## **Project Report on**

# **BANK MANAGEMENT SYSTEM**

# **Using Java**

**Relational Database Management System** 

MCA – (1st year)

**Branch (CSA)** 

Submitted By:

L.L. Sai Krishna

## INTRODUCTION

## > Introduction to JAVA:-

- JAVA was developed by James Gosling at Sun Microsystems\_Inc in the year 1995 and later acquired by Oracle Corporation.
- JAVA is a class-based, object-oriented programming language and is designed to have as few implementation dependencies as possible.
- Implementation of a Java application program involves a following step. They include:
  - 1. Creating the program
  - 2. Compiling the program
  - 3. Running the program

#### > Introduction to GUI:-

- GUI (Graphical User Interface) is a type of interface that enables users to interact with digital devices using visual elements such as icons, menus, and buttons instead of text commands.
- The GUI was first developed at Xerox PARC by Alan Kay, Douglas Engelbart, and a group of other researchers in 1981. Later, Apple introduced the Lisa computer with a GUI on January 19, 1983.
- GUIs are used in a wide range of applications, from desktop operating systems such as Windows, MacOS, and Linux, to mobile devices such as smartphones and tablets, and also in various software applications such as web browsers, media players, and office suites

## Advantages:-

## **Accuracy:**

A Bank Management System developed in Java ensures accuracy in recording and managing transactions, reducing the risk of human error.

#### **Automation:**

The Java project automates the process of managing customer accounts, handling transactions, generating reports, etc.

#### **Security:**

A Bank Management System developed in Java can provide a high level of security to the data stored in the system, preventing unauthorized access and data breaches.

## **Disadvantages:-**

- 1. Complexity is generally high which can't be handled.
- 2. Performance is lower.
- 3. It may be more difficult to maintain.

## **SYSTEM REQUIREMENTS**

## > SOFTWARE REQUIREMENTS:

The major software requirements of the project are as follows:

Language: JDK17.0.2 Visual Studio

Data Base Connection: JDBC Driver(MySQL)

Operating System: Windows Explorer.

## **HARDWARE REQUIREMENTS:**

The hardware requirements that map towards the software are as follows:

RAM: 8.00 GB (7.77 GB usable)

## AIM of this project

The main aim of designing and developing this Internet banking System Java primarily based Engineering project is to provide secure and efficient net banking facilities to the banking customers over the internet. Apache Server Pages, MYSQL database used to develop this bank application where all banking customers can login through the secured web page by their account login id and password. Users will have all options and features in that application like get money from western union, money transfer to others, and send cash or money to inter banking as well as other banking customers by simply adding them as payees You must have java JDK installed on your system and we are using Visual Studio IDE to build this project, you can use either this or NetBeans IDE.

The first step will be to create a new project. Name it as you wish. In the src folder create a bank package. In that package, we will be creating some files for different modules.

## **Main Purpose**

The Traditional way of maintaining details of a user in a bank was to enter the details and record them. Every time the user needs to perform some transactions he has to go to bank and perform the necessary actions, which may not be so feasible all the time. It may be a hard-hitting task for the users and the bankers too. The project gives real life understanding of Online Banking System and activities performed by various roles in the supply chain. Here, we provide automation for banking system through Internet. Online Banking System project captures activities performed by different roles in real life banking which provides enhanced techniques for maintaining the required information up-to-date, which results in efficiency. The project gives real life understanding of Online Banking System and activities performed by various roles in the supply chain .

## **Main Goal**

- 1. Motto- Our motto is to develop a software program for managing the entire bank process related to Administration accounts customer accounts and to keep each every track about their property and their various transaction processes efficiently. Hereby, our main objective is the customer's satisfaction considering today's faster in the world.
- 2. Customer Satisfaction: Client can do his operations comfortably without any risk or losing of his privacy. Our software will perform and fulfill all the tasks that any customer would desire.
- 3. Saving Customer Time: Client doesn't need to go to the bank to do small operation.
- 4. Protecting the Customer: It helps the customer to be satisfied and comfortable in his choices, this protection contains customer's account, money and his privacy.
- 5. Transferring Money: Help client transferring money to/or another bank or country.

#### **Methods**

- We need to be able to generate an account numbe
- Account types: Savings or Current Account
- Maintain/update Balance
- Open/Close Account Withdraw/Deposit

## Benefits of online banking

Many of us lead busy lives. Some of us are up before the crack of dawn, getting ourselves prepared so we can in turn get our families ready for the day. We rush to work, rush to get the kids to school, and at the end of the day we rush home only to brace ourselves for the next day. After a hectic day, the last thing you want to do is spend time waiting in line at the bank, or even the post office. That's where Online Banking comes in. Many of the benefits of doing our banking online are obvious:

- 1. You don't have to wait in line.
- 2. You don't have to plan your day around the bank's hours.
- 3. You can look at your balance whenever you want, not just when you get a statement.

There are some hidden benefits too.

As a young bank customer, you're just learning how to manage your money and observe your spending patterns.

Online banking allows you to watch your money on a daily basis if you want to. By keeping close tabs on your funds, you'll always be aware of what's happening in your bank account.

For those experienced spenders, this option is far more appealing than the sudden discovery that you're broke! It's also helpful to watch how much interest you're gathering on investments and savings or what service charges you have incurred. Most available benefits

- 1. Online banking with key bank is fast, secure, convenient and free.
- 2. Quick, simple, authenticated access to accounts via the web application.
- 3. Simply scalable to grow with changing system requirement.
- 4. Global enterprise wide access to information.
- 5. Improved data security, restricting unauthorized access.
- 6. Minimize Storage Space.

