



PRODUCT BILLING

GRADE 12 0

BY JADEN ADE



CERTIFICATE

This is to certify that the Project Titled

is a bona fide work done by _____

of Grade _____ Sec _____ under Informatics Practices in

partial fulfilment of the requirements for All India Senior Certificate

Examination as prescribed by the Central Board of Secondary

Education (CBSE) during the academic year 2019-2020.

Date: _____

Teacher In charge: _____

Internal Examiner

External Examiner

Principal

INTRODUCTION

This document is a Software Design Document for our project named as Product Billing. In this document, system module will be documented clearly.

Purpose

The purpose of document is to identify what needs to be coded, that is specified in Software Requirements Specification. In this document, brief information of Product Billing will be given.

Scope

In this document, the detailed description of Product Billing will be given. Our Product Billing System will have an interface, it is a user-friendly software allowing the user to browse the software without any errors & complications.

In the interface, there are 2 types of users, which are:-

- Administrator

- Authorized User

Each user type will have a different authorization to access to the system.

SYSTEM REQUIREMENTS

- NETBEANS 8.2/ JAVA(TM) PLATFORM SE BINARY
- MYSQL VERSION 5.1 & ABOVE

FRAMES

JFRAME1(Load FRAME)

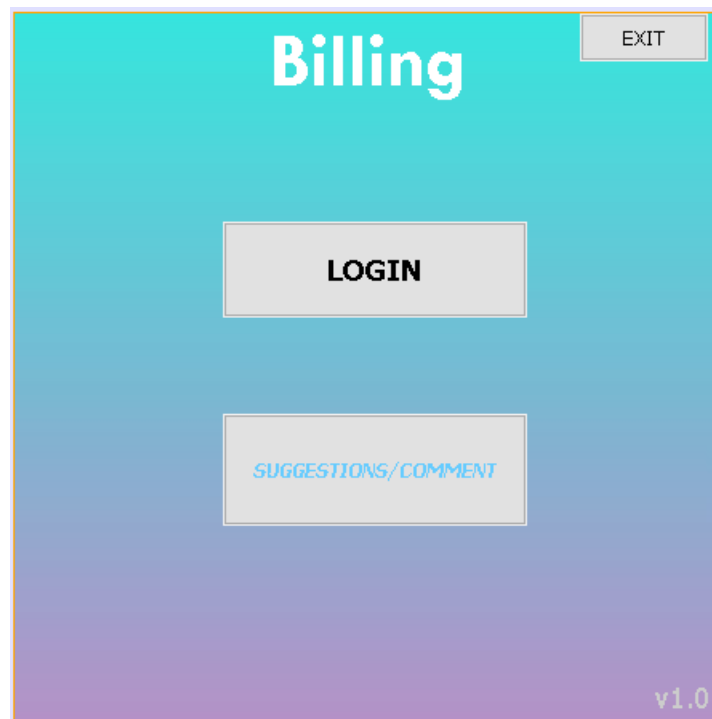


SOURCE CODE(UNDER START BUTTON) JBUTTON1

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {  
    new Home().setVisible(true);  
    this.setVisible(false); // TODO add your handling code here:  
}
```

(THIS BUTTON WILL DIRECT USERS TO THE HOME FRAME)

JFRAME2(START FRAME)



SOURCE CODE(UNDER LOGIN BUTTON) JBUTTON1

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {  
    LoginHome log = new LoginHome();  
    log.setVisible(true);  
  
    this.setVisible(false);    // TODO add your handling code here:  
}
```

(THIS BUTTON WILL DIRECT USERS TO THE LOGIN FRAME)

SOURCE CODE(UNDER COMMENT BUTTON) JBUTTON2

```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {  
    Comment log = new Comment();  
    log.setVisible(true);  
  
    this.setVisible(false);    // TODO add your handling code here:  
}
```


(THIS BUTTON WILL DIRECT USERS TO THE COMMENT FRAME)

SOURCE CODE(UNDER EXIT BUTTON) JBUTTON3

```
private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {  
    System.exit(0);        // TODO add your handling code here:  
}
```

(THIS BUTTON WILL TERMINATE/CLOSE THE PROGRAM)

JFRAME3(LOGIN FRAME)



Login EXIT

Employee ID:

Password:

