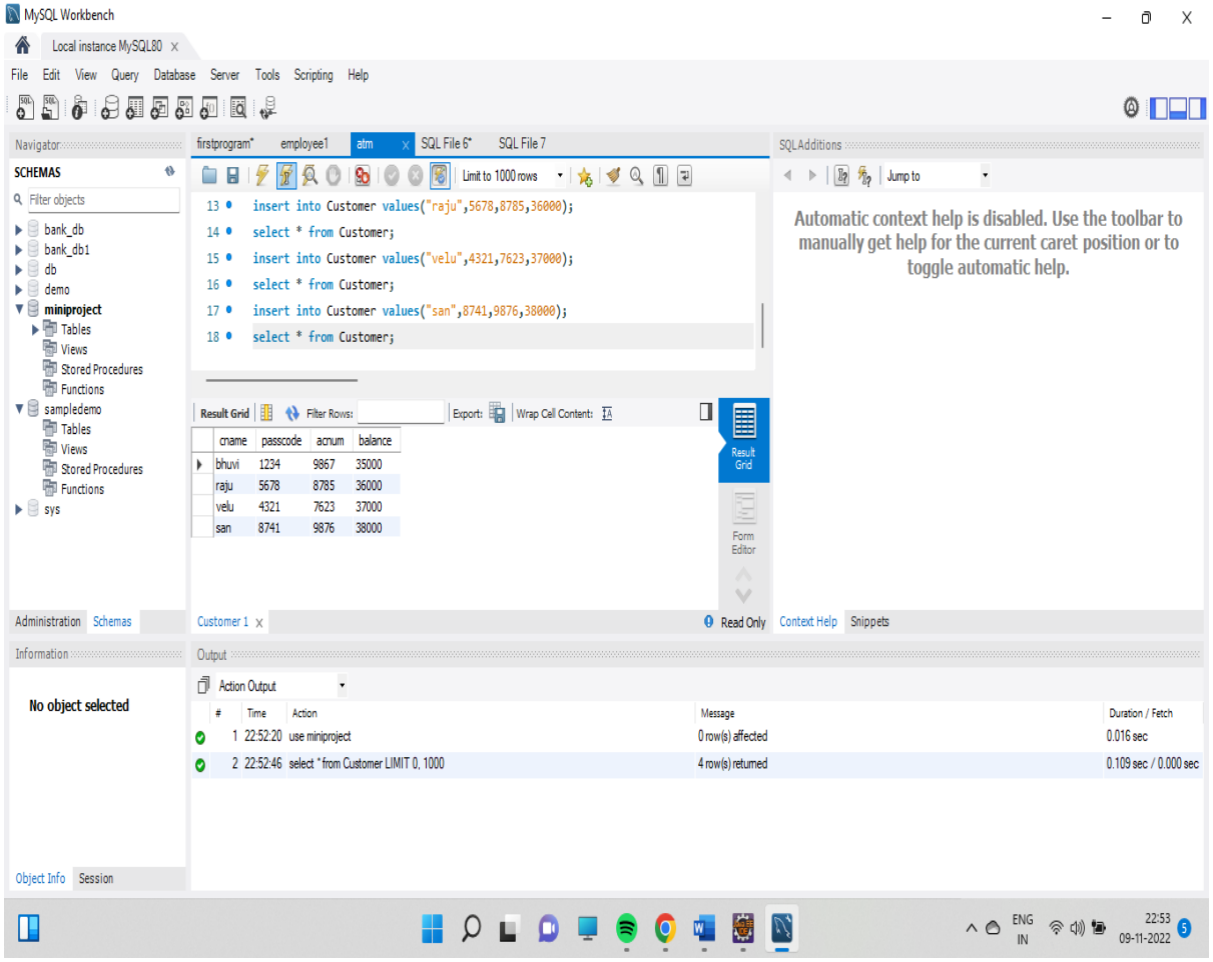
Software Requirements:

Front end: Java/J-unit5

Back end: MySQL workbench 8.0.23CE.