## **Future Look**

The "Banking Online System is a big and ambitious project. I am thankful for being provided this great opportunity to work on it. As already mentioned, this project has gone through extensive research work. On the basis of the research work, we have successfully designed and implemented banking online System. To know what the future of online banking looks like, it's probably worth looking at the present – online banking isn't new. When you think of online banking, you probably think about a computer (either a desktop or laptop), a three or four step security process and then an interface that lets you view the balance of your various bank accounts and credit cards, whilst permitting you to transfer money and pay bills. And you're not wrong either.

The most valuable future looks are following below:

- 1. More branches of the bank, maybe it will be international, that means more ATM machines outside.
- 2.Customer issues development based on their needs, so the help desk will be aware of their needs and easy to use.
- 3.Developing a mobile App for banking system that help users to do the obtained his operations without go to the bank only he needs to sign in using his A/C NO. And password and then use your own PIN. Finally the system will update automatically.

## 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. Future version 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. By asking the bank employs we came to know that maximum numbers of internet bank account holders are youth and business man. Online banking is an innovative tool that is fast becoming a necessity. It is a successful strategic weapon for banks to remain profitable in a volatile and competitive marketplace of today.

If proper training should be given to customer by the bank employs to open an account will be beneficial secondly the website should be made friendlier from where the customers can directly make and access their accounts. Thus, the Bank Management System it is developed and executed successfully.

## **Components**

All the elements like the button, text fields, scroll bars, etc. are called components. In Java AWT, there are classes for each component as shown in above diagram. In order to place every component in a particular position on a screen, we need to add them to a container.

## **Registration Methods in Event Handling**

For registering the component with the Listener, many classes provide the registration methods. For example:

#### o Button

public void addActionListener(ActionListener a){}

#### o MenuItem

o public void addActionListener(ActionListener a){}

#### TextField

- o public void addActionListener(ActionListener a){}
- o public void addTextListener(TextListener a){}

#### o TextArea

o public void addTextListener(TextListener a){}

#### Checkbox

o public void addItemListener(ItemListener a){}

#### Choice

o public void addItemListener(ItemListener a){}

#### List

- public void addActionListener(ActionListener a){}
- o public void addItemListener(ItemListener a){}

#### Container

The Container is a component in AWT that can contain another components like <u>buttons</u>, textfields, labels etc. The classes that extends Container class are known as container such as **Frame**, **Dialog** and **Panel**.

There are four types of containers in Java AWT:

- 1. Window
- 2. Panel
- 3. Frame
- 4. Dialog

#### Window

The window is the container that have no borders and menu bars. You must use frame, dialog or another window for creating a window.

#### Panel

The Panel is the container that doesn't contain title bar, border or menu bar. It is generic container for holding the components. It can have other components like button, text field etc.

#### **Frame**

The Frame is the container that contain title bar and border and can have menu bars. It can have other components like button, text field, scrollbar etc.

## **Importing Packages:**

## import javax.swing.\*;

Java swing components are platform-independent. The javax.swing package provides classes for java swing API such as JButton, JTextField, JTextArea, JRadioButton, JCheckbox, JMenu, JColorChooser etc.

## import java.awt.event.\*;

Changing the state of an object is known as an event. For example, click on button, dragging mouse etc. The java.awt.event package provides many event classes and Listener interfaces for event handling.

## import java.awt.\*;

Java AWT (Abstract Window Toolkit) is an API to develop Graphical User Interface (GUI) or windows-based applications in Java. Java AWT components are platform dependent.

## import java.awt.event.ActionEvent;

By importing the ActionEvent class, it allows the code to use the class and its methods without having to specify the full package path every time it is used.

## import java.awt.event.ActionListener;

The ActionListener interface defines a single method called actionPerformed() that is called when an object (such as a button) is activated. By importing the ActionListener interface, it allows the code to use the interface without having to specify the full package path every time it is used.

## import java.util.Random;

By importing the Random class, it allows the code to use the class and its methods without having to specify the full package path every time it is used. For example, instead of writing java.util.Random every time we want to create an instance of the class or call its methods, we can simply write Random. Once we have an instance of the Random class, we can call its methods to generate random numbers.

## import java.sql.ResultSet;

importing the ResultSet interface from the java.sql package. The ResultSet interface provides methods for retrieving and manipulating data from a database.

When you execute a query on a database using JDBC (Java Database Connectivity), a ResultSet object is returned, which represents the data retrieved by the query.

The ResultSet interface provides methods for iterating over the data, retrieving values from columns, and navigating through the rows of the result set.

#### // HOME PAGE

- \* Here we can create a new Account
- \* Here you can also Login Existing Account

```
public Home(){
    setLocation (400, 100);
    Image i2=i1.getImage().getScaledInstance(630, 500,
    add(label);
    JLabel text=new JLabel("WELCOME TO ATM MACHINE");
    createAccount.setBackground(Color.black);
    createAccount.setForeground(Color.white);
```

