



**PROJECT REPORT  
ON  
ELECTRICITY BILLING SYSTEM**

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# **ELECTRICITY BILLING SYSTEM**

## **1. WHAT IS E-BILLING?**

Electricity Bill Management System is made to keep the records of the bills of the customers. The admin can manage all the accounts and the registered users like employees and customers can only manage their accounts. This system helps in maintaining the bills and the payments.

## **2. WHAT ARE JFRAMES?**

JFrame is a top-level container that provides a window on the screen. A frame is actually a base window on which other components rely, namely the menu bar, panels, labels, text fields, buttons, etc. Almost every other Swing application starts with the JFrame window.

## **3. TYPES OF JFRAMES?**

- I. JPanel :JPanel is a generic lightweight container.
- II. JButton :JButton is an implementation of a “push” button. Buttons can be configured, and to some degree controlled by Actions.
- III. JLabel:A JLabel is a display area for a short text string or an image or both. A label does not react to input events. As a result, it cannot get the keyboard focus.

Etc

## TECHNOLOGIES USED:

### Software and Hardware Requirements

1. apache netbeans ide 12.3

a jframes  
b libraries

2. Jdk 16

## CODE:

```
import java.awt.print.PrinterException;
import java.util.logging.Level;
import java.util.logging.Logger;

/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

/**
 *
 * @author DELL-PC
 */
public class EBILL extends javax.swing.JFrame {

    /**
     * Creates new form EBILL
     */
    public EBILL() {
        initComponents();
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated
Code">//GEN-BEGIN: initComponents
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jPanel1 = new javax.swing.JPanel();
        jLabel2 = new javax.swing.JLabel();
        jLabel3 = new javax.swing.JLabel();
        jLabel4 = new javax.swing.JLabel();
        txtcid = new javax.swing.JTextField();
```

```

txtcname = new javax.swing.JTextField();
txtunit = new javax.swing.JTextField();
jButton1 = new javax.swing.JButton();
jScrollPane1 = new javax.swing.JScrollPane();
txtprint = new javax.swing.JTextArea();
jButton2 = new javax.swing.JButton();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

jLabel1.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
jLabel1.setText("ELECTRICITY BILLING SYSTEM");

jPanel1.setBorder(new
javax.swing.border.SoftBevelBorder(javax.swing.border.BevelBorder.RAISED));

jLabel2.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jLabel2.setText("CUSTOMER ID");

jLabel3.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jLabel3.setText("CUSTOMER NAME");

jLabel4.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N
jLabel4.setText("UNIT");

jButton1.setText("CAL");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

txtprint.setColumns(20);
txtprint.setRows(5);
jScrollPane1.setViewportView(txtprint);

jButton2.setText("PRINT");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addGap(25, 25, 25)
        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE,
90, javax.swing.GroupLayout.PREFERRED_SIZE)

```

```

        .addGroup(jPanel1Layout.createSequentialGroup())
        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.
Layout.Alignment.LEADING)
            .addComponent(jLabel2)
            .addComponent(jLabel3)
            .addComponent(jLabel4))
        .addGap(18, 18, 18)
        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.
Layout.Alignment.TRAILING)
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.
GroupLayout.Alignment.LEADING, false)
                .addComponent(txtcid)
                .addComponent(txtcname,
javax.swing.GroupLayout.PREFERRED_SIZE, 157,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addComponent(txtunit,
javax.swing.GroupLayout.PREFERRED_SIZE, 157,
javax.swing.GroupLayout.PREFERRED_SIZE))))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,
28, Short.MAX_VALUE)
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.
Layout.Alignment.LEADING)
                .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()
                    .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 256,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addContainerGap())
                .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup()
                    .addComponent(jButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 79,
javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addGap(86, 86, 86))))
    );
    jPanel1Layout.setVerticalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(jPanel1Layout.createSequentialGroup()
        .addContainerGap()
        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.
Layout.Alignment.LEADING)
            .addGroup(jPanel1Layout.createSequentialGroup()
                .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.
Layout.Alignment.BASELINE)
                    .addComponent(jLabel2)
                    .addComponent(txtcid,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.R
ELATED, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.
Layout.Alignment.BASELINE)

