JAVA MINI PROJECT

ELECTRICITY BILLING SYSTEM

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PROGRAM CODE:

1. SIGNUP PAGE

```
package electricity.billing.system;

import javax.swing.*;
import javax.swing.border.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
import java.sql.ResultSet;
import java.sql.Statement;
import java.sql.Connection;
import java.sql.DriverManager;


public class Signup extends JFrame implements ActionListener {

   JButton create, back;
   Choice accountType;
   JTextField meter,username,name,password;
   Signup() {
      setBounds(450, 150, 700, 400);
      getContentPane().setBackground(Color.WHITE);
      setLayout(null);

      JPanel panel = new JPanel();
      panel.setBounds(30, 30, 650, 300);
      panel.setBorder(new TitledBorder(new LineBorder(new
Color(173, 216, 230), 2), "Create-Account",
TitledBorder.CENTER, TitledBorder.TOP, null, new Color(172,
216, 230)));
      panel.setBackground(Color.WHITE);
      panel.setLayout(null);
      panel.setForeground(new Color(35, 139, 34));
      add(panel);

      JLabel heading = new JLabel("Create Account");
      heading.setBounds(100, 50, 140, 20);
      heading.setForeground(Color.GRAY);
      heading.setFont(new Font("Tahoma", Font.BOLD, 14));
```

```
        panel.add(heading);

        accountType = new Choice();
        accountType.add("Admin");
        accountType.add("Customer");
        accountType.setBounds(260, 50, 150, 20);
        panel.add(accountType);

        JLabel lblmeter = new JLabel("Meter Number");
        lblmeter.setBounds(100, 90, 140, 20);
        lblmeter.setForeground(Color.GRAY);
        lblmeter.setFont(new Font("Tahoma", Font.BOLD, 14));
        panel.add(lblmeter);

        meter = new JTextField();
        meter.setBounds(260, 90, 150, 20);
        panel.add(meter);

        JLabel lblusername = new JLabel("Username");
        lblusername.setBounds(100, 130, 140, 20);
        lblusername.setForeground(Color.GRAY);
        lblusername.setFont(new Font("Tahoma", Font.BOLD, 14));
        panel.add(lblusername);

        username = new JTextField();
        username.setBounds(260, 130, 150, 20);
        panel.add(username);

        JLabel lblname = new JLabel("Name");
        lblname.setBounds(100, 170, 140, 20);
        lblname.setForeground(Color.GRAY);
        lblname.setFont(new Font("Tahoma", Font.BOLD, 14));
        panel.add(lblname);

        name = new JTextField();
        name.setBounds(260, 170, 150, 20);
        panel.add(name);


        meter.addFocusListener(new FocusListener() {
    @Override
    public void focusGained(FocusEvent fe) {}
```

```
@Override
public void focusLost(FocusEvent fe) {
try {
Conn c = new Conn();
ResultSet rs = c.s.executeQuery("Select * from login where
meter_no = '"+meter.getText()+"'");
while(rs.next()) {
name.setText(rs.getString("name"));
}
} catch (Exception e) {
e.printStackTrace();
}
}
});

      JLabel lblpassword = new JLabel("Password");
      lblpassword.setBounds(100, 210, 140, 20);
      lblpassword.setForeground(Color.GRAY);
      lblpassword.setFont(new Font("Tahoma", Font.BOLD, 14));
      panel.add(lblpassword);

      password = new JTextField();
      password.setBounds(260, 210, 150, 20);
      panel.add(password);

      accountType.addItemListener(new ItemListener() {
public void itemStateChanged(ItemEvent ae) {
String user = accountType.getSelectedItem();
if(user.equals("Customer")) {
lblmeter.setVisible(true);
meter.setVisible(true);
name.setEditable(false);
}else {
lblmeter.setVisible(false);
meter.setVisible(false);
name.setEditable(true);
}
}
});

      create = new JButton("create");
      create.setBackground(Color.BLACK);
      create.setForeground(Color.WHITE);
```

```
        create.setBounds(140, 260, 120, 25);
        create.addActionListener(this);
        panel.add(create);

        back = new JButton("Back");
        back.setBackground(Color.BLACK);
        back.setForeground(Color.WHITE);
        back.setBounds(300, 260, 120, 25);
        back.addActionListener(this);
        panel.add(back);

        ImageIcon i1 = new
ImageIcon(ClassLoader.getSystemResource("icon/signupImage.png"
));
        Image i2 = i1.getImage().getScaledInstance(250, 250,
Image.SCALE_DEFAULT);
        ImageIcon i3 = new ImageIcon(i2);
        JLabel image = new JLabel(i3);
        image.setBounds(430, 30, 250, 250);
        panel.add(image);

        setVisible(true);
    }


    public void actionPerformed(ActionEvent ae) {

        if (ae.getSource() == create) {
            String atype=accountType.getSelectedItem();
            String susername=username.getText();
            String sname=name.getText();
            String spassword=password.getText();
            String smeter=meter.getText();

            try {
Conn c = new Conn();

String query = null;
if(atype.equals("Admin")) {
query ="insert into login values('" + smeter + "', '" +
susername + "', '" + sname + "', '"
+ spassword + "', '" + atype + "')";
} else {
```

```
query = "update login set username = '"+susername+"', password
= '"+spassword+"', user = '"+atype+"' where meter_no =
'"+smeter+"'";
}
c.s.executeUpdate(query);

JOptionPane.showMessageDialog(null, "Account Created
Successfully");

setVisible(false);
new Login();
} catch (Exception e) {
e.printStackTrace();
}
} else if (ae.getSource() == back) {
setVisible(false);

new Login();
}
}



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

2.ADD NEW CUSTOMER