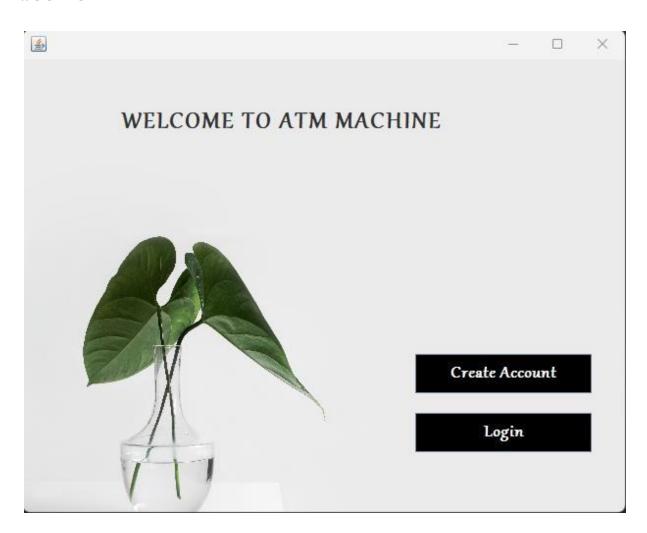
```
login=new JButton("Login");
login.setFont(new Font("Gabriola", Font.BOLD, 20));
login.setBounds(400, 360, 180, 40);
login.setBackground(Color.black);
login.setForeground(Color.white);
login.addActionListener(this);
label.add(login);

}

public void actionPerformed(ActionEvent ae){
    if (ae.getSource() == createAccount) {
        setVisible(false);
        new banks();
    }
    else {
        setVisible(false);
        new BankManagementSystem();
    }
}

public static void main(String[] args) {
    new Home();
}
```

#### //OUTPUT

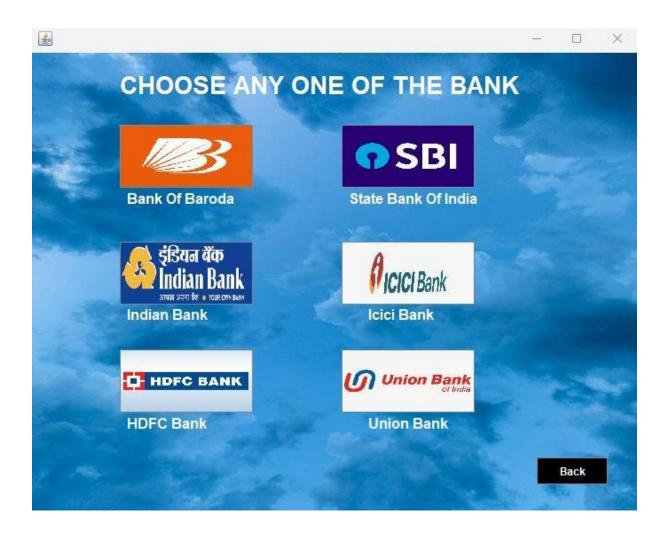


#### // CREATE ACCOUNT PAGE

```
banks(){
        ImageIcon i3=new ImageIcon(i2);
        JLabel label=new JLabel(i3);
        text.setBounds(100,20,500,30);
        label.add(text);
        ImageIcon bi3=new ImageIcon(bi2);
        bob=new JButton(bi3);
        bob.addActionListener(this);
        label.add(bob);
ImageIcon(ClassLoader.getSystemResource("sbi-icon.png"));
```

```
ImageIcon si3=new ImageIcon(si2);
        label.add(sbi);
        JLabel Lsbi=new JLabel("State Bank Of India");
        Lsbi.setBounds(358,146,150,30);
        label.add(Lsbi);
        indian=new JButton(ii3);
        indian.setBounds(100,210,150,70);
        indian.addActionListener(this);
        label.add(indian);
        JLabel Lindian=new JLabel("Indian Bank");
        label.add(Lindian);
        ImageIcon ici1 = new
ImageIcon(ClassLoader.getSystemResource("icici-icon.png"));
        ImageIcon ici3=new ImageIcon(ici2);
        icici=new JButton(ici3);
        label.add(icici);
        JLabel Licici=new JLabel("Icici Bank");
        Licici.setForeground(Color.white);
        Licici.setBounds (380, 275, 150, 30);
        label.add(Licici);
        hdfc=new JButton(hi3);
        hdfc.setBounds(100,330,150,70);
        hdfc.addActionListener(this);
        JLabel Lhdfc=new JLabel("HDFC Bank");
```

```
Lhdfc.setBounds(108,396,150,30);
    label.add(Lhdfc);
    Image ui2=ui1.getImage().getScaledInstance(150, 70,
   union.addActionListener(this);
    label.add(union);
    label.add(Lunion);
   back.setBackground(Color.black);
   back.addActionListener(this);
public void actionPerformed(ActionEvent ae) {
    if (ae.getSource() == bob) {
        setVisible(false);
        setVisible(false);
        new SignUpOne(INDIAN).setVisible(true);
        new Home();
```



#### //SIGNUP ONE PAGE (PERSONAL DETAILS)

```
setVisible(true);
  ImageIcon i1=new
  Image i2=i1.getImage().getScaledInstance(850, 800,
  add(label);
random= Math.abs( (ran.nextLong() % 9000L) + 1000L);
  formno.setBounds(130,22,1000,32);
      JLabel personaldetails = new JLabel("Page 1 : Personal
  personaldetails.setBounds(280,80,800,30);
  label.add(personaldetails);
     name.setBounds(100,140,100,30);
  label.add(name);
     nameTextField.setFont(new Font("Raleway", Font. BOLD , 14));
     nameTextField.setBounds(300,140,400,30);
  label.add(nameTextField);
  label.add(fname);
     fnameTextField = new JTextField();
     fnameTextField.setBounds(300,190,400,30);
  label.add(fnameTextField);
  label.add(dob);
```

