# BANK MANAGEMENT SYSTEM USING JAVA

## Frames:

## Login Frame:

- I. Login
- II. SignupOne
- III. SignupTwo
- IV. SignupThree

#### Transactions Frame:

- I. Transactions
- II. Deposit
- III. Withdrawl
- IV. FastCash
- V. MiniStatement
- VI. PinChange
- VII. BlanceEnquiry

#### Connection Frame:

I. Conn

# Source codes:

# Login Frames:

Login.java:

package bank.management.system;

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

public class Login extends JFrame implements ActionListener{

JButton login, clear, signup;

```
JTextField cardTextField;
JPasswordField pinTextField;
Login(){
  setTitle("AUTOMATED TELLER MACHINE");
  setLayout(null);
  ImageIcon i1 = new ImageIcon(ClassLoader.getSystemResource("icons/logo.jpg"));
  Image i2 = i1.getImage().getScaledInstance(100,100,Image.SCALE_DEFAULT);
  ImageIcon i3 = new ImageIcon(i2);
  JLabel label = new JLabel(i3);
  label.setBounds(70,10,100,100);
  add(label);
  JLabel text = new JLabel("Welcome to ATM");
  add(text);
  text.setFont(new Font("Osward",Font.BOLD,38));
  text.setBounds(200,40,400,40);
  JLabel cardno = new JLabel("Card No:");
  cardno.setFont(new Font("Raleway",Font.BOLD,28));
  cardno.setBounds(120,150,150,30);
  add(cardno);
  cardTextField = new JTextField();
  cardTextField.setBounds(300,150,230,30);
  cardTextField.setFont(new Font("Arial", Font.BOLD,14));
  add(cardTextField);
  JLabel pin = new JLabel("PIN:");
  add(pin);
  pinTextField = new JPasswordField();
  pinTextField.setBounds(300,220,230,30);
  pinTextField.setFont(new Font("Arial", Font.BOLD,14));
```

```
add(pinTextField);
login = new JButton("SIGN IN");
login.setBounds(300,300,100,30);
login.setBackground(Color.BLACK);
login.setForeground(Color.WHITE);
login.addActionListener(this);
add(login);
clear = new JButton("CLEAR");
clear.setBounds(430,300,100,30);
clear.setBackground(Color.BLACK);
clear.setForeground(Color.WHITE);
clear.addActionListener(this);
add(clear);
signup = new JButton("SIGN UP");
signup.setBounds(300,350,230,30);
signup.setBackground(Color.BLACK);
signup.setForeground(Color.WHITE);
signup.addActionListener(this);
add(signup);
pin.setFont(new Font("Raleway",Font.BOLD,28));
pin.setBounds(120,220,400,40);
getContentPane().setBackground(Color.WHITE);
setSize(800,480);
setVisible(true);
```

```
setLocation(350,200);
  }
  public void actionPerformed(ActionEvent ae)
  {
    if(ae.getSource()== clear){
      cardTextField.setText("");
      pinTextField.setText("");
    } else if(ae.getSource()==login){
      Conn conn = new Conn();
      String cardnumber = cardTextField.getText();
      String pinnumber = pinTextField.getText();
      String query = "select * from login where cardnumber = "+cardnumber+" and pin =
""+pinnumber+""";
      try{
        ResultSet rs = conn.s.executeQuery(query);
        if(rs.next()){
          setVisible(false);
          new Transactions(pinnumber).setVisible(true);
        }
        else{
          JOptionPane.showMessageDialog(null,"Incorrect Card Number Or Pin");
        }
      }catch(Exception e){
        System.out.println(e);
      }
    }else if(ae.getSource()==signup){
      setVisible(false);
      new SignupOne().setVisible(true);
    }
```

```
}
  public static void main(String[]args){
    new Login();
  }
}
SignupOne.java:
package bank.management.system;
import java.awt.*;
import javax.swing.*;
import java.util.*;
import com.toedter.calendar.JDateChooser;
import java.awt.event.*;
public class SignupOne extends JFrame implements ActionListener{
  long random;
  JTextField nameTextField, fnameTextField, emailTextField, addressTextField,
cityTextField,stateTextField, pinTextField;
  JButton next;
  JRadioButton male, female, other, married, unmarried;
  JDateChooser dateChooser;
  SignupOne(){
    setLayout(null);
    Random ran = new Random();
   random = Math.abs((ran.nextLong() % 9000L) +1000L);
```

```
JLabel formno = new JLabel("APPLICATION FORM NO " +random);
formno.setFont(new Font("Raleway",Font.BOLD, 38));
formno.setBounds(140,20,600,40);
add(formno);
JLabel personDetails = new JLabel("Page 1 : Personal Details");
personDetails.setFont(new Font("Raleway",Font.BOLD, 22));
personDetails.setBounds(290,80,400,30);
add(personDetails);
JLabel name = new JLabel("Name:");
name.setFont(new Font("Raleway",Font.BOLD, 22));
name.setBounds(100,140,100,30);
add(name);
nameTextField = new JTextField();
nameTextField.setFont(new Font("Raleway", Font.BOLD, 14));
nameTextField.setBounds(300,140,400,30);
add(nameTextField);
JLabel fathername = new JLabel("Father's Name:");
fathername.setFont(new Font("Raleway",Font.BOLD, 22));
fathername.setBounds(100,190,200,30);
add(fathername);
fnameTextField = new JTextField();
fnameTextField.setFont(new Font("Raleway", Font.BOLD, 14));
fnameTextField.setBounds(300,190,400,30);
add(fnameTextField);
JLabel dob = new JLabel("Date of Birth:");
dob.setFont(new Font("Raleway",Font.BOLD, 22));
```

```
dob.setBounds(100,240,200,30);
add(dob);
dateChooser = new JDateChooser();
dateChooser.setBounds(300,240,200,30);
add(dateChooser);
JLabel gender = new JLabel("Gender:");
gender.setFont(new Font("Raleway",Font.BOLD, 22));
gender.setBounds(100,290,200,30);
add(gender);
male = new JRadioButton("MALE");
male.setBounds(300,290,120,30);
male.setBackground(Color.WHITE);
add(male);
female = new JRadioButton("FEMALE");
female.setBounds(450,290,120,30);
female.setBackground(Color.WHITE);
add(female);
ButtonGroup gendergroup = new ButtonGroup();
gendergroup.add(male);
gendergroup.add(female);
JLabel email = new JLabel("Email Address:");
email.setFont(new Font("Raleway",Font.BOLD, 22));
email.setBounds(100,340,200,30);
```

```
add(email);
emailTextField = new JTextField();
emailTextField.setFont(new Font("Raleway", Font.BOLD, 14));
emailTextField.setBounds(300,340,400,30);
add(emailTextField);
JLabel marital = new JLabel("Marital Status:");
marital.setFont(new Font("Raleway",Font.BOLD, 22));
marital.setBounds(100,390,200,30);
add(marital);
married = new JRadioButton("MARRIED");
married.setBounds(300,390,120,30);
married.setBackground(Color.WHITE);
add(married);
unmarried = new JRadioButton("UNMARRIED");
unmarried.setBounds(450,390,120,30);
unmarried.setBackground(Color.WHITE);
add(unmarried);
other = new JRadioButton("OTHER");
other.setBounds(600,390,120,30);
other.setBackground(Color.WHITE);
add(other);
ButtonGroup maritalgroup = new ButtonGroup();
maritalgroup.add(married);
maritalgroup.add(unmarried);
maritalgroup.add(other);
```