DATA DICTIONARY

TABLE CREATION:



SOURCE CODE:

```
package atm;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.util.Scanner;



import com.mysql.cj.xdevapi.Statement;
public class Atminterface {

	public static void main(String[] args)
	{
		try
		{

			//Class.forName("com.mysql.jdbc.Driver");


		Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/miniproject", "root","Root");
		PreparedStatement stmt=con.prepareStatement("select * from Customer");
		// java.sql.Statement ss1=con.createStatement();
```

```
// ResultSet ls=ss1.executeQuery("select * from customer");
 ResultSet rs=stmt.executeQuery();
 {

 if(rs.next())
 {
 String name = rs.getString("cname");
       int pas=rs.getInt("pass_code");
       int acc = rs.getInt("ac_no");
       int balance = rs.getInt("balance") ;

       int deposit= 0 ;
       int withdrawl = 0;


 Scanner ss= new Scanner(System.in);
       System.out.println("Enter Your Acc no :");
       int acc1 = ss.nextInt();

 System.out.println("Enter Your Pin :");
       int pin = ss.nextInt();


       if(acc1 == acc && pas == pin)
       {
                System.out.println("Welcome " + name );
```

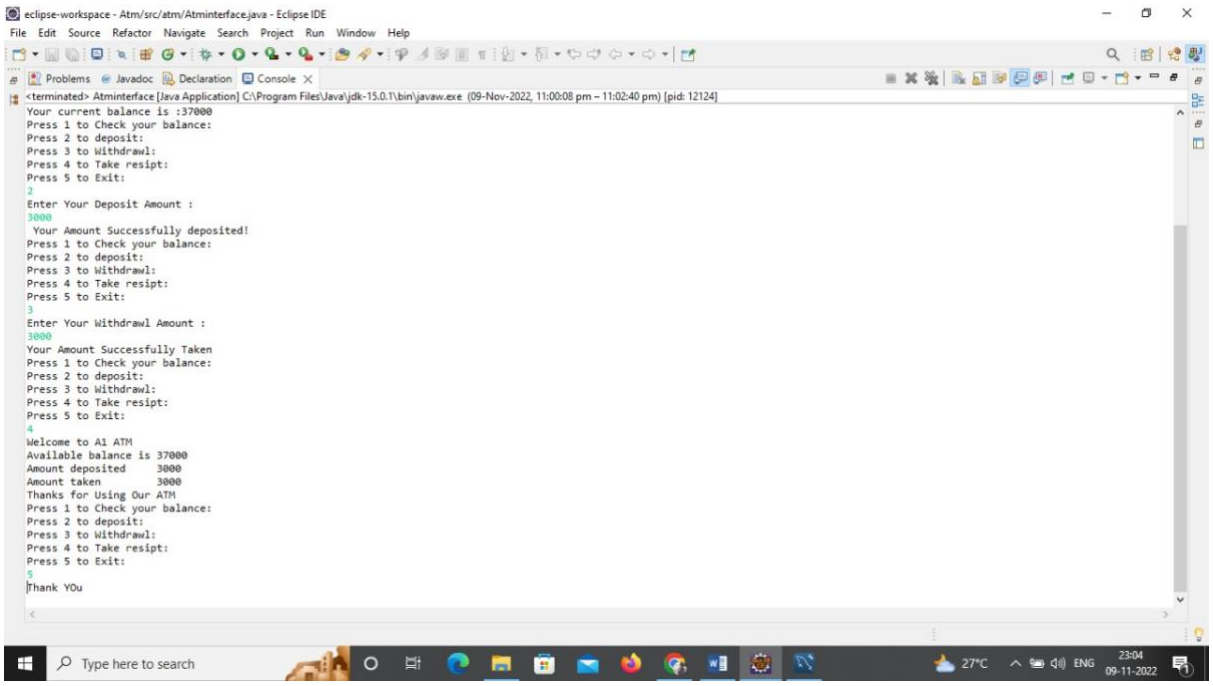
```
boolean flag=true;
 while(flag)
 {
        System.out.println("Press 1 to Check your balance: ");
        System.out.println("Press 2 to deposit: ");
        System.out.println("Press 3 to Withdrawl: ");
        System.out.println("Press 4 to Take resipt: ");
        System.out.println("Press 5 to Exit: ");
        int opt = ss.nextInt();
        switch(opt)
        {

        case 1:
                System.out.println("Your current balance is :" +
balance);
        break;

        case 2:
        System.out.println("Enter Your Deposit Amount :  ");
        deposit= ss.nextInt();

        stmt.executeUpdate("update customer set
balance=balance+"
                        + deposit + " where ac_no=" + acc);

        System.out.println(" Your Amount Successfully
deposited! ");
```

```
                    break;

                case 3:

                    System.out.println("Enter Your Withdrawl Amount : ");
                    withdrawl = ss.nextInt();
                    if(withdrawl > balance)

                    {
                        System.out.println("Your balance is insufficient");
                        System.out.println("Check your available balance");
                    }
                    else
                    {

                    stmt.executeUpdate("update customer set balance=balance-"
                                        + withdrawl + " where ac_no=" + acc);

                    System.out.println("Your Amount Successfully Taken ");
                    break;
                    }
```

```
                    case 4:

                        System.out.println("Welcome to A1 ATM");
                        System.out.println("Available balance is " +
balance);
                        System.out.println("Amount deposited " +
deposit);
                        System.out.println("Amount taken " +
withdrawl);
                        System.out.println("Thanks for Using Our
ATM");

                    break;
                    case 5:
                    System.out.println("Thank YOu");
                    flag=false;
                    break;
                    }
                }
            }
                    else

                        System.out.println("Please Enter Valid Account
number and Pin Number ");

        stmt.close();
        con.close();
         }
```

```
                }
                }
        catch(Exception e)
                {
                System.out.println("Failed");
                }
        }

}
```