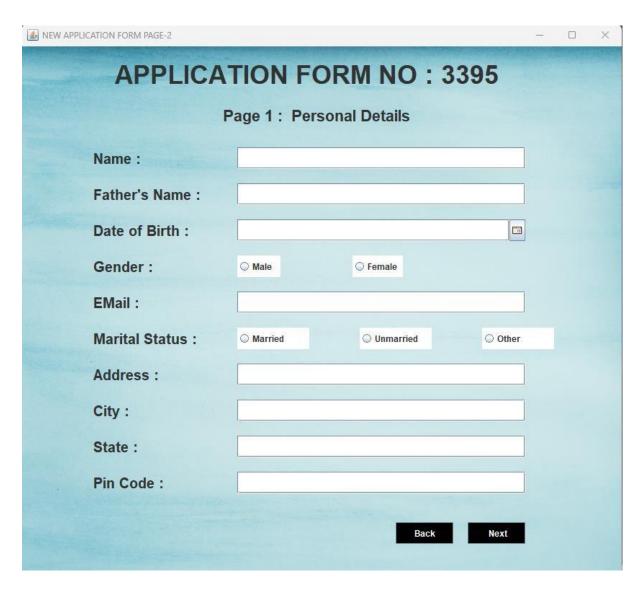
```
datechooser = new JDateChooser();
   datechooser.setBounds(300,240,400,30);
   gender.setBounds(100,290,100,30);
label.add(gender);
    female.setBackground(Color.white);
label.add(female);
    ButtonGroup gendergroup = new ButtonGroup();
    gendergroup.add(male);
    gendergroup.add(female);
label.add(email);
   emailTextField = new JTextField();
   emailTextField.setFont(new Font("Raleway", Font. BOLD , 14));
label.add(emailTextField);
  married.setBounds(300,390,100,30);
   married.setBackground(Color.white);
label.add(married);
label.add(unmarried);
    other.setBackground(Color.white);
label.add(other);
    ButtonGroup maritalstatusgroup = new ButtonGroup();
    maritalstatusgroup.add(married);
```

```
maritalstatusgroup.add(unmarried);
   maritalstatusgroup.add(other);
label.add(address);
   addressTextField = new JTextField();
  addressTextField.setFont(new Font("Raleway", Font. BOLD , 14));
   addressTextField.setBounds(300,440,400,30);
   JLabel city= new JLabel("City : ");
   JLabel state= new JLabel("State : ");
label.add(state);
  stateTextField.setBounds(300,540,400,30);
pincode.setBounds(100,590,200,30);
back.setForeground(Color.white);
back.addActionListener(this);
label.add(back);
```

```
public void actionPerformed(ActionEvent ae) {
             if (ae.getSource() == back) {
                        marital = "Unmarried";
                        marital = "Other";
                              JOptionPane.showMessageDialog(null, "Name is
                              if (bankName.equals("baroda")) {
String query = "insert into signup values('" + formno + "', '" + name + "', '" + fname + "', '" + dob + "', '" + gender + "','" + email + "','" + marital + "', '" + address + "', '" + city + "','" + state + "', '" + pin + "')";
                                    setVisible(false);
bankName).setVisible(true);
formno + "', '" + name + "', '" + fname + "', '" + dob + "', '" +
```

```
gender + "','" + email + "','" + marital + "', '" + address + "',
                                  c.s.executeUpdate(query);
bankName).setVisible(true);
formno + "', '" + name + "', '" + fname + "', '" + dob + "', '" + gender + "', '" + email + "', '" + marital + "', '" + address + "', '" + city + "', '" + state + "', '" + pin + "')";
                                  setVisible(false);
bankName).setVisible(true);
formno + "', '" + name + "', '" + fname + "', '" + dob + "', '" + gender + "','" + email + "','" + marital + "', '" + address + "', '" +
c.s.executeUpdate(query);
                                  setVisible(false);
                                  new SignUpTwo(formno,
bankName).setVisible(true);
formno + "', '" + name + "', '" + fname + "', '" + dob + "', '" +
gender + "','" + email + "','" + marital + "', '" + address + "', '" +
city + "','" + state + "', '" + pin + "')";
                                  setVisible(false);
bankName).setVisible(true);
                             } else if (bankName.equals("indian")) {
formno + "', '" + name + "', '" + fname + "', '" + dob + "', '" + gender + "', '" + email + "', '" + marital + "', '" + address + "', '" + city + "', '" + state + "', '" + pin + "')";
                                  setVisible(false);
bankName).setVisible(true);
```

|   |   | <pre>static void main(String args[]) { SignUpOne("");</pre> |
|---|---|---|
| } | } |   |



## // SIGNUP TWO PAGE (ADDITIONAL DETAILS)

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;

//import com.toedter.calendar.JDateChooser;
```

```
public SignUpTwo(String formno, String bankName) {
         this.bankName=bankName;
         setLocation(350,10);
        setTitle("NEW APPLICATION FORM PAGE-2");
ImageIcon(ClassLoader.getSystemResource("wallpaper6.jpg"));
         Image i2=i1.getImage().getScaledInstance(850, 800,
         ImageIcon i3=new ImageIcon(i2);
         add(label);
         additionaldetails.setBounds(280,80,800,30);
         label.add(rel);
            String
           religion = new JComboBox(valReligion);//for selections
         label.add(religion);
            cate.setBounds(100,190,200,30);
         label.add(cate);
            String valCategory[]={"General", "OBC", "SC", "ST", "Other"};
```

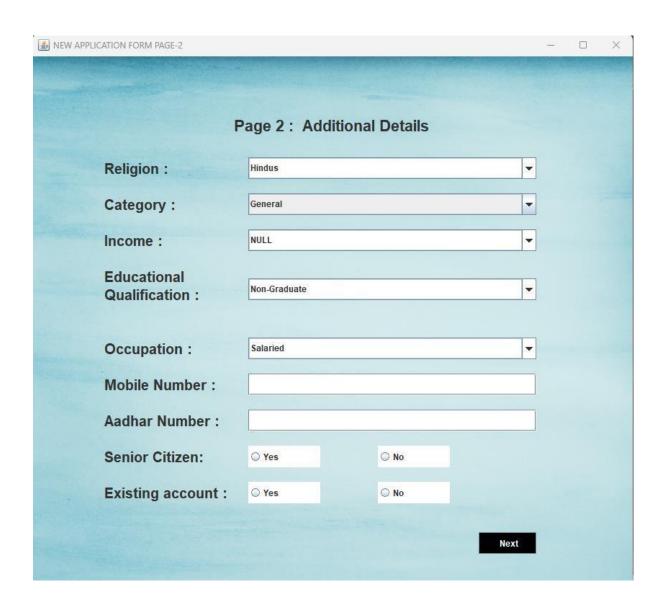
```
money.setFont(new Font("Raleway", Font. BOLD, 20));
label.add(money);
label.add(study);
   qualificate.setBounds(100,315,200,30);
   String educationalValues[]={"Non-
     education.setBackground(Color.WHITE);
label.add( education);
    occupation = new JComboBox(occupationalValues);
    occupation.setBounds(300,390,400,30);
    occupation.setBackground(Color.WHITE);
label.add(pannumber);
```