JLabel address = new JLabel("Address:");

```
address.setFont(new Font("Raleway",Font.BOLD, 22));
address.setBounds(100,440,200,30);
add(address);
addressTextField = new JTextField();
addressTextField.setFont(new Font("Raleway", Font.BOLD, 14));
addressTextField.setBounds(300,440,400,40);
add(addressTextField);
JLabel city = new JLabel("City:");
city.setFont(new Font("Raleway",Font.BOLD, 22));
city.setBounds(100,490,200,30);
add(city);
cityTextField = new JTextField();
cityTextField.setFont(new Font("Raleway", Font.BOLD, 14));
cityTextField.setBounds(300,490,400,30);
add(cityTextField);
JLabel state = new JLabel("State:");
state.setFont(new Font("Raleway",Font.BOLD, 22));
state.setBounds(100,540,200,30);
add(state);
stateTextField = new JTextField();
stateTextField.setFont(new Font("Raleway", Font.BOLD, 14));
stateTextField.setBounds(300,540,400,30);
add(stateTextField);
JLabel pincode = new JLabel("Pincode:");
pincode.setFont(new Font("Raleway",Font.BOLD, 22));
pincode.setBounds(100,590,200,30);
add(pincode);
pinTextField = new JTextField();
```

```
pinTextField.setFont(new Font("Raleway", Font.BOLD, 14));
    pinTextField.setBounds(300,590,400,30);
    add(pinTextField);
    next = new JButton("Next");
    next.setBackground(Color.BLACK);
    next.setForeground(Color.WHITE);
    next.setFont(new Font("Raleway",Font.BOLD,14));
    next.setBounds(620,640,80,30);
    next.addActionListener(this);
    add(next);
    getContentPane().setBackground(Color.WHITE);
    setSize(850,800);
    setLocation(350,10);
    setVisible(true);
 }
public void actionPerformed(ActionEvent ae){
String formno = "" + random;
String name = nameTextField.getText();
String fname = fnameTextField.getText();
String dob = ((JTextField) dateChooser.getDateEditor().getUiComponent()).getText();
String gender = null;
if(male.isSelected())
gender="Male";
}else if(female.isSelected()){
gender="Female";
```

```
}
String email = emailTextField.getText();
String marital = null;
if(married.isSelected()){
marital="Married";
}else if(unmarried.isSelected()){
marital="Unmarried";
}else if(other.isSelected())
{
marital="Other";
}
String address = addressTextField.getText();
String city = cityTextField.getText();
String state = stateTextField.getText();
String pin = pinTextField.getText();
try{
if(name.equals("")){
  JOptionPane.showMessageDialog(null, "Name is Required");
}else{
  Conn c = new Conn();
  String query = "insert into signup1 values (""+formno+"', ""+name+"', ""+fname+"', ""+dob+"',
""+gender+"", ""+email+"", ""+marital+"", ""+address+"", ""+city+"", ""+pin+"", ""+state+"")";
  c.s.executeUpdate(query);
  setVisible(false);
  new SignupTwo(formno).setVisible(true);
}
}catch (Exception e){
  System.out.println(e);
```

```
}
}
  public static void main(String[]args)
{
  new SignupOne();
}
}
SignupTwo.java:
package bank.management.system;
import java.awt.*;
import javax.swing.*;
import java.util.*;
import java.awt.event.*;
public class SignupTwo extends JFrame implements ActionListener{
  JTextField pan1,aadhar1;
  JButton next;
  JRadioButton yes,no,yes1,no1;
  JComboBox religion, category, occupation, education, income;
  String formno;
  SignupTwo(String formno){
    this.formno = formno;
```

```
setLayout(null);
setTitle("NEW ACCOUNT APPLICATION FORM - PAGE2");
JLabel additionalDetails = new JLabel("Page 2 : ADDITIONAL Details");
additionalDetails.setFont(new Font("Raleway",Font.BOLD, 22));
additionalDetails.setBounds(290,80,400,30);
add(additionalDetails);
JLabel name = new JLabel("Religion:");
name.setFont(new Font("Raleway",Font.BOLD, 22));
name.setBounds(100,140,100,30);
add(name);
String valReligion[] = {"HINDU", "MUSLIM", "SIKH", "CHRISTIAN", "OTHER"};
religion= new JComboBox(valReligion);
religion.setBounds(300,140,400,30);
religion.setBackground(Color.WHITE);
add(religion);
JLabel fathername = new JLabel("Category:");
fathername.setFont(new Font("Raleway",Font.BOLD, 22));
fathername.setBounds(100,190,200,30);
add(fathername);
String valCategory[] = {"GENERAL", "OBC", "SC", "ST", "OTHER"};
category= new JComboBox(valCategory);
category.setBounds(300,190,400,30);
category.setBackground(Color.WHITE);
add(category);
JLabel dob = new JLabel("Income:");
```

```
dob.setFont(new Font("Raleway",Font.BOLD, 22));
    dob.setBounds(100,240,200,30);
    add(dob);
    String valIncome[] = {"NULL", "<1,50,000", "<2,50,000", "<5,00,000", "UPTO 10,00,000"};
    income= new JComboBox(valIncome);
    income.setBounds(300,240,400,30);
    income.setBackground(Color.WHITE);
    add(income);
    JLabel gender = new JLabel("Educational");
    gender.setFont(new Font("Raleway",Font.BOLD, 22));
    gender.setBounds(100,290,200,30);
    add(gender);
    JLabel email = new JLabel("Qualification:");
    email.setFont(new Font("Raleway",Font.BOLD, 22));
    email.setBounds(100,310,200,30);