LOGIN

CANCEL v1.0

SOURCE CODE(UNDER LOGIN BUTTON) JBUTTON1

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {  
String User={empid.getText()};  
String pass=jPasswordField1.getText();  
  
try  
{  
    Class.forName("java.sql.DriverManager");  
    Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
    Statement stmt=con.createStatement();  
  
    String query="SELECT * FROM USERS WHERE EMPLOYEE_ID='"+User+"'";  
    ResultSet rs=stmt.executeQuery(query);  
    if(rs.next())  
    {  
        String pas=rs.getString("PASSWORD");  
        if (pass.equals(pas))  
        {  
  
            JOptionPane.showMessageDialog(this,"Login Successful");  
            Main log = new Main();  
            log.setVisible(true);  
  
            this.setVisible(false);  
        }  
        else  
        {  
            JOptionPane.showMessageDialog(this,"Incorrect Password");  
        }  
    }  
    else{  
        JOptionPane.showMessageDialog(this, "No User Found");  
    }  
} catch (Exception e)  
{  
    JOptionPane.showMessageDialog(this, "***Please Try Again**\n Try Re-entering the Username & Password");  
}  
  
// TODO add your handling code here:  
}
```

(THIS BUTTON WILL VERIFY THE USERNAME AND PASSWORD WITH DATABASE AND THEN REDIRECT TO MAIN FRAME)

SOURCE CODE(UNDER CANCEL BUTTON) JBUTTON2

```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {  
    Home log = new Home();  
    log.setVisible(true);  
  
    this.setVisible(false); // TODO add your handling code here:  
}
```

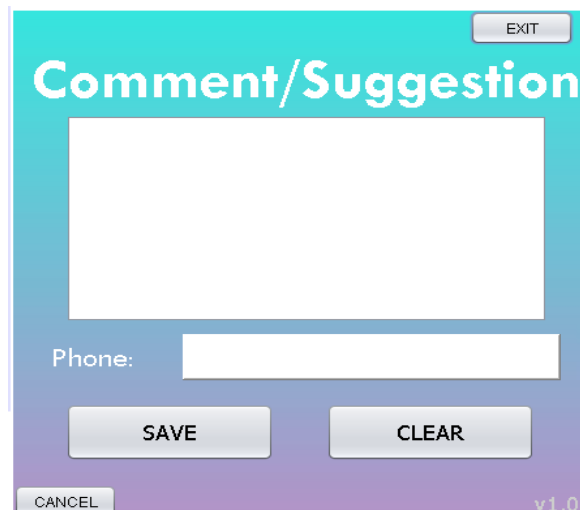
(THIS BUTTON WILL REDIRECT USERS TO START FRAME)

SOURCE CODE(UNDER EXIT BUTTON) JBUTTON3

```
private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {  
    System.exit(0);          // TODO add your handling code here:  
}
```

(THIS BUTTON WILL TERMINATE THE PROGRAM)

JFRAME4(COMMENT FRAME)



SOURCE CODE(UNDER CLEAR BUTTON) JBUTTON2

```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {  
jTextField1.setText("");  
jTextArea1.setText(""); // TODO add your handling code here:  
}
```

(THIS BUTTON WILL CLEAR THE TEXTFIELDS)

SOURCE CODE(UNDER EXIT BUTTON) JBUTTON3

```
private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {  
    System.exit(0);          // TODO add your handling code here:  
}
```

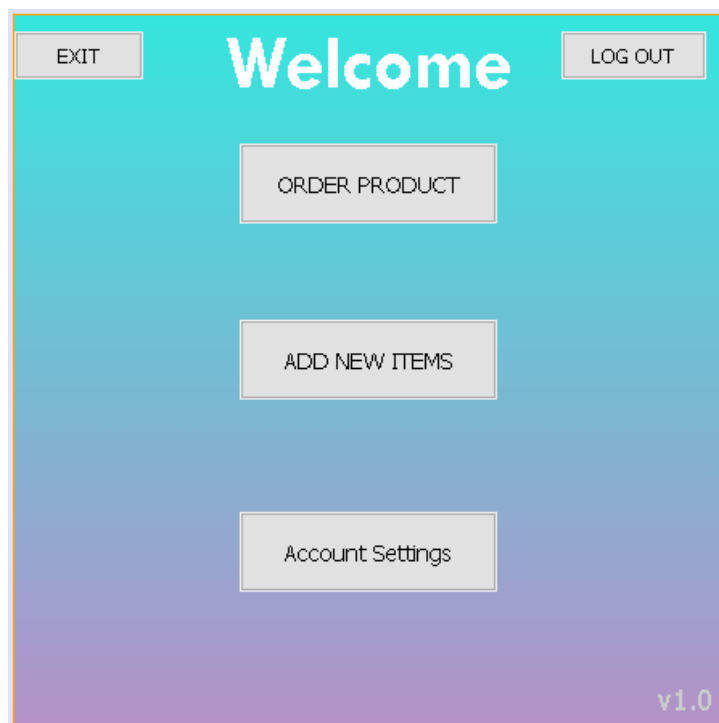
(THIS BUTTON WILL TERMINATE THE PROGRAM)

SOURCE CODE(UNDER CANCEL BUTTON) JBUTTON4