```
JLabel add= new JLabel("Aadhar Number : ");
   add.setBounds(100,490,200,30);
label.add(add);
aadhar.setBounds(300,490,400,30);
label.add(syes);
label.add(sno);
 Laccount.setFont(new Font("Raleway", Font. BOLD, 20));
label.add(Laccount);
   ayes.setBounds(300,590,100,30);
   ano.setBounds(480,590,100,30);
   ano.setBackground(Color.white);
label.add(ano);
  existaccount.add(ayes);
   existaccount.add(ano);
       next.setBackground(Color.black);
label.add(next);
       next.addActionListener(this);
```

```
public void actionPerformed(ActionEvent ae) {
    else if(ano.isSelected()){
    String span = pan.getText();
            Baroda c = new Baroda();
            new SignUpThree(formno,bankName).setVisible(true);
            c.s.executeUpdate(query);
            new SignUpThree(formno, bankName).setVisible(true);
```

```
setVisible(false);
'"+scitizen+"','"+saccount+"')";
                c.s.executeUpdate(query);
                setVisible(false);
                c.s.executeUpdate(query);
                setVisible(false);
                 new SignUpThree(formno, bankName).setVisible(true);
                c.s.executeUpdate(query);
                setVisible(false);
   public static void main(String args[]) {
```

#### //OUTPUT



#### //SIGNUP THREE (ACCOUNT DETAILS)

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.util.Random;

public class SignUpThree extends JFrame implements ActionListener
{
    JRadioButton r1,r2,r3,r4;
    JCheckBox c1,c2,c3,c4,c5,c6,c7;
    JButton submit,cancel;
    String formno,bankName;
    public SignUpThree(String formno,String bankName) {
        this.formno=formno;
        this.bankName=bankName;
        setVisible(true);
        setLayout(null);
```

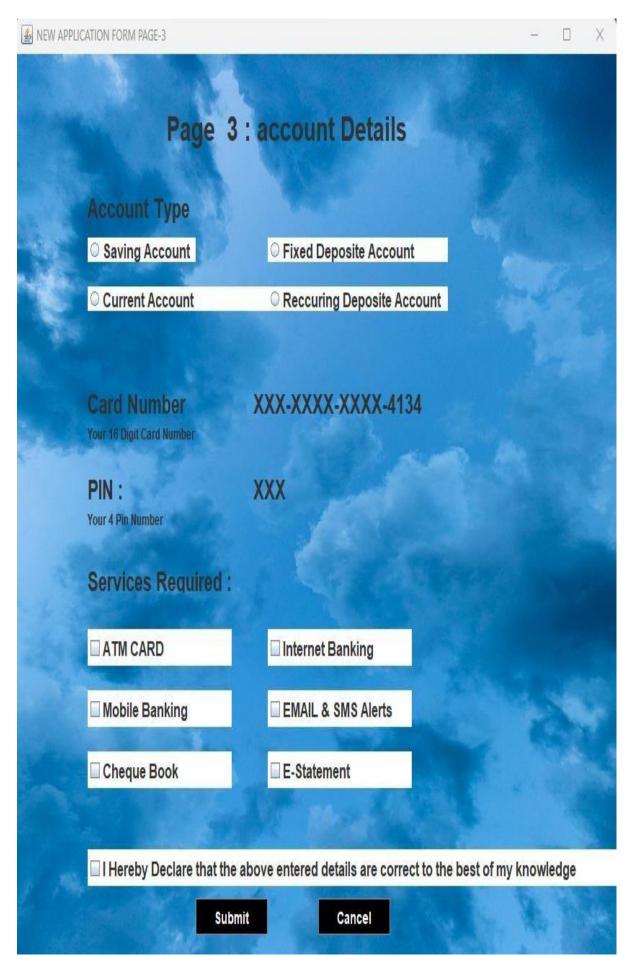
```
ImageIcon i1=new
11.setBounds(210,40,400,40);
r2.setFont(new Font("Raleway", Font. BOLD, 16));
label.add(r2);
label.add(r3);
r4.setBackground(Color.white);
```

```
label.add(number);
carddetails.setBounds(100,300,400,20);
label.add(pin);
label.add(pnumber);
pindetails.setBounds(100,370,400,20);
label.add(services);
c1= new JCheckBox("ATM CARD");
label.add(c1);
c2.setFont(new Font("Raleway", Font.BOLD, 16));
label.add(c2);
c3= new JCheckBox("Mobile Banking");
c3.setBackground(Color.white);
c4.setBounds(350,520,200,30);
label.add(c4);
c5.setBackground(Color.white);
```

```
label.add(c5);
      label.add(c6);
      submit.setForeground(Color.white);
      submit.setBounds(250,690,100,30);
      label.add(submit);
      submit.addActionListener(this);
      cancel.addActionListener(this);
        String accounttype=null;
          accounttype="Savings Account";
          accounttype="Fixed Deposite Account";
          accounttype="Current Account";
          accounttype="Reccuring Deposite";
rev1=""+Math.abs((random.nextLong()%900000001))+5040936000000001;
      String rev2 =""+Math.abs((random.nextLong()%9000L))+1000L;
          pinnumber+=rev2.charAt(i);
```

```
if(accounttype.equals("")){
           JOptionPane.showMessageDialog(null, "Account Type is
values('"+formno+"','"+cardnumber+"', '"+pinnumber+"')";
               c.s.executeUpdate(query2);
               JOptionPane.showMessageDialog(null, "Card Number :
               c.s.executeUpdate(query1);
               c.s.executeUpdate(query2);
               JOptionPane.showMessageDialog(null, "Card Number:
""+pinnumber+"', '"+facility+"')
               JOptionPane.showMessageDialog(null, "Card Number:
```

```
setVisible(false);
               c.s.executeUpdate(query1);
values('"+formno+"','"+cardnumber+"', '"+pinnumber+"')";
               c.s.executeUpdate(query2);
               JOptionPane.showMessageDialog(null, "Card Number:
               setVisible(false);
               c.s.executeUpdate(query1);
               String query2 = "insert into login
               JOptionPane.showMessageDialog(null, "Card Number:
               c.s.executeUpdate(query1);
               c.s.executeUpdate(query2);
               JOptionPane.showMessageDialog(null, "Card Number :
               setVisible(false);
               new Deposite(pinnumber).setVisible(true);
       new SignUpThree("","");
```