    add(email);
    String valEducation[] = {"NON-GRADUATION", "GRADUATION", "POST-GRADUATION",
"DOCTRATE", "OTHER" };
    education= new JComboBox(valEducation);
    education.setBounds(300,300,400,30);
    education.setBackground(Color.WHITE);
    add(education);
    JLabel marital = new JLabel("Occupation:");
    marital.setFont(new Font("Raleway",Font.BOLD, 22));
    marital.setBounds(100,390,200,30);
    add(marital);
```

```
String valOccupation[] = {"SALARIED", "SELF EMPLOYEED", "BUSSINESS", "STUDENT", "RETIRED",
"OTHERS"};
    occupation= new JComboBox(valOccupation);
    occupation.setBounds(300,390,400,30);
    occupation.setBackground(Color.WHITE);
    add(occupation);
    JLabel pan = new JLabel("Pan Number:");
    pan.setFont(new Font("Raleway",Font.BOLD, 22));
    pan.setBounds(100,440,200,30);
    add(pan);
    pan1 = new JTextField();
    pan1.setFont(new Font("Raleway", Font.BOLD, 14));
    pan1.setBounds(300,440,400,40);
    add(pan1);
    JLabel aadhar = new JLabel("Aadhar no:");
    aadhar.setFont(new Font("Raleway",Font.BOLD, 22));
    aadhar.setBounds(100,490,200,30);
    add(aadhar);
    aadhar1 = new JTextField();
    aadhar1.setFont(new Font("Raleway", Font.BOLD, 14));
    aadhar1.setBounds(300,490,400,30);
    add(aadhar1);
    JLabel seniorcitizen = new JLabel("Senior citizen:");
    seniorcitizen.setFont(new Font("Raleway",Font.BOLD, 22));
    seniorcitizen.setBounds(100,540,200,30);
    add(seniorcitizen);
    yes = new JRadioButton("Yes");
```

```
yes.setFont(new Font("Raleway",Font.BOLD,16));
yes.setBounds(300,540,100,30);
yes.setBackground(Color.WHITE);
add(yes);
no = new JRadioButton("No");
no.setFont(new Font("Raleway",Font.BOLD,16));
no.setBounds(500,540,100,30);
no.setBackground(Color.WHITE);
add(no);
JLabel existingaccount = new JLabel("Existing Account:");
existingaccount.setFont(new Font("Raleway",Font.BOLD, 22));
existingaccount.setBounds(100,590,200,30);
add(existingaccount);
yes1 = new JRadioButton("Yes");
yes1.setFont(new Font("Raleway",Font.BOLD,16));
yes1.setBounds(300,590,100,30);
yes1.setBackground(Color.WHITE);
add(yes1);
no1 = new JRadioButton("No");
no1.setFont(new Font("Raleway",Font.BOLD,16));
no1.setBounds(500,590,100,30);
no1.setBackground(Color.WHITE);
add(no1);
next = new JButton("Next");
next.setBackground(Color.BLACK);
next.setForeground(Color.WHITE);
next.setFont(new Font("Raleway",Font.BOLD,14));
next.setBounds(620,640,80,30);
next.addActionListener(this);
add(next);
```

```
getContentPane().setBackground(Color.WHITE);
     setSize(850,800);
     setLocation(350,10);
     setVisible(true);
  }
public void actionPerformed(ActionEvent ae){
String sreligion = (String)religion.getSelectedItem();
String scategory = (String)category.getSelectedItem();
String sincome = (String)income.getSelectedItem();
String seducation=(String)education.getSelectedItem();
String soccupation=(String)occupation.getSelectedItem();
String seniorcitizen = null;
if(yes.isSelected())
{
seniorcitizen="Yes";
}else if(no.isSelected()){
seniorcitizen="No";
}
String existingaccount = null;
if(yes1.isSelected()){
existingaccount="Yes";
}else if(no1.isSelected()){
existingaccount="No";
}
String span = pan1.getText();
String saadhar = aadhar1.getText();
```

```
try{
            Conn c = new Conn();
           String query = "insert into signup2 values (""+formno+"", ""+sreligion+"", ""+scategory+"",
""+sincome+"", ""+seducation+"", ""+soccupation+"", ""+span+"", ""+saadhar+"", ""+seniorcitizen+"", ""+span+"", ""+span+", ""+span+"", ""+span+"", ""+span+"", ""+span+"", ""+span+"", ""+span+", ""+span+"
""+existingaccount+"")";
            c.s.executeUpdate(query);
           setVisible(false);
            new SignupThree(formno).setVisible(true);
}catch (Exception e){
          System.out.println(e);
}
}
          public static void main(String[]args)
          new SignupTwo("");
}
}
SignupThree.java:
package bank.management.system;
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.util.*;
```

```
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;
  SignupThree(String formno){
    this.formno = formno;
    setLayout(null);
    JLabel I1 = new JLabel("PAGE-3: ACCOUNT DETAILS");
    l1.setFont(new Font("Raleway",Font.BOLD,22));
    l1.setBounds(280,40,400,40);
    add(I1);
    JLabel type = new JLabel("Account Type");
    type.setFont(new Font("Raleway",Font.BOLD,22));
    type.setBounds(100,140,200,30);
    add(type);
    r1= new JRadioButton("Savings Account");
    r1.setFont(new Font("Raleway",Font.BOLD,16));
    r1.setBackground(Color.WHITE);
    r1.setBounds(100,180,180,20);
    add(r1);
    r2= new JRadioButton("Fixed Deposit Account");
    r2.setFont(new Font("Raleway",Font.BOLD,16));
    r2.setBackground(Color.WHITE);
    r2.setBounds(350,180,250,20);
    add(r2);
    r3= new JRadioButton("Current Account");
```