```

```

        .addComponent(jLabel3)
        .addComponent(txtcname,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(53, 53, 53)
        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel4)
        .addComponent(txtunit,
javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(41, 41, 41)
        .addComponent(jButton1,
javax.swing.GroupLayout.PREFERRED_SIZE, 48,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(25, 25, 25))
        .addGroup(jPanel1Layout.createSequentialGroup()
        .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 205,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 24, Short.MAX_VALUE)
        .addComponent(jButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 37,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap()))
    );

    javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
        .addContainerGap(18, Short.MAX_VALUE)
        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(134, 134, 134))
        .addGroup(layout.createSequentialGroup()
        .addGap(130, 130, 130)
        .addComponent(jLabel1)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
        .addGap(22, 22, 22)
        .addComponent(jLabel1)
        .addGap(18, 18, 18)
        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(35, Short.MAX_VALUE))
    );

```

```

    );

    pack();
    setLocationRelativeTo(null);
} // </editor-fold> // GEN-END: initComponents
String cid;
double charge, gramount;
int count;

public void print()
{
    String cid = txtcid.getText();
    String cname = txtcname.getText();
    String unit = txtunit.getText();

    txtprint.setText(txtprint.getText() + "\n");
    txtprint.setText(txtprint.getText() + "ELECTRICITY BILLING SYSTEM" + "\n");
    txtprint.setText(txtprint.getText() + "\n");
    txtprint.setText(txtprint.getText() + "CUSTOMER ID : " + cid + "\n");
    txtprint.setText(txtprint.getText() + "CUSTOMER NAME : " + cname + "\n");
    txtprint.setText(txtprint.getText() + "UNIT : " + unit + "\n");
    txtprint.setText(txtprint.getText() + "AMOUNT: " + gramount + "\n");
    txtprint.setText(txtprint.getText() + "THANK YOU COME AGAIN");
}

```

```

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{ // GEN-FIRST: event_jButton1ActionPerformed
    // TODO add your handling code here:

    cid = txtcid.getText();
    count = Integer.parseInt(txtunit.getText());

    if(count < 500)
    {
        charge = 1.00;
    }
    else if(count < 500 && count < 600 )
    {
        charge = 1.80;
    }
    else if(count < 600 && count < 800 )
    {
        charge = 2.80;
    }
    else
    {
        charge = 3.00;
    }
}

```



```

    }

    gramount = charge * count;

    print();

} //GEN-LAST:event_jButton1ActionPerformed

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_jButton2ActionPerformed
    try {
        // TODO add your handling code here:

        txtprint.print();
    } catch (PrinterException ex) {
        Logger.getLogger(EBILL.class.getName()).log(Level.SEVERE, null, ex);
    }
} //GEN-LAST:event_jButton2ActionPerformed

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and
feel.
    * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
    */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

        java.util.logging.Logger.getLogger(EBILL.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {

        java.util.logging.Logger.getLogger(EBILL.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {

        java.util.logging.Logger.getLogger(EBILL.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

```

```

java.util.logging.Logger.getLogger(EBILL.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    }
    //</editor-fold>

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new EBILL().setVisible(true);
        }
    });
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JPanel jPanel1;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JTextField txtcid;
private javax.swing.JTextField txtcname;
private javax.swing.JTextArea txtprint;
private javax.swing.JTextField txtunit;
// End of variables declaration//GEN-END:variables
}