```
package electricity.billing.system;

import java.awt.*;
import javax.swing.*;
import java.util.*;
import java.awt.event.*;

public class NewCustomer extends JFrame implements
ActionListener {

 JTextField tfname, tfaddress, tfstate, tfcity, tfemail,
tfphone;
 JButton next, cancel;
 JLabel lblmeter;

 NewCustomer() {
  setSize(700, 500);
  setLocation(400, 200);

  JPanel p = new JPanel();
  p.setLayout(null);
  p.setBackground(new Color(173, 216, 230));
  add(p);

  JLabel heading = new JLabel("New Customer");
  heading.setBounds(180, 10, 200, 25);
  heading.setFont(new Font("Tahoma", Font.PLAIN, 24));
  p.add(heading);

  JLabel lblname = new JLabel("Customer Name");
  lblname.setBounds(100, 80, 100, 20);
  p.add(lblname);

  tfname = new JTextField();
  tfname.setBounds(240, 80, 200, 20);
  p.add(tfname);

  JLabel lblmeterno = new JLabel("Meter Number");
  lblmeterno.setBounds(100, 120, 100, 20);
  p.add(lblmeterno);
```

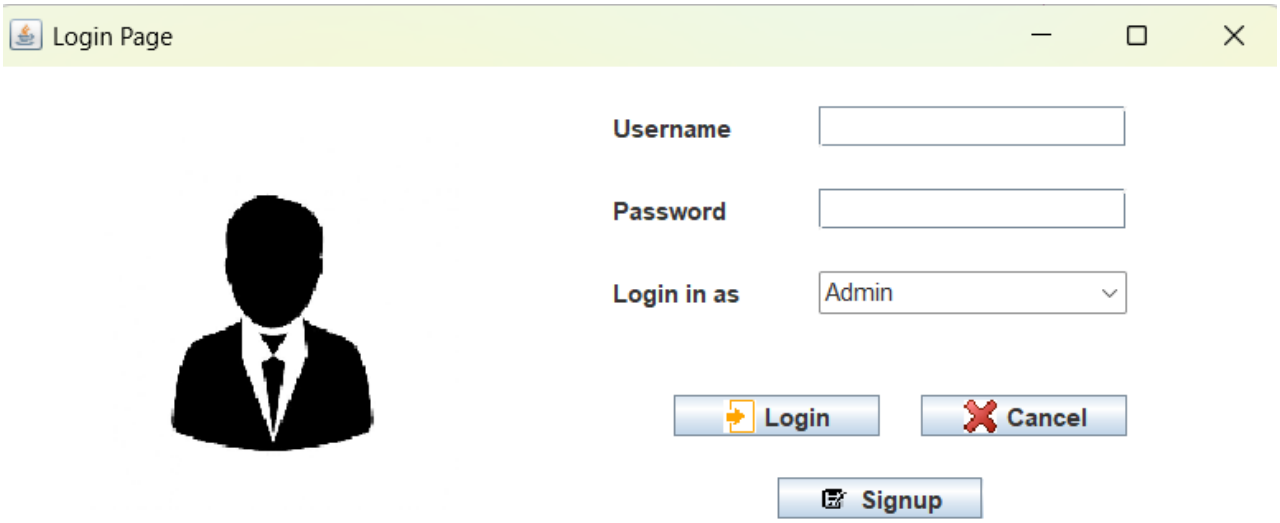
```
lblmeter = new JLabel("");
lblmeter.setBounds(240, 120, 100, 20);
p.add(lblmeter);