## 1. Login module

This module helps to make a login page so that the user can enter the user name and password to enter into the bank management system in java. Name the file as login.java

AFTER CREATING BANK ACCOUNT GO TO HOME PAGE AND CLICK ON LOGIN BUTTON THEN LOGIN PAGE WILL APPER.

**// LOGIN PAGE SOURCE CODE** 

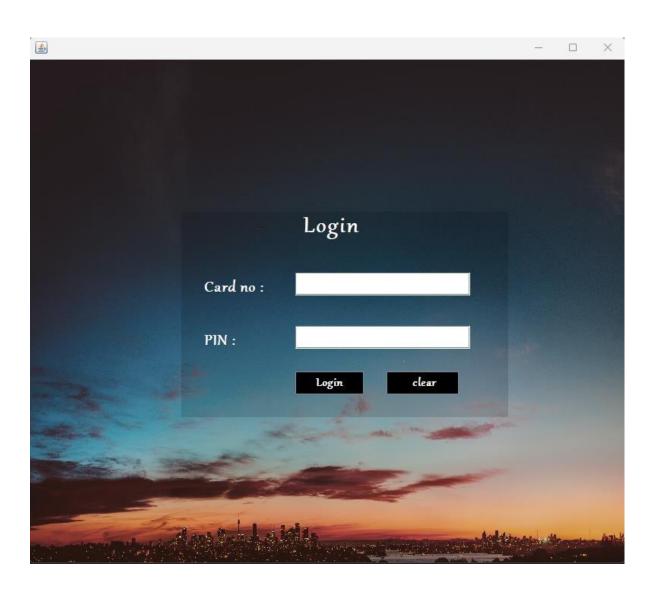
```
import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.sql.ResultSet;

public class BankManagementSystem extends JFrame implements
ActionListener
{
    JTextField CardTextField;
    JPasswordField PinTextField;
    JButton signin,clear;

    public BankManagementSystem() {
```

```
setSize(800,700);
setVisible(true);
ImageIcon i3=new ImageIcon(i2);
p.setBounds (200, 200, 430, 270);
login.setForeground(Color.white);
label.add(cardno);
CardTextField = new JTextField();
label.add(CardTextField);
label.add(pin);
signin.setForeground(Color.white);
signin.addActionListener(this);
label.add(signin);
clear.setFont(new Font("Gabriola", Font.BOLD, 18));
```

```
clear.addActionListener(this);
             label.add(clear);
             label.add(p);
          public void actionPerformed(ActionEvent ae) {
                    if(ae.getSource() == clear){
                        PinTextField.setText("");
                            ResultSet rsb=b.s.executeQuery(query);
                            ResultSet rss=s.s.executeQuery(query);
                            ResultSet rsin=in.s.executeQuery(query);
                            ResultSet rsu=u.s.executeQuery(query);
                            if(rsb.next()){
Transactions (pinnumber) .setVisible (true);
Transactions(pinnumber).setVisible(true);
                                setVisible(false);
Transactions (pinnumber) .setVisible (true);
                                setVisible(false);
Transactions(pinnumber).setVisible(true);
Transactions(pinnumber).setVisible(true);
                                setVisible(false);
Transactions (pinnumber) .setVisible (true);
                                JOptionPane.showMessageDialog(null,
```



Once we enter the correct username and password it takes us to the Transaction page of our bank application.

IN THE ABOVE PAGE WE CAN LOGIN IN TO OUR ACCOUNT BY GIVING CORRECT CARD NO AND PINNO.