r3.setFont(new Font("Raleway",Font.BOLD,16));

```
r3.setBackground(Color.WHITE);
r3.setBounds(100,220,150,20);
add(r3);
r4= new JRadioButton("Reccuring Deposit Account");
r4.setFont(new Font("Raleway",Font.BOLD,16));
r4.setBackground(Color.WHITE);
r4.setBounds(350,220,250,20);
add(r4);
ButtonGroup groupaccount = new ButtonGroup();
groupaccount.add(r1);
groupaccount.add(r2);
groupaccount.add(r3);
groupaccount.add(r4);
JLabel card = new JLabel("Card Number");
card.setFont(new Font("Raleway",Font.BOLD,22));
card.setBounds(100,270,200,30);
add(card);
JLabel number = new JLabel("XXXX-XXXX-XXXX-4184");
number.setFont(new Font("Raleway",Font.BOLD,22));
number.setBounds(330,270,300,30);
add(number);
JLabel pin = new JLabel("PIN:");
pin.setFont(new Font("Raleway",Font.BOLD,22));
pin.setBounds(100,340,200,30);
add(pin);
JLabel carddetails = new JLabel("Your 16 Digit Card Number");
carddetails.setFont(new Font("Raleway",Font.BOLD,12));
carddetails.setBounds(100,300,300,20);
add(carddetails);
```

```
JLabel pinnumber = new JLabel("XXXX");
pinnumber.setFont(new Font("Raleway",Font.BOLD,22));
pinnumber.setBounds(330,340,300,30);
add(pinnumber);
JLabel pindetails = new JLabel("Your 4 Digit Password");
pindetails.setFont(new Font("Raleway",Font.BOLD,12));
pindetails.setBounds(100,370,300,20);
add(pindetails);
JLabel services = new JLabel("Services Required:");
services.setFont(new Font("Raleway",Font.BOLD,22));
services.setBounds(100,430,400,30);
add(services);
c1 = new JCheckBox("ATM CARD");
c1.setBackground(Color.WHITE);
c1.setFont(new Font("Raleway",Font.BOLD,16));
c1.setBounds(100,480,200,30);
add(c1);
c2 = new JCheckBox("Internet Banking");
c2.setBackground(Color.WHITE);
c2.setFont(new Font("Raleway",Font.BOLD,16));
c2.setBounds(330,480,200,30);
add(c2);
c3 = new JCheckBox("Mobile Banking");
c3.setBackground(Color.WHITE);
c3.setFont(new Font("Raleway",Font.BOLD,16));
c3.setBounds(100,530,200,30);
add(c3);
c4 = new JCheckBox("Email& SMS Alerts");
```

```
c4.setBackground(Color.WHITE);
    c4.setFont(new Font("Raleway",Font.BOLD,16));
    c4.setBounds(330,530,200,30);
    add(c4);
    c5 = new JCheckBox("Cheque Book");
    c5.setBackground(Color.WHITE);
    c5.setFont(new Font("Raleway",Font.BOLD,16));
    c5.setBounds(100,580,200,30);
    add(c5);
    c6 = new JCheckBox("E-Statement");
    c6.setBackground(Color.WHITE);
    c6.setFont(new Font("Raleway",Font.BOLD,16));
    c6.setBounds(330,580,200,30);
    add(c6);
    c7 = new JCheckBox("I Hereby Declares that the above entered details are correct to the best of
the knowledge");
    c7.setBackground(Color.WHITE);
    c7.setFont(new Font("Raleway",Font.BOLD,12));
    c7.setBounds(180,650,700,30);
    add(c7);
    submit = new JButton("submit");
    submit.setBackground(Color.BLACK);
    submit.setForeground(Color.WHITE);
    submit.setFont(new Font("Raleway",Font.BOLD,14));
    submit.setBounds(250,700,100,30);
    submit.addActionListener(this);
    add(submit);
    cancel = new JButton("cancel");
    cancel.setBackground(Color.BLACK);
    cancel.setForeground(Color.WHITE);
```

```
cancel.setFont(new Font("Raleway",Font.BOLD,14));
    cancel.setBounds(420,700,100,30);
    cancel.addActionListener(this);
    add(cancel);
    getContentPane().setBackground(Color.WHITE);
    setSize(850,820);
    setLocation(350,0);
    setVisible(true);
  }
  public void actionPerformed(ActionEvent ae){
    if(ae.getSource() == submit){
      String accountType=null;
      if(r1.isSelected()){
        accountType="Savings account";
      }else if(r2.isSelected()){
             accountType = "Fixed Deposit";
            }else if(r3.isSelected()){
             accountType = "Current Account";
             }else if(r4.isSelected()){
             accountType = "Reccuring Deposit Account";
             Random random = new Random();
            String cardnumber = "" + Math.abs((random.nextLong() %
9000000L)+504093600000000L);
             String pinnumber = ""+ Math.abs((random.nextLong()% 9000L) + 1000L);
```

```
String facility = "";
              if(c1.isSelected()){
                facility = facility+ " ATM CARD";
              }else if(c2.isSelected()){
                facility = facility + "Internet Banking";
              }else if(c3.isSelected()){
                facility = facility + "Mobile Banking";
              }else if(c4.isSelected()){
                facility = facility+ " Emal & SMS Alerts";
              }else if (c5.isSelected()){
                facility = facility + "Cheque Book";
              }else if (c6.isSelected()){
                facility = facility + "E-Satement";
              }
            try{
              if(accountType.equals("")){
              JOptionPane.showMessageDialog(null,"Account Type is required");
            }else{
                Conn conn = new Conn();
                String query1 = "insert into signupthree