```

## DESIGN:

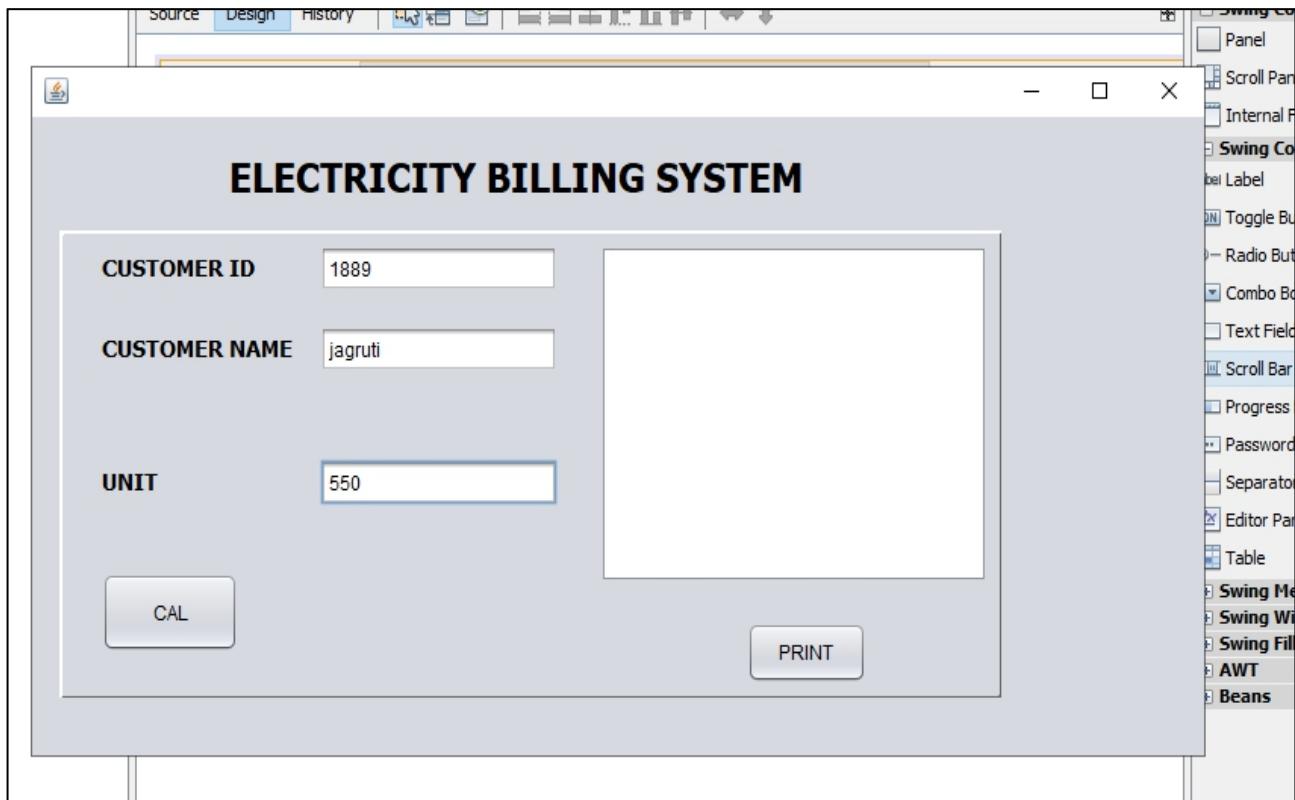
This screenshot shows the 'ELECTRICITY BILLING SYSTEM' form in a design tool. The form has a title bar with 'Source', 'Design', and 'History' tabs. The main area contains three input fields: 'CUSTOMER ID', 'CUSTOMER NAME', and 'UNIT'. To the right of these fields is a large empty rectangular box. At the bottom left is a 'CAL' button, and at the bottom right is a 'PRINT' button. The form is set against a light gray background with a subtle grid.