## // TRANSACTIONS PAGE

```
import java.awt.event.ActionListener;
public class Transactions extends JFrame implements ActionListener
       setVisible(true);
       setLayout(null);
       setSize(900,900);
       ImageIcon i1= new
       ImageIcon i3=new ImageIcon(i2);
       image.setBounds(0,0,900,900);
       add(image);
       text.setForeground(Color.white);
       withdrawl.setBounds(355,415,150,30);
       withdrawl.addActionListener(this);
```

```
ministatement.addActionListener(this);
    pinchange.addActionListener(this);
    image.add(exit);
public void actionPerformed(ActionEvent ae) {
    }else if (ae.getSource() == deposite) {
    }else if (ae.getSource() == withdrawl) {
        setVisible(false);
        new Withdrawl(pinnumber).setVisible(true);
    }else if(ae.getSource() == fastcash) {
        setVisible(false);
    }else if(ae.getSource() == pinchange) {
        new MiniStatement(pinnumber).setVisible(true);
        new Transactions("");
```



#### //FOR DEPOSITING

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.sql.ResultSet;
import java.util.Date;

public class Deposite extends JFrame implements ActionListener
{
    JTextField amount;
    JButton deposite,back;
    String pinnumber;

    public Deposite(String pinnumber) {
        this.pinnumber=pinnumber;
        setUndecorated(true);
        setVisible(true);
        setLayout(null);
        setSize(900,900);
```

```
ImageIcon i1=new
    Image i2=i1.getImage().getScaledInstance(900,900,
    JLabel image = new JLabel(i3);
    amount = new JTextField();
    deposite.setBounds(355,485,150,30);
    back.addActionListener(this);
public void actionPerformed(ActionEvent ae)
    if (ae.getSource() ==back)
        setVisible(false);
            JOptionPane.showMessageDialog(null, "Please enter the
```

```
ResultSet rsb=b.s.executeQuery(query);
ResultSet rss=s.s.executeQuery(query);
ResultSet rsic=ic.s.executeQuery(query);
ResultSet rsh=h.s.executeQuery(query);
ResultSet rsin=in.s.executeQuery(query);
    JOptionPane.showMessageDialog(null, "Rs
    setVisible(false);
    new Transactions(pinnumber).setVisible(true);
    JOptionPane.showMessageDialog(null, "Rs
    setVisible(false);
    in.s.executeUpdate(query2);
    JOptionPane.showMessageDialog(null, "Rs
    setVisible(false);
    JOptionPane.showMessageDialog(null, "Rs
    setVisible(false);
    new Transactions(pinnumber).setVisible(true);
    ic.s.executeUpdate(query2);
    JOptionPane.showMessageDialog(null, "Rs
    setVisible(false);
    JOptionPane.showMessageDialog(null, "Rs
    setVisible(false);
```



//FOR WITHDRAWL

```
import javax.swing.*;
       setSize(900,900);
       setLocation(300,0);
       image.add(text);
       image.add(amount);
       withdrawl.setBounds(355,485,150,30);
       withdrawl.addActionListener(this);
       image.add(back);
   public void actionPerformed(ActionEvent ae) {
```

```
setVisible(false);
}else if(ae.getSource() == withdrawl) {
        JOptionPane.showMessageDialog(null, "Please enter the
       Hdfc h = new Hdfc();
            ResultSet rsb=b.s.executeQuery(query);
            ResultSet rss=s.s.executeQuery(query);
            ResultSet rsic=ic.s.executeQuery(query);
            ResultSet rsh=h.s.executeQuery(query);
            ResultSet rsin=in.s.executeQuery(query);
                b.s.executeUpdate(guery2);
                JOptionPane.showMessageDialog(null, "Rs
                setVisible(false);
                JOptionPane.showMessageDialog(null, "Rs
                setVisible(false);
                new Transactions(pinnumber).setVisible(true);
                in.s.executeUpdate(query2);
                JOptionPane.showMessageDialog(null, "Rs
                setVisible(false);
                JOptionPane.showMessageDialog(null, "Rs
```

```
ic.s.executeUpdate(query2);
JOptionPane.showMessageDialog(null, "Rs
```



## // BALANCE ENQUIRY

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.sql.ResultSet;

public class BalanceEnquiry extends JFrame implements ActionListener
{
    String pinnumber;
    JButton back;
    public BalanceEnquiry(String pinnumber) {
        this.pinnumber=pinnumber;

        setVisible(true);
        setLayout(null);
        setSize(900,900);
        setLocation(300,0);
```

```
ImageIcon i1= new
Image i2=i1.getImage().getScaledInstance(900,
JLabel image = new JLabel(i3);
back.addActionListener(this);
Sbi s = new Sbi();
    ResultSet rsb=b.s.executeQuery(query);
    ResultSet rsic=ic.s.executeQuery(query);
    ResultSet rsh=h.s.executeQuery(query);
    ResultSet rsin=in.s.executeQuery(query);
    ResultSet rsu=u.s.executeQuery(query);
            ResultSet rs = b.s.executeQuery("select * from bank
                    balance-
            ResultSet rs = h.s.executeQuery("select * from bank
                if(rs.getString("type").equals("Deposite")){
```

```
balance-
                    ResultSet rs = in.s.executeQuery("select * from
balance+=Integer.parseInt(rs.getString("amount"));
                    ResultSet rs = u.s.executeQuery("select * from bank
balance+=Integer.parseInt(rs.getString("amount"));
                            balance-
                    ResultSet rs = ic.s.executeQuery("select * from
balance+=Integer.parseInt(rs.getString("amount"));
                            balance-
```

```
balance+=Integer.parseInt(rs.getString("amount"));
=Integer.parseInt(rs.getString("amount"));
                }catch (Exception e) {
         text.setForeground(Color.white);
    public void actionPerformed(ActionEvent ae) {
```