OUTPUT:


eclipse-workspace - Atm/src/atm/Atminterface.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Problems Javadoc Declaration Console
<terminated> Atminterface [Java Application] C:\Program Files\Java\jdk-15.0.1\bin\javaw.exe (09-Nov-2022, 11:00:08 pm – 11:02:40 pm) [pid: 12124]
Your current balance is :37000
Press 1 to Check your balance:
Press 2 to deposit:
Press 3 to Withdrawl:
Press 4 to Take resipt:
Press 5 to Exit:
2
Enter Your Deposit Amount :
3000
Your Amount Successfully deposited!
Press 1 to Check your balance:
Press 2 to deposit:
Press 3 to Withdrawl:
Press 4 to Take resipt:
Press 5 to Exit:
3
Enter Your Withdrawl Amount :
3000
Your Amount Successfully Taken
Press 1 to Check your balance:
Press 2 to deposit:
Press 3 to Withdrawl:
Press 4 to Take resipt:
Press 5 to Exit:
4
Welcome to A1 ATM
Available balance is 37000
Amount deposited 3000
Amount taken 3000
Thanks for Using Our ATM
Press 1 to Check your balance:
Press 2 to deposit:
Press 3 to Withdrawl:
Press 4 to Take resipt:
Press 5 to Exit:
5
Thank YOu
Type here to search
27°C
ENG
23:04
09-11-2022

Hardware Interfaces

The ATM network has to provide hardware interfaces to:

various printers

various ATM machines (There are several companies producing the ATM machines.)several types of networks The exact specification of the hardware interfaces is not part of this document .

Software Interfaces

The ATM network has to provide software interfaces to:

the software used by different banks

different network software.The exact, detailed specication of the software interfaces is not part of this document.

3.2.4 Communication Interfaces

There is no restriction of the ATM network to a specific network protocol as long as the performance requirements are satisfied.

Attributes

3.4.1 Availability

The ATM network has to be available 24 hours a day.

3.4.2 Security

The ATM network should provide maximal security. In order to make that much more transparent there are the following requirements:

It must be impossible to plug into the network.