Random ran = new Random();
long number = ran.nextLong() % 1000000;
lblmeter.setText("" + Math.abs(number));

JLabel lbladdress = new JLabel("Address");
lbladdress.setBounds(100, 160, 100, 20);
p.add(lbladdress);

tfaddress = new JTextField();
tfaddress.setBounds(240, 160, 200, 20);
p.add(tfaddress);

JLabel lblcity = new JLabel("City");
lblcity.setBounds(100, 200, 100, 20);
p.add(lblcity);

tfcity = new JTextField();
tfcity.setBounds(240, 200, 200, 20);
p.add(tfcity);

JLabel lblstate = new JLabel("State");
lblstate.setBounds(100, 240, 100, 20);
p.add(lblstate);

tfstate = new JTextField();
tfstate.setBounds(240, 240, 200, 20);
p.add(tfstate);

JLabel lblemail = new JLabel("Email");
lblemail.setBounds(100, 280, 100, 20);
p.add(lblemail);

tfemail = new JTextField();
tfemail.setBounds(240, 280, 200, 20);
p.add(tfemail);

JLabel lblphone = new JLabel("Phone Number");
lblphone.setBounds(100, 320, 100, 20);
p.add(lblphone);
```

```
 tfphone = new JTextField();
 tfphone.setBounds(240, 320, 200, 20);
 p.add(tfphone);

 next = new JButton("Next");
 next.setBounds(120, 390, 100, 25);
 next.setBackground(Color.BLACK);
 next.setForeground(Color.WHITE);
 next.addActionListener(this);
 p.add(next);

 cancel = new JButton("Cancel");
 cancel.setBounds(250, 390, 100, 25);
 cancel.setBackground(Color.BLACK);
 cancel.setForeground(Color.WHITE);
 cancel.addActionListener(this);
 p.add(cancel);

 setLayout(new BorderLayout());

 add(p, "Center");

 ImageIcon i1 = new
ImageIcon(ClassLoader.getSystemResource("icon/hicon1.jpg"));
 Image i2 = i1.getImage().getScaledInstance(150, 300,
Image.SCALE_DEFAULT);
 ImageIcon i3 = new ImageIcon(i2);
 JLabel image = new JLabel(i3);
 add(image, "West");

 getContentPane().setBackground(Color.WHITE);

 setVisible(true);
}

public void actionPerformed(ActionEvent ae) {
 if (ae.getSource() == next) {
  String name = tfname.getText();
  String meter = lblmeter.getText();
  String address = tfaddress.getText();
  String city = tfcity.getText();
  String state = tfstate.getText();
```

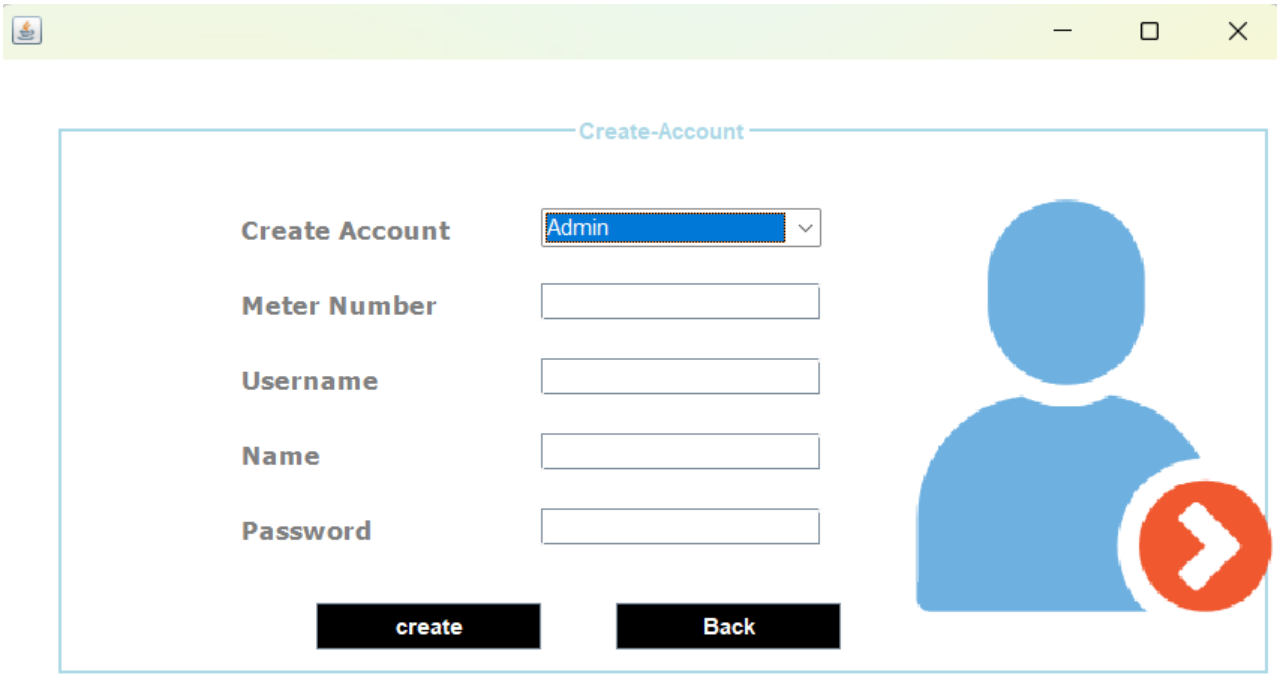
```
  String email = tfemail.getText();
  String phone = tfphone.getText();