## // MINI STATEMENT

```
import javax.swing.*;
import java.awt.*;
import java.sql.ResultSet;

public class MiniStatement extends JFrame
{
    String pinnumber;
    public MiniStatement(String pinnumber) {
        this.pinnumber=pinnumber;

        setTitle("Mini Statement");
        setSize(400,600);
        setLocation(20,20);
        getContentPane().setBackground(Color.white);
        setVisible(true);
        setLayout(null);
```

```
add(bank);
            card.setBounds(20,80,300,20);
            add(card);
            JLabel mini = new JLabel();
            mini.setBounds(20,140,400,200);
            add(mini);
        Baroda b = new Baroda();
            ResultSet rsb = b.s.executeQuery(query);
            ResultSet rss = s.s.executeQuery(query);
            ResultSet rsic = ic.s.executeQuery(query);
            ResultSet rsh = h.s.executeQuery(query);
            ResultSet rsin = in.s.executeQuery(query);
            ResultSet rsu = u.s.executeQuery(query);
                                   b.s.executeQuery("select * from
rs.getString("cardnumber").substring(0,4)+" XXXXXXXX"+
                }catch(Exception e) {
                    ResultSet rs= b.s.executeQuery("select * from
                        mini.setText(mini.getText() +
                        if (rs.getString("type").equals("Deposite")) {
```

```
balance.setText("your current account balance is RS
               }catch(Exception e) {
                   System.out.println(e);
                   ResultSet rs= h.s.executeQuery("select * from
               }catch(Exception e) {
                   System.out.println(e);
                   ResultSet rs= h.s.executeQuery("select * from
                      mini.setText(mini.getText() +
ring("type")+"    "+rs.getString("amount")+"<
                       if(rs.getString("type").equals("Deposite")){
bal+=Integer.parseInt(rs.getString("amount"));
                   balance.setText("your current account balance is RS
                                  in.s.executeQuery("select * from
rs.getString("cardnumber").substring(0,4)+" XXXXXXXX"+
rs.getString("cardnumber").substring(12));
```

```
in.s.executeQuery("select * from
                        mini.setText(mini.getText() +
bal+=Integer.parseInt(rs.getString("amount"));
=Integer.parseInt(rs.getString("amount"));
                }catch(Exception e) {
                    ResultSet rs= u.s.executeQuery("select * from
                        card.setText("Card Number : "+
rs.getString("cardnumber").substring(0,4)+" XXXXXXXX"+
                    ResultSet rs= u.s.executeQuery("select * from
                        mini.setText(mini.getText() +
bal+=Integer.parseInt(rs.getString("amount"));
=Integer.parseInt(rs.getString("amount"));
```

```
ResultSet rs=
                                 ic.s.executeQuery("select * from
rs.getString("cardnumber").substring(0,4)+" XXXXXXXX"+
                  ResultSet rs=
                                 ic.s.executeQuery("select * from
"<html>"+rs.getString("date")+"&nbsp;&nbsp;&nbsp;&nbsp;"+rs.getSt
ring("type")+"    "+rs.getString("amount")+"<
                      if(rs.getString("type").equals("Deposite")){
bal+=Integer.parseInt(rs.getString("amount"));
                          bal-
                  ResultSet rs= s.s.executeQuery("select * from
                  int bal=0;
                                 s.s.executeQuery("select * from
```

```
<html>"+rs.getString("date")+"&nbsp;&nbsp;&nbsp;&nbsp; &nbsp;"+rs.getSt
                        if(rs.getString("type").equals("Deposite")){
bal+=Integer.parseInt(rs.getString("amount"));
```

- → -> Here is the SIGN-UP Details for Generating new Bank Account.
- ✓ Form No,
- ✓ Name, Father\_Name,
- ✓ DOB,
- ✓ Gender,
- ✓ Gmail,
- ✓ Martial\_Status,
- ✓ Address,
- ✓ City,
- ✓ Pincode and State.

|   | formno | name       | father_name   | dob          | gender | email                        | marital_status | address                     | city      | pincode        | state  |
|---|--------|------------|---------------|--------------|--------|------------------------------|----------------|-----------------------------|-----------|----------------|--------|
| • | 832    | SAIKRISHNA | Srinivasa rao | 5 Oct, 2001  | Male   | saikrishnakrish147@gmail.com | Unmarried      | RAJAPANAGALA ROAD 14TH LINE | ONGOLE    | ANDHRA PRADESH | 523001 |
|   | 1389   | AKHIL      | SRINIVASA RAO | 13 Jul, 2000 | Male   | akhil 123@gmail.com          | Unmarried      | GADDALAGUNTA                | ONGOLE    | ANDHRA PRADESH | 523001 |
|   | 6784   | STARK      | STEVE SMITH   |              | Male   | ironman123@gmail.com         | Married        | GACHIBOWLI                  | HYDERABAD | TELANGANA      | 86541  |

- Here is the New Generated Account Type and Card Numbers.
  - ✓ Form No
  - ✓ Account Type
  - ✓ Card Number
  - ✓ Pin
  - ✓ Ficilities

|   | formno | accountType     | cardnumber       | pin  | facilities |
|---|--------|-----------------|------------------|------|------------|
| • | 832    | Savings Account | 1355499250409360 | 1660 | ATM Card   |
|   | 1389   | Current Account | 9062037504093600 | 3124 | ATM Card   |
|   | 6784   | Savings Account | 5342462150409360 | 4187 | ATM Card   |

- ♣ Here we are using Indian Bank
- **♣** We done Deposit and withdraw
- ♣ Here in mini statement it shows date and time when the Transaction is occur.

# Indian Bank

| Sun Apr 16 10:11:14 IST 2023 | Deposite  | 1000 |
|------------------------------|-----------|------|
| Sun Apr 16 10:12:59 IST 2023 | Withdrawl | 1000 |
| Sun Apr 16 10:13:23 IST 2023 | Deposite  | 2000 |
| Sun Apr 16 10:13:36 IST 2023 | Withdrawl | 100  |

your current account balance is RS 1900