values (""+formno+"', ""+account Type+"', ""+card number+"', ""+pinnumber+"', ""+facility+"')"; \\
                String query2 = "insert into login
values(""+formno+"','"+cardnumber+"','"+pinnumber+"')";
                conn.s.executeUpdate(query1);
                conn.s.executeUpdate(query2);
```

```
JOptionPane.showMessageDialog(null,"Card Number:" + cardnumber + "\n Pin:" +
pinnumber);
               setVisible(false);
               new Deposit(pinnumber).setVisible(false);
               }
          } catch(Exception e){
             System.out.println(e);
          }
}
  else if(ae.getSource()==cancel){
    setVisible(false);
    new Login().setVisible(true);
  }
  }
  public static void main(String args[]){
   new SignupThree("");
  }
}
Transaction Frames:
Transactions.java:
package bank.management.system;
import javax.swing.*;
```

```
import java.awt.*;
import java.awt.event.*;
public class Transactions extends JFrame implements ActionListener{
  JButton deposit, withdrawl, ministatement, pinchange, fastcash, balance, exit;
  String pinnumber;
  Transactions(String pinnumber){
    this.pinnumber = pinnumber;
    setLayout(null);
    ImageIcon i1 = new ImageIcon(ClassLoader.getSystemResource("icons/atm.jpg"));
    Image i2 = i1.getImage().getScaledInstance(900,900,Image.SCALE_DEFAULT);
    ImageIcon i3 = new ImageIcon(i2);
    JLabel image = new JLabel(i3);
    image.setBounds(0,0,900,900);
    add(image);
    JLabel text = new JLabel("Please select your Transaction");
    text.setBounds(210,300,700,35);
    text.setForeground(Color.WHITE);
    text.setFont(new Font("System",Font.BOLD,16));
    image.add(text);
    deposit = new JButton("Deposit");
    deposit.setBounds(170,415,150,30);
    deposit.addActionListener(this);
```

```
image.add(deposit);
withdrawl = new JButton("Withdrawl");
withdrawl.setBounds(355,415,150,30);
withdrawl.addActionListener(this);
image.add(withdrawl);
fastcash = new JButton("FastCash");
fastcash.setBounds(170,450,150,30);
fastcash.addActionListener(this);
image.add(fastcash);
ministatement = new JButton("Mini Statement");
ministatement.setBounds(355,450,150,30);
ministatement.addActionListener(this);
image.add(ministatement);
pinchange = new JButton("Pin Change");
pinchange.setBounds(170,485,150,30);
pinchange.addActionListener(this);
image.add(pinchange);
balance = new JButton("Balance Enquiry");
balance.setBounds(355,485,150,30);
balance.addActionListener(this);
image.add(balance);
exit = new JButton("Exit");
exit.setBounds(355,520,150,30);
exit.addActionListener(this);
image.add(exit);
```

```
setSize(900,900);
  setLocation(300,0);
  setUndecorated(true);
  setVisible(true);
}
public void actionPerformed(ActionEvent ae){
  if(ae.getSource()==exit){
    System.exit(0);
  }else if (ae.getSource()== deposit){
    setVisible(false);
    new Deposit(pinnumber).setVisible(true);
  }else if(ae.getSource()==withdrawl){
    setVisible(false);
    new Withdrawl(pinnumber).setVisible(true);
  }else if(ae.getSource() == fastcash){
    setVisible(false);
    new FastCash(pinnumber).setVisible(true);
  }else if (ae.getSource()== pinchange){
    setVisible(false);
    new PinChange(pinnumber).setVisible(true);
  }else if(ae.getSource() == balance){
```

```
setVisible(false);
      new BalanceEnquiry(pinnumber).setVisible(true);
    }else if(ae.getSource()== ministatement){
      new MiniStatement(pinnumber).setVisible(true);
    }
  }
  public static void main(String[]args){
    new Transactions("");
  }
}
Deposit.java:
package bank.management.system;
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.util.*;
public class Deposit extends JFrame implements ActionListener {
  JTextField amount;
  JButton deposit,back;
  String pinnumber;
  Deposit(String pinnumber){
```

```
this.pinnumber = pinnumber;
setLayout(null);
ImageIcon i1 = new ImageIcon(ClassLoader.getSystemResource("icons/atm.jpg"));
Image i2 = i1.getImage().getScaledInstance(900,900, Image.SCALE_DEFAULT);
ImageIcon i3 = new ImageIcon(i2);
JLabel image = new JLabel(i3);
image.setBounds(0,0,900,900);
add(image);
JLabel text = new JLabel("Enter the amount you want to deposit");
text.setForeground(Color.WHITE);
text.setFont(new Font("System",Font.BOLD,16));
text.setBounds(170,300,400,20);
image.add(text);
amount = new JTextField();
amount.setFont(new Font("Raleway",Font.BOLD,22));
amount.setBounds(170,350,320,25);
image.add(amount);
deposit = new JButton("Deposit");
deposit.setBounds(355,485,150,30);
deposit.addActionListener(this);
image.add(deposit);
 back = new JButton("Back");
back.setBounds(355,520,150,30);
back.addActionListener(this);
image.add(back);
```

```
setSize(900,900);
    setLocation(300,0);
    setVisible(true);
  }
  public void actionPerformed(ActionEvent ae){
    if(ae.getSource()== deposit){
      String number = amount.getText();