  String query1 = "insert into customer values('" + name + "',
'" + meter + "', '" + address + "', '" + city
    + "', '" + state + "', '" + email + "', '" + phone + "')";
  String query2 = "insert into login values('" + meter + "',
'', '" + name + "', '', '')";

  try {
   Conn c = new Conn();

   c.s.executeUpdate(query1);
   c.s.executeUpdate(query2);
   JOptionPane.showMessageDialog(null, "Customer Details Added
Successfully");
   setVisible(false);

   new MeterInfo(meter);
  } catch (Exception e) {
   e.printStackTrace();
  }
  } else {
  setVisible(false);
  }
 }

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

}
```

RESULTS

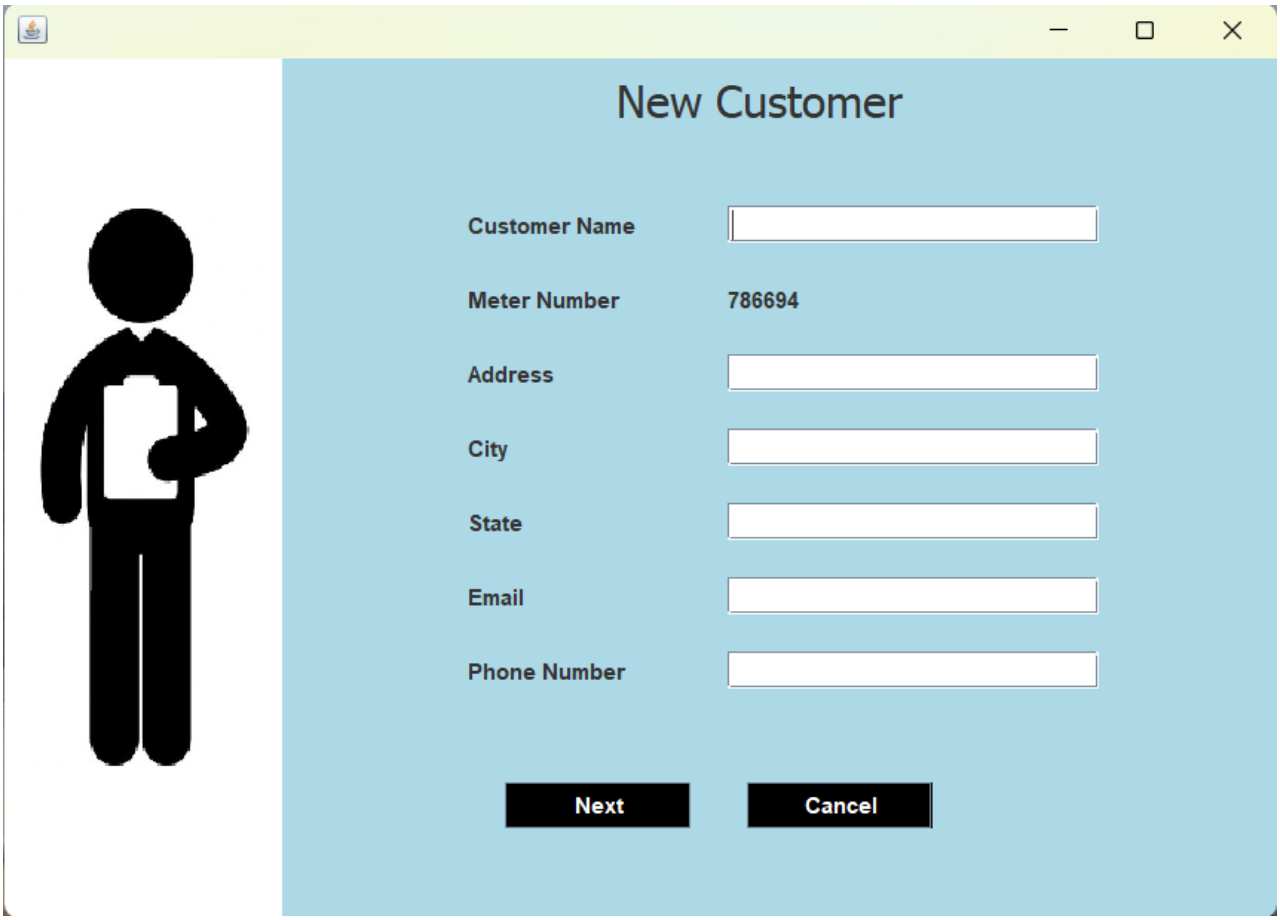
LOGIN PAGE



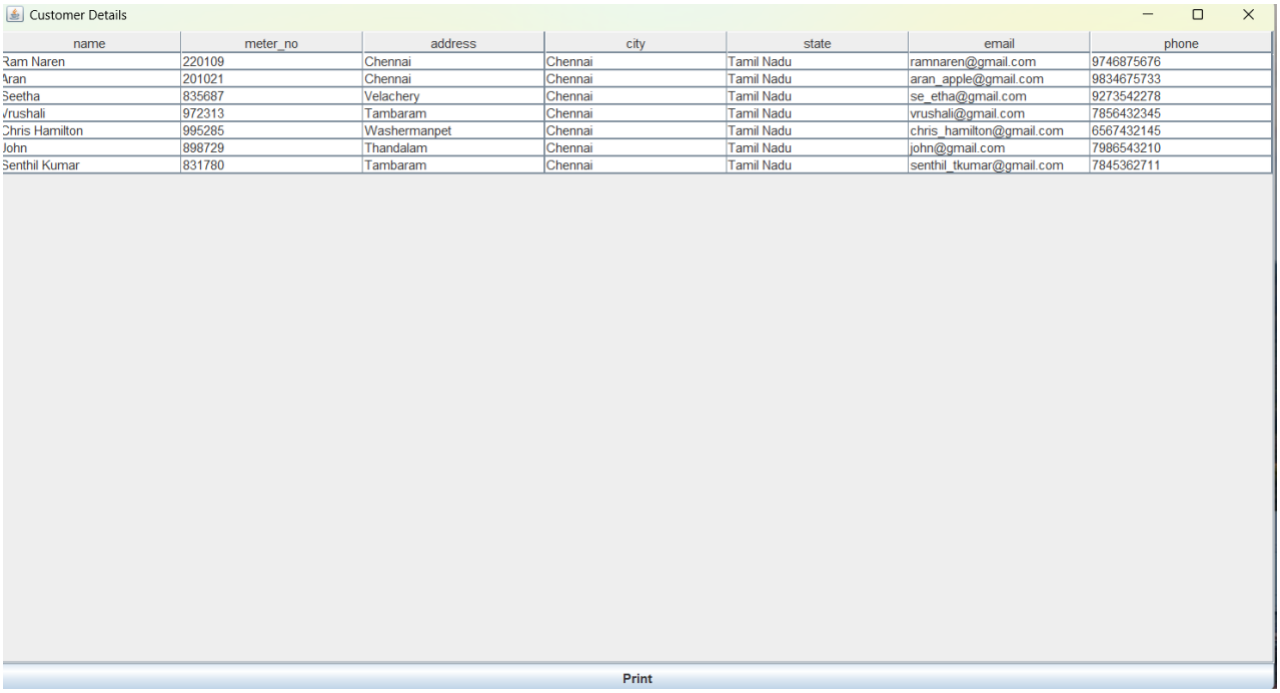
SIGNUP PAGE



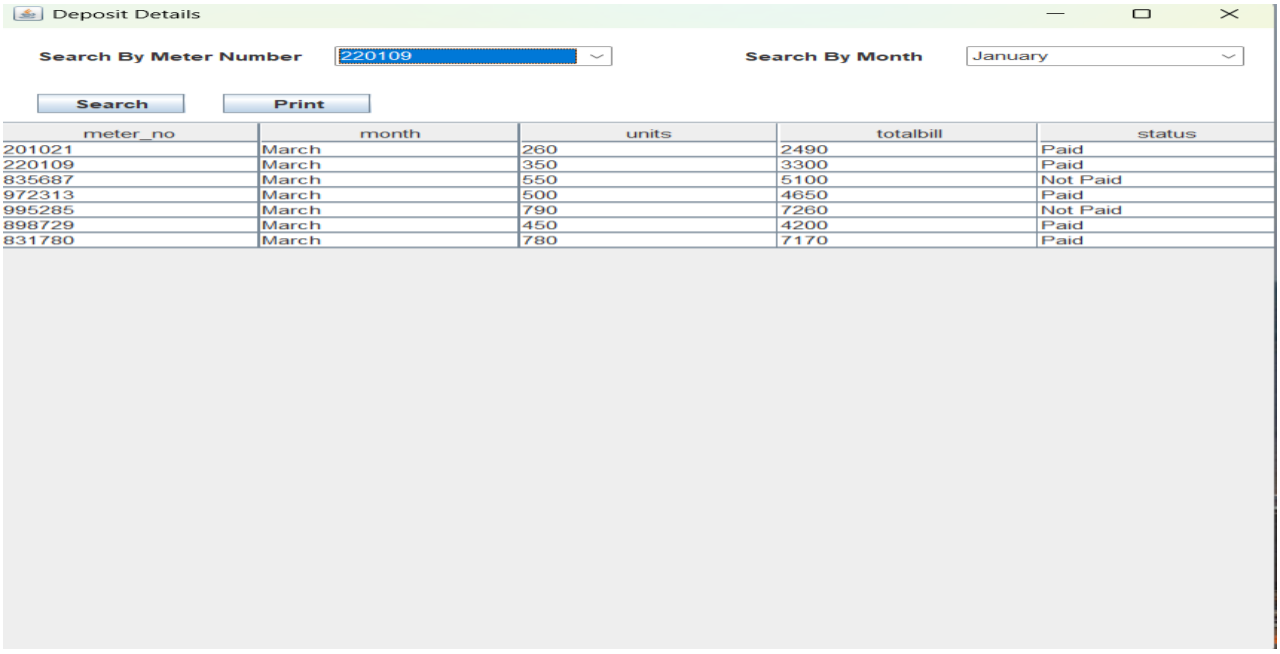
ADDING NEW CUSTOMER



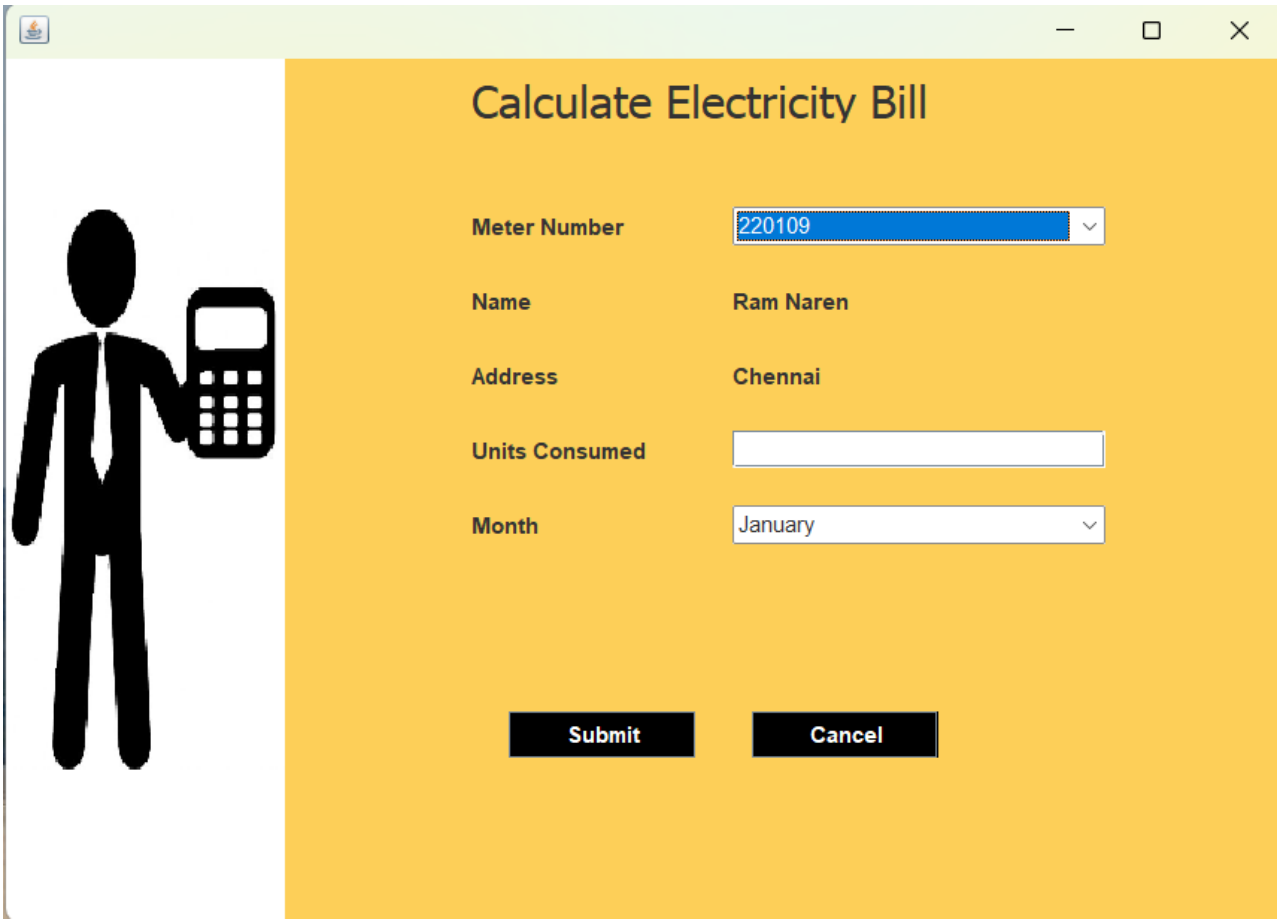
CUSTOMER DETAIL VIEW