```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {  
    Home log = new Home();  
    log.setVisible(true);  
  
    this.setVisible(false); // TODO add your handling code here:  
}
```

(THIS BUTTON WILL REDIRECT THE USERS TO START FRAME)

JFRAME5(MAIN FRAME)



SOURCE CODE(UNDER ORDER PRODUCT BUTTON) JBUTTON1

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {  
    Order log = new Order();  
    log.setVisible(true);  
  
    this.setVisible(false); // TODO add your handling code here:  
}
```

(THIS BUTTON WILL DIRECT USERS TO THE ORDER FRAME)

SOURCE CODE(UNDER ADD NEW ITEMS BUTTON) JBUTTON2

```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {  
int user=Integer.parseInt(jLabel15.getText());  
if (user==0){  
    Add log=new Add();  
log.setVisible(true);  
this.setVisible(false);}  
else{  
    LoginAdd log = new LoginAdd();  
    log.setVisible(true);  
  
    this.setVisible(false); // TODO add your handling code here:  
}
```

(THIS BUTTON WILL DIRECT USERS OTHER THAN THE ADMIN TO THE ADMIN LOGIN & THE ADMIN DIRECTLY TO ADD ITEMS FRAME)

SOURCE CODE(UNDER ACCOUNT SETTINGS BUTTON) JBUTTON3

```
private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {  
Account log = new Account();  
    log.setVisible(true);  
  
    this.setVisible(false); // TODO add your handling code here:  
}
```

(THIS BUTTON WILL DIRECT USERS TO THE ACCOUNT SETTINGS FRAME)

SOURCE CODE(UNDER LOG OUT BUTTON) JBUTTON4

```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {  
    Home log = new Home();  
    log.setVisible(true);  
  
    this.setVisible(false); // TODO add your handling code here:  
}
```

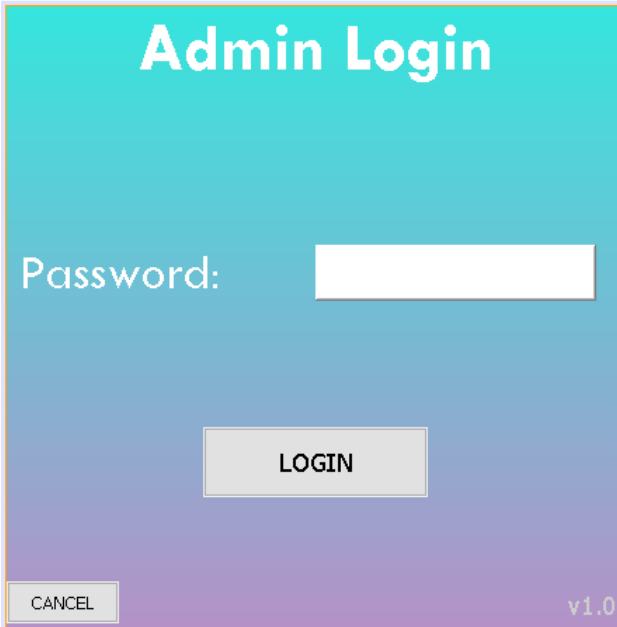
(THIS BUTTON WILL DIRECT USERS TO THE LOG IN FRAME)

SOURCE CODE (UNDER EXIT BUTTON) JBUTTON5

```
private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {  
    System.exit(0);          // TODO add your handling code here:  
}
```

(THIS BUTTON WILL TERMINATE/CLOSE THE PROGRAM)

JFRAME6 (ADMIN PASSWORD FOR ADD PRODUCT FRAME)



The image shows a Java Swing dialog box titled "Admin Login". The dialog has a light blue header bar with the title in white. Below the header, the text "Password:" is followed by a white text input field. In the center of the dialog is a grey button labeled "LOGIN". At the bottom left is a smaller grey button labeled "CANCEL". At the bottom right, the text "v1.0" is displayed. The background of the dialog has a blue-to-purple gradient.