      Date date = new Date();
      if(number.equals("")){
        JOptionPane.showMessageDialog(null,"Please enter the amount you want to deposit");
      }else{
        try{
        Conn conn = new Conn();
        String query = "insert into bank values(""+pinnumber+"", ""+date+"",
'Deposit','"+number+"')";
        conn.s.executeUpdate(query);
        JOptionPane.showMessageDialog(null,"RS"+number+"Deposited Successfully");
        setVisible(false);
        new Transactions(pinnumber).setVisible(true);
        }
        catch(Exception e){
           System.out.println(e);
        }
       }
;
    }else if(ae.getSource()==back)
```

```
{
      setVisible(false);
      new Transactions(pinnumber).setVisible(true);
    }
  }
  public static void main(String[]args){
    new Deposit("");
  }
}
Withdrawl.java:
package bank.management.system;
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.util.*;
public class Withdrawl extends JFrame implements ActionListener {
  JTextField amount;
  JButton withdrawl,back;
  String pinnumber;
  Withdrawl(String pinnumber){
    this.pinnumber = pinnumber;
    setLayout(null);
```

```
ImageIcon i1 = new ImageIcon(ClassLoader.getSystemResource("icons/atm.jpg"));
Image i2 = i1.getImage().getScaledInstance(900,900, Image.SCALE_DEFAULT);
Imagelcon i3 = new Imagelcon(i2);
JLabel image = new JLabel(i3);
image.setBounds(0,0,900,900);
add(image);
JLabel text = new JLabel("Enter the amount you want to Withdraw");
text.setForeground(Color.WHITE);
text.setFont(new Font("System",Font.BOLD,16));
text.setBounds(170,300,400,20);
image.add(text);
amount = new JTextField();
amount.setFont(new Font("Raleway",Font.BOLD,22));
amount.setBounds(170,350,320,25);
image.add(amount);
withdrawl = new JButton("Withdrawl");
withdrawl.setBounds(355,485,150,30);
withdrawl.addActionListener(this);
image.add(withdrawl);
 back = new JButton("Back");
back.setBounds(355,520,150,30);
back.addActionListener(this);
image.add(back);
```

```
setSize(900,900);
    setLocation(300,0);
    setVisible(true);
 }
  public void actionPerformed(ActionEvent ae){
    if(ae.getSource()== withdrawl){
      String number = amount.getText();
      Date date = new Date();
      if(number.equals("")){
        JOptionPane.showMessageDialog(null,"Please enter the amount you want to deposit");
      }else{
        try{
        Conn conn = new Conn();
        String query = "insert into bank values(""+pinnumber+"", ""+date+"",
'Withdrawl','"+number+"')";
        conn.s.executeUpdate(query);
        JOptionPane.showMessageDialog(null,"RS"+number+"Withdrawl Successful");
        setVisible(false);
        new Transactions(pinnumber).setVisible(true);
        }
        catch(Exception e){
          System.out.println(e);
        }
      }
    }else if(ae.getSource()==back)
    {
      setVisible(false);
      new Transactions(pinnumber).setVisible(true);
```

```
}
  }
  public static void main(String[]args){
    new Withdrawl("");
  }
}
FastCash.java:
package bank.management.system;
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
import java.util.Date;
public class FastCash extends JFrame implements ActionListener{
  JButton deposit, withdrawl, ministatement, pinchange, fastcash, balance, exit;
  String pinnumber;
  FastCash(String pinnumber){
    this.pinnumber = pinnumber;
    setLayout(null);
    ImageIcon i1 = new ImageIcon(ClassLoader.getSystemResource("icons/atm.jpg"));
    Image i2 = i1.getImage().getScaledInstance(900,900 ,Image.SCALE_DEFAULT);
```

```
lmagelcon i3 = new lmagelcon(i2);
JLabel image = new JLabel(i3);
image.setBounds(0,0,900,900);
add(image);
JLabel text = new JLabel("SELECT WITHDRAWL AMOUNT");
text.setBounds(210,300,700,35);
text.setForeground(Color.WHITE);
text.setFont(new Font("System",Font.BOLD,16));
image.add(text);
deposit = new JButton("Rs 100");
deposit.setBounds(170,415,150,30);
deposit.addActionListener(this);
image.add(deposit);
withdrawl = new JButton("Rs 500");
withdrawl.setBounds(355,415,150,30);
withdrawl.addActionListener(this);
image.add(withdrawl);
fastcash = new JButton("Rs 1000");
fastcash.setBounds(170,450,150,30);
fastcash.addActionListener(this);
image.add(fastcash);
ministatement = new JButton(" Rs 2000");
ministatement.setBounds(355,450,150,30);
ministatement.addActionListener(this);
```

```
pinchange = new JButton("Rs 5000");
  pinchange.setBounds(170,485,150,30);
  pinchange.addActionListener(this);
  image.add(pinchange);
  balance = new JButton(" Rs 10000");
  balance.setBounds(355,485,150,30);
  balance.addActionListener(this);
  image.add(balance);
  exit = new JButton("BACK");
  exit.setBounds(355,520,150,30);
  exit.addActionListener(this);
  image.add(exit);
  setSize(900,900);
  setLocation(300,0);
  setUndecorated(true);
  setVisible(true);
public void actionPerformed(ActionEvent ae){
  if(ae.getSource()==exit){
```