DEPOSIT DETAILS



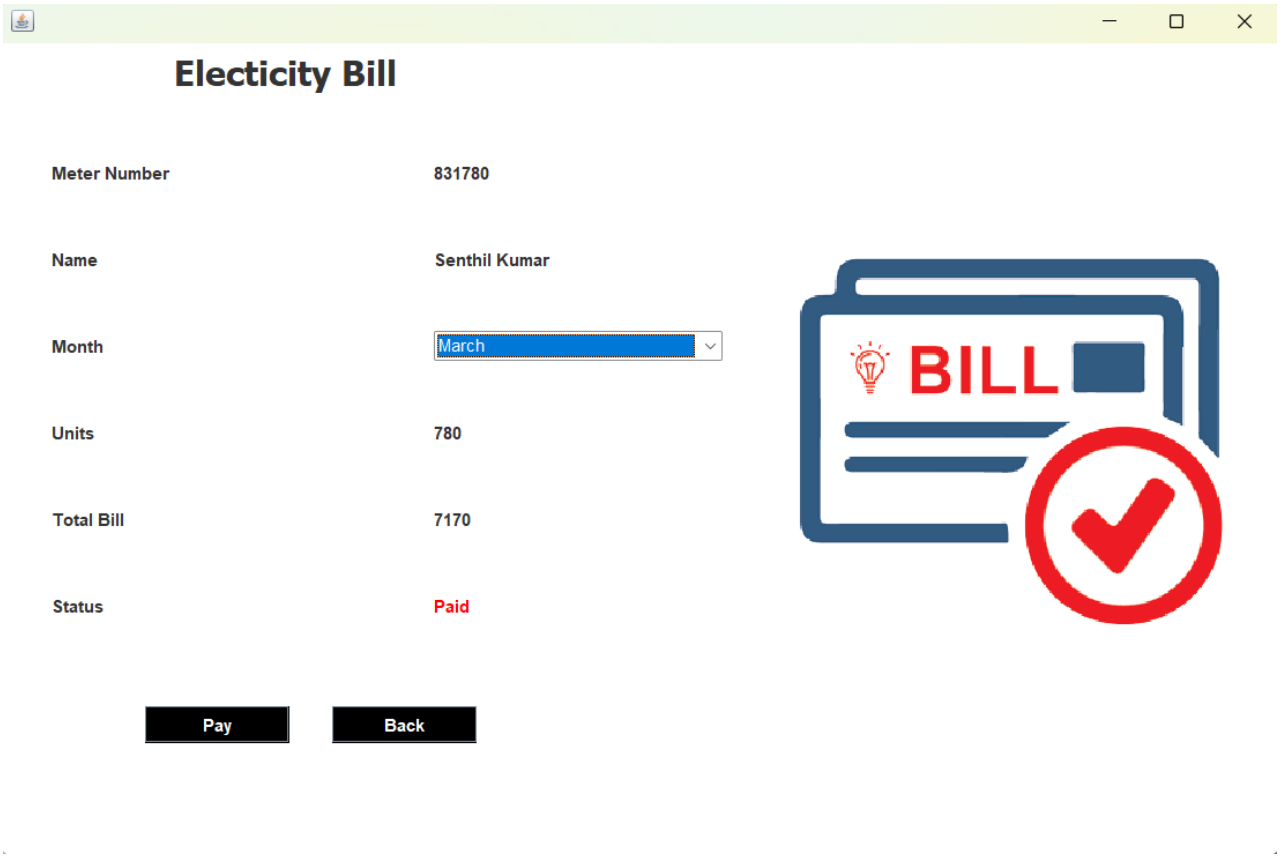
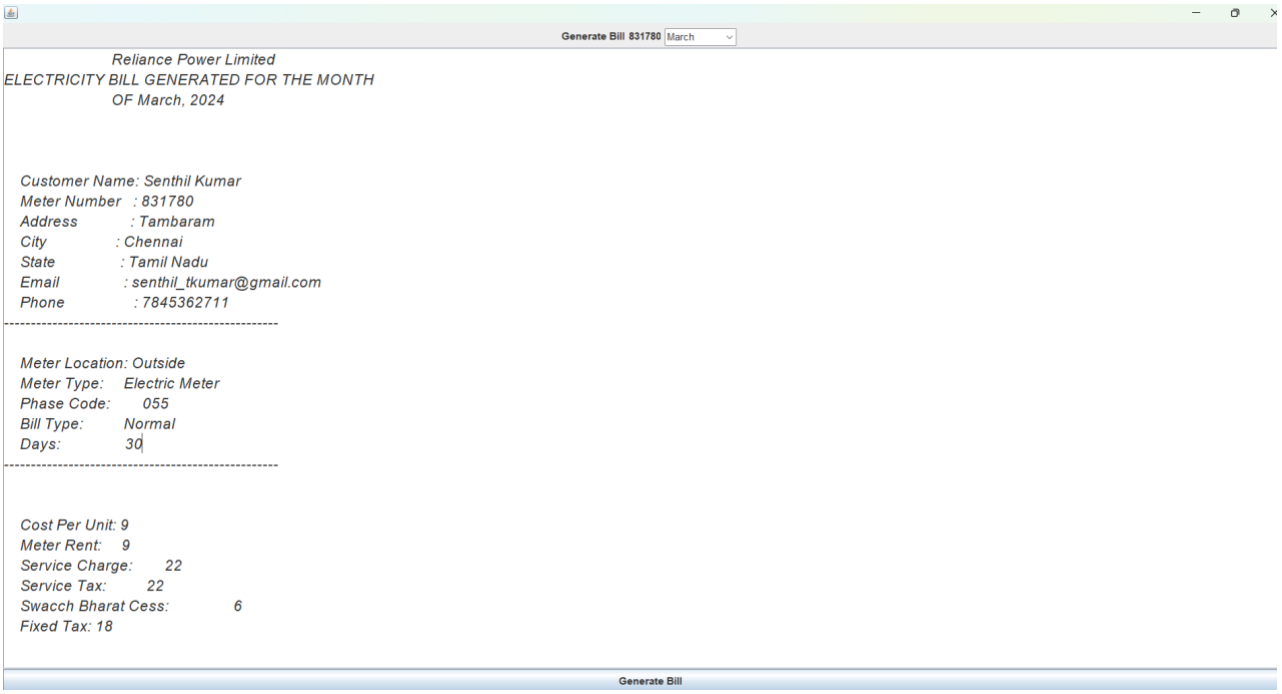
CALCULATE ELECTRICITY BILL



DASHBOARD

UPDATE CUSTOMER INFORMATION

ELECTRICITY BILL VIEW



GENERATE BILL PAGE