## IMPLEMENTATION :

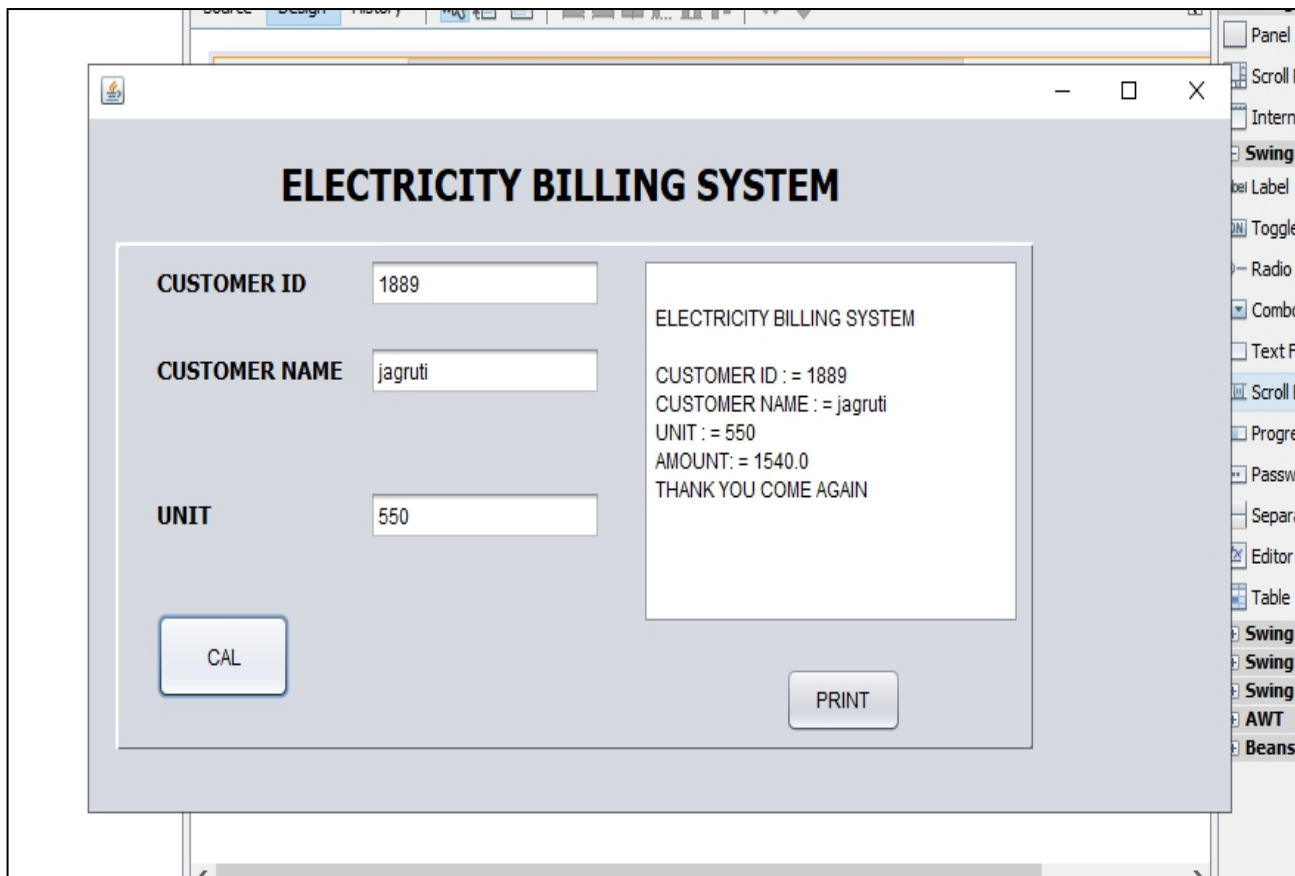
a) 1<sup>ST</sup> View :

This screenshot shows the 'ELECTRICITY BILLING SYSTEM' form in a runtime view. The form is displayed within a window that has standard Windows-style controls (minimize, maximize, close buttons). The form itself is identical to the one in the design mode, with input fields for 'CUSTOMER ID', 'CUSTOMER NAME', and 'UNIT', a large empty box on the right, and 'CAL' and 'PRINT' buttons at the bottom. The background is a solid light gray.

b) Entry of data:



c) Recipe generated with amount:



d) To print recipe :