}

image.add(ministatement);

```
setVisible(false);
     new Transactions(pinnumber).setVisible(true);
    }else{
      String amount =((JButton) ae.getSource()).getText().substring(3);
      Conn c = new Conn();
      try{
        ResultSet rs = c.s.executeQuery("Select * from bank where pin = ""+pinnumber+""");
        int balance = 0;
        while(rs.next()){
           if(rs.getString("type").equals("Deposit")){
             balance+= Integer.parseInt(rs.getString("amount"));
           }else{
             balance -= Integer.parseInt(rs.getString("amount"));
           }
           if(ae.getSource()!= exit && balance < Integer.parseInt(amount)){
             JOptionPane.showMessageDialog(null, "Insufficient Balance");
             return;
           }
           Date date = new Date();
           String query = "insert into bank values(""+pinnumber+"',""+date+"','Withdrawl',
""+amount+"")";
           c.s.executeUpdate(query);
           JOptionPane.showMessageDialog(null,"Rs"+amount+"Debited Successfully");
        }
        setVisible(false);
        new Transactions(pinnumber).setVisible(true);
```

```
}catch(Exception e){
        System.out.println(e);
      }
    }
  }
  public static void main(String[]args){
    new FastCash("");
  }
}
MiniStatement.java:
package bank.management.system;
import javax.swing.*;
import java.awt.*;
import java.sql.*;
public class MiniStatement extends JFrame {
  MiniStatement(String pinnumber){
    setTitle("Mini Statement");
    setLayout(null);
    JLabel mini = new JLabel();
    add(mini);
```

```
JLabel bank = new JLabel("State Bank of India");
    bank.setBounds(150,20,200,20);
    add(bank);
    JLabel card = new JLabel();
    card.setBounds(20,80,300,20);
     add(card);
     JLabel balance = new JLabel();
     balance.setBounds(20,400,300,20);
     add(balance);
    try{
      Conn conn = new Conn();
     ResultSet rs = conn.s.executeQuery("select * from login where pin = ""+pinnumber+""");
     while(rs.next()){
        card.setText("Card Number:"
+rs.getString("cardnumber").substring(0,4)+"XXXXXXXX"+rs.getNString("cardnumber").substring(12))
     }
    }catch(Exception e){
      System.out.println(e);
    }
    try{
      Conn conn = new Conn();
      int bal =0;
      ResultSet rs = conn.s.executeQuery("select * from bank where pin ='"+pinnumber+""");
      while(rs.next()){
```

```
mini.setText(mini.getText()+"<html>"+ rs.getString("date")+
"    " + rs.getString("type")
+"         + rs.getString("amount")
+ "<br><html>");
     if(rs.getString("type").equals("Deposit")){
       bal+= Integer.parseInt(rs.getString("amount"));
       }else{
       bal -= Integer.parseInt(rs.getString("amount"));
       }
     }
     balance.setText("Your Current Account Balance is Rs" +bal);
   }catch(Exception e){
     System.out.println(e);
   }
   mini.setBounds(20,140,400,200);
   setSize(400,600);
   setLocation(20,20);
   getContentPane().setBackground(Color.WHITE);
   setVisible(true);
 }
```

```
public static void main(String[]args){
   new MiniStatement("");
}
}
PinChange:
package bank.management.system;
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
public class PinChange extends JFrame implements ActionListener {
  JPasswordField pass, pass1;
  JButton change, back;
  String pinnumber;
  PinChange(String pinnumber){
    this.pinnumber= pinnumber;
    setLayout(null);
    ImageIcon i1 = new ImageIcon(ClassLoader.getSystemResource("icons/atm.jpg"));
    Image i2 = i1.getImage().getScaledInstance(900,900,Image.SCALE_DEFAULT);
    Imagelcon i3 = new Imagelcon(i2);
    JLabel image = new JLabel(i3);
    image.setBounds(0,0,900,900);
    add(image);
    JLabel text = new JLabel("CHANGE YOUR PIN");
    text.setForeground(Color.WHITE);
```

```
text.setFont(new Font("System",Font.BOLD,16));
text.setBounds(250,280,500,35);
image.add(text);
JLabel pintext = new JLabel("NEW PIN");
pintext.setForeground(Color.WHITE);
pintext.setFont(new Font("System",Font.BOLD,16));
pintext.setBounds(165,320,180,25);