SOURCE CODE(UNDER LOGIN BUTTON)

JBUTTON1

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {  
String Name="ADMIN";  
String pass=jPasswordField1.getText();  
  
try  
{  
    (Class.forName("java.sql.DriverManager");  
    Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
    Statement stmt=con.createStatement();  
  
    String query="SELECT * FROM USERS WHERE NAME='"+Name+"'";  
    ResultSet rs=stmt.executeQuery(query);  
    if(rs.next())  
    {  
        String pas=rs.getString("PASSWORD");  
        if (pass.equals(pas))  
        {  
  
            Add log = new Add();  
            log.setVisible(true);  
  
            this.setVisible(false);}  
        else  
            JOptionPane.showMessageDialog(this,"Incorrect Password");  
    }  
    else{  
        }  
    }  
catch(Exception e)  
{  
    JOptionPane.showMessageDialog(this, "***Please Try Again**\n Try Re-entering the Username & Password");  
}  
    // TODO add your handling code here:  
}
```

(THIS BUTTON WILL CHECK IF THE ADMIN PASSWORD ENTERED IS TRUE/CORRECT AND WILL DIRECT THE USERS TO ADD NEW ITEMS FRAME)

SOURCE CODE(UNDER CANCEL BUTTON) JBUTTON2

```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {  
    Main log = new Main();  
    log.setVisible(true);  
  
    this.setVisible(false);    // TODO add your handling code here:  
}
```

(THIS BUTTON WILL TAKE USERS TO THE MAIN FRAME)

JFRAME7(ORDER PRODUCT FRAME)

Order Product

EXIT

Customer Information

Customer ID:

Customer Name:

Phone:

Date of Join:

Find

New Customer

Product Information

Category Name

Product

Barcode

Quantity

Price

ADD

DELETE

Barcode

Product

Unit Price

Quantity

Price

Cost Information

Total Items

Total VAT

Total Price

CANCEL

PAYMENT

v1.0

SOURCE CODE(UNDER PUBLIC CLASS FOR JTABLE1)

```
public class Order extends javax.swing.JFrame {  
    public int getSum(){  
        int rowCount = jTable1.getRowCount();  
        int sum = 0;  
        for(int i = 0; i < rowCount; i++){  
            sum = sum+Integer.parseInt(jTable1.getValueAt(i, 3).toString());  
        }  
        return sum;  
    }  
    public float getvat(){  
        int rowCount = jTable1.getRowCount();  
        float price = 0;  
        for(int i = 0; i < rowCount; i++){  
            price = price+Float.parseFloat(jTable1.getValueAt(i, 4).toString());  
        }  
        return price;  
    }  
    public float getPrice(){  
        int rowCount = jTable1.getRowCount();  
        float price = 0;  
        for(int i = 0; i < rowCount; i++){  
            price = price+Float.parseFloat(jTable1.getValueAt(i, 4).toString());  
        }  
        return price;  
    }  
}
```

(THIS CODING WILL AUTOMATICALLY ADD/REMOVE ITEMS, INCLUDING PRICE, VAT AND QUANTITY, INTO/FROM THE JTABLE AND TEXTBOXES BELOW THE JTABLE)

SOURCE CODE (UNDER FRAME EVENT, FORM WINDOW OPENED)

```
private void formWindowOpened(java.awt.event.WindowEvent evt) {  
try  
  
    {Class.forName("java.sql.DriverManager");  
    Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
    Statement stmt=con.createStatement();  
  
    String cust="SELECT * FROM CUSTOMER;";  
    String cat="SELECT * FROM CATEGORY;";  
  
  
    String id="SELECT * FROM BILL_ID ORDER BY ID DESC;";  
  
    ResultSet rs=stmt.executeQuery(cust);  
  
  
    while(rs.next())  
    {  
        String i=rs.getString("NAME");  
  
        jComboBox1.addItem(i);  
  
    }  
  
    ResultSet as=stmt.executeQuery(cat);  
    while(as.next())  
    {  
        String a=as.getString("CATEGORY");  
        jComboBox2.addItem(a);  
  
    }  
  
    ResultSet cs=stmt.executeQuery(id);  
  
    if (cs.next()){  
        int g=cs.getInt("ID");  
  
        jLabel19.setText(Integer.toString(g+1));  
    }  
    }  
catch(Exception e)  
    {System.out.println(e);  
    }  
  
    // TODO add your handling code here:  
}
```

(THIS CODING WILL GET CUSTOMERS AND ADD THEM TO A COMBO BOX, AS WELL AS FOR CATEGORY & BILL_ID)

SOURCE CODE(UNDER ADD BUTTON) JBUTTON1

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {  
    int bar=Integer.parseInt(jTextField4.getText());  
    try  
    {  
        Class.forName("java.sql.DriverManager");  
        Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
        Statement stmt=con.createStatement();  
  
        String cate="SELECT * FROM PRODUCT WHERE BARCODE='"+bar+"'";  
  
        ResultSet rs=stmt.executeQuery(cate);  
  
        while(rs.next())  
        {  
            float a=rs.getFloat("TOTAL_PRICE");  
            DefaultTableModel model=(DefaultTableModel) jTable1.getModel();  
            model.addRow(new Object[] { jTextField4.getText(),jComboBox3.getSelectedItem(),a,jTextField5.getText(),jTextField6.getText()});  
            jTextField7.setText(Integer.toString(getSum()));  
            float price=Float.parseFloat(Float.toString(getPrice()));  
            jTextField9.setText(new DecimalFormat("#####.###").format(price));  
            float vat=Float.parseFloat(Double.toString(price/1.05));  
            float ivat=(vat*5)/100;  
            jTextField8.setText(new DecimalFormat("#####.###").format(ivat));  
        }  
    }  
    catch(Exception e)  
    {  
        System.out.println(e);  
    }  
    // TODO add your handling code here:  
}
```

(THIS BUTTON WILL ADD ITEMS ALONG WITH PRICE AND QUANTITY ENTERED INTO JTABLE)

SOURCE CODE(UNDER DELETE BUTTON)

JBUTTON2

```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {  
DefaultTableModel model= (DefaultTableModel) jTable1.getModel();  
try(  
    int SelectedRowIndex=jTable1.getSelectedRow();  
  
    int sum = Integer.parseInt(jTextField7.getText());  
    float price=Float.parseFloat(jTextField9.getText());  
    int i = SelectedRowIndex;  
        int qty = sum-Integer.parseInt(jTable1.getValueAt(i, 3).toString());  
        float p=price-Float.parseFloat(jTable1.getValueAt(i,4).toString());  
        float vat=Float.parseFloat(Double.toString(p/1.05));  
        float ivat=(vat*5)/100;  
        jTextField7.setText(Integer.toString(qty));  
        jTextField8.setText(new DecimalFormat("#####.##").format(ivat));  
        jTextField9.setText(new DecimalFormat("#####.##").format(p));  
        model.removeRow(SelectedRowIndex);  
    }  
catch(Exception e)  
{JOptionPane.showMessageDialog(this,"ERROR\n Try Removing the Item Later");  
}  
// TODO add your handling code here:  
}
```

(THIS BUTTON WILL DELETE ITEMS ALONG WITH PRICE AND QUANTITY ENTERED INTO JTABLE)

SOURCE CODE(UNDER NEW CUSTOMER BUTTON) JBUTTON3

```
private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {  
new orcustomer().setVisible(true);  
this.setVisible(false);// TODO add your handling code here:  
}
```

(THIS BUTTON WILL REDIRECT THE USER TO ADD NEW CUSTOMER FRAME)

SOURCE CODE(UNDER CANCEL BUTTON)

JBUTTON4

```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {  
    Main log = new Main();  
    log.setVisible(true);  
  
    this.setVisible(false);          // TODO add your handling code here:  
}
```

(THIS BUTTON WILL REDIRECT THE USER TO THE MAIN FRAME)

SOURCE CODE(UNDER FIND BUTTON) JBUTTON5

```
private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {  
    int id=Integer.parseInt(jTextField1.getText());  
  
    try  
    {Class.forName("java.sql.DriverManager");  
      Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
      Statement stmt=con.createStatement();  
  
      String combo="SELECT * FROM CUSTOMER WHERE CUST_ID='"+id+"'";  
      ResultSet as=stmt.executeQuery(combo);  
      {  
          if(as.next()){  
              String cusname=as.getString("NAME");  
              String phone2=as.getString("PHONE");  
              String date2=as.getString("DATE");  
              jComboBox1.setSelectedItem(cusname);  
              jTextField2.setText(phone2);  
              jTextField3.setText(date2);  
          }  
          else{int cus=JOptionPane.showConfirmDialog(this,"NO CUSTOMER FOUND!!\n ADD NEW CUSTOMER?","ERROR",JOptionPane.YES_NO_OPTION);  
              if (cus==0) {  
                  new orcustomer().setVisible(true);  
                  this.setVisible(false);  
              }  
              else {  
                  jTextField1.setText("");  
                  jTextField2.setText("");  
                  jTextField3.setText("");  
                  jComboBox1.setSelectedIndex(0);  
              }  
          }  
      }  
    }  
    catch(Exception e){  
        System.out.println(e);  
    }  
    // TODO add your handling code here:  
}
```

(THIS BUTTON WILL FIND THE CUSTOMER VIA CUSTOMER ID FROM THE DATABASE AND FILL IN THE REQUIRED TEXTBOXES)

SOURCE CODE(UNDER PAYMENT BUTTON)

JBUTTON6

```
private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) {  
int items=Integer.parseInt(Integer.toString(jTextField7.getText().length()));  
if (items==0){  
    JOptionPane.showMessageDialog(this, "No Items Bought/Added");  
} else  
    JOptionPane.showMessageDialog(this, "You will not be able to return to this form during Payment");  
{ new Payment().setVisible(true);  
this.setVisible(false);}  
// TODO add your handling code here:  
}
```

(THIS BUTTON CHECKS IF ANY ITEMS ARE BOUGHT AND IF TRUE, REDIRECTS THE USER TO THE PAYMENT FRAME)

SOURCE CODE(UNDER CUSTOMER NAME)

JCOMBOBOX1

```
private void jComboBox1ActionPerformed(java.awt.event.ActionEvent evt) {  
String custname=(String) jComboBox1.getSelectedItem();  
jButton5.setVisible(false);  
try  
    {Class.forName("java.sql.DriverManager");  
    Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
    Statement stmt=con.createStatement();  
    String custid="SELECT * FROM CUSTOMER WHERE NAME='"+custname+"'";  
    ResultSet es=stmt.executeQuery(custid);  
    if(es.next()){  
        String cusid=es.getString("CUST_ID");  
        String phone1=es.getString("PHONE");  
        String date1=es.getString("DATE");  
        jTextField1.setText(cusid);  
        jTextField2.setText(phone1);  
        jTextField3.setText(date1); }  
    }  
catch(Exception e)  
    {System.out.println(e);  
    } // TODO add your handling code here:  
}
```

(THIS CODE ALLOW THE PROGRAME TO AUTOMACTICALLY DISPLAY DETAILS OF CUSTOMER WHEN THEY SELECT ANY OPTION FROM THE COMBOBOX)

SOURCE CODE(UNDER PRODUCT) JCOMBOBOX2

```
private void jComboBox2ActionPerformed(java.awt.event.ActionEvent evt) {  
String cat=(String)jComboBox2.getSelectedItem();  
jComboBox3.removeAllItems();  
try  
{  
    (Class.forName("java.sql.DriverManager");  
    Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
    Statement stmt=con.createStatement();  
  
    String cate="SELECT * FROM PRODUCT WHERE CATEGORY='"+cat+"'";  
  
    ResultSet rs=stmt.executeQuery(cate);  
  
    while(rs.next())  
    {  
        String i=rs.getString("NAME");  
  
        jComboBox3.addItem(i);  
    }  
}  
catch(Exception e)  
{System.out.println(e);  
}  
  
// TODO add your handling code here:  
}
```

(THIS CODE ALLOW THE PROGRAME TO AUTOMACTICALLY LOAD THE PRODUCTS FROM THE DATABASE BASED ON THE CATEGORY SELECTED INTO THE COMBOBOX)

SOURCE CODE(UNDER PRODUCT) JCOMBOBOX3

```
private void jComboBox3ActionPerformed(java.awt.event.ActionEvent evt) {
String prod=(String) jComboBox3.getSelectedItem();

    try
    {Class.forName("java.sql.DriverManager");
    Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");

    Statement stmt=con.createStatement();

    String produ="SELECT * FROM PRODUCT WHERE NAME='"+prod+"'";

    ResultSet rs=stmt.executeQuery(produ);

    while(rs.next())
    {
        jTextField5.