image.add(pintext);
pass = new JPasswordField();
pass.setFont(new Font("Raleway",Font.BOLD,16));
pass.setBounds(165,340,200,25);
image.add(pass);
JLabel repin = new JLabel("RE-ENTER NEW PIN");
repin.setForeground(Color.WHITE);
repin.setFont(new Font("System",Font.BOLD,16));
repin.setBounds(165,370,180,25);
image.add(repin);
pass1 = new JPasswordField();
pass1.setFont(new Font("Raleway",Font.BOLD,16));
pass1.setBounds(165,390,200,25);
image.add(pass1);
change = new JButton("CHANGE");
change.setBounds(355,485,150,30);
change.addActionListener(this);
image.add(change);
```

```
back = new JButton("BACk");
  back.setBounds(355,520,150,30);
  back.addActionListener(this);
  image.add(back);
  setSize(900,900);
  setLocation(300,0);
  setUndecorated(true);
  setVisible(true);
}
public void actionPerformed(ActionEvent ae){
  if(ae.getSource()== change){
  try{
    String npin = pass.getText();
    String rpin = pass1.getText();
    if(!npin.equals(rpin)){
      JOptionPane.showMessageDialog(null,"Entered PIN does not match");
      return;
    }
    if(npin.equals("")){
               JOptionPane.showMessageDialog(null,"Please Enter PIN");
    return;
    }if(rpin.equals("")){
               JOptionPane.showMessageDialog(null,"Please RE-Enter PIN");
               return;
    }
```

```
Conn conn = new Conn();
    String query1 = "update bank set pin = ""+rpin+"" where pin=""+pinnumber+""";
    String query2 = "update login set pin = ""+rpin+"" where pin=""+pinnumber+""";
    String query3 = "update signupthree set pin = ""+rpin+"" where pin=""+pinnumber+""";
    conn.s.executeUpdate(query1);
    conn.s.executeUpdate(query2);
    conn.s.executeUpdate(query3);
    JOptionPane.showMessageDialog(null,"PIN changed successfully");
    setVisible(false);
    new Transactions(rpin).setVisible(true);
  }catch(Exception e){
    System.out.println(e);
 }
  }else{
    setVisible(false);
    new Transactions(pinnumber).setVisible(true);
  }
public static void main(String[]args){
new PinChange("").setVisible(true);
```

}

}

## BalanceEnquiry:

```
package bank.management.system;
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
public class BalanceEnquiry extends JFrame implements ActionListener {
  JButton back;
  String pinnumber;
  BalanceEnquiry(String pinnumber){
    this.pinnumber = pinnumber;
    setLayout(null);
    lmagelcon i1 = new lmagelcon(ClassLoader.getSystemResource("icons/atm.jpg"));
    Image i2 = i1.getImage().getScaledInstance(900, 900, Image.SCALE_DEFAULT);
    ImageIcon i3 = new ImageIcon(i2);
    JLabel image = new JLabel(i3);
    image.setBounds(0,0,900,900);
    add(image);
    back = new JButton("back");
    back.setBounds(355,520,150,30);
    back.addActionListener(this);
    image.add(back);
    Conn c = new Conn();
    int balance = 0;
```

```
try{
      ResultSet rs = c.s.executeQuery("Select * from bank where pin = ""+pinnumber+""");
      while(rs.next()){
        if(rs.getString("type").equals("Deposit")){
           balance+= Integer.parseInt(rs.getString("amount"));
        }else{
           balance -= Integer.parseInt(rs.getString("amount"));
        }
      }
    }
    catch (Exception e){
      System.out.println(e);
    }
    JLabel text = new JLabel("Your Current Account balance is Rs"+balance);
    text.setForeground(Color.WHITE);
    text.setBounds(170,300,400,30);
    image.add(text);
  setSize(900,900);
  setLocation(300,0);
  setUndecorated(true);
  setVisible(true);
public void actionPerformed(ActionEvent ae){
  setVisible(false);
  new Transactions(pinnumber).setVisible(true);
```

}

}

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

## Connection Frame:

## Conn.java:

```
package bank.management.system;
import java.sql.*;
public class Conn {

Connection c;
   Statement s;
public Conn(){

   try{
      c = DriverManager.getConnection("jdbc:mysql:///bankmanagementsystem","root","varun24");
      s = c.createStatement();
      }catch(Exception e){
            System.out.println(e);
      }
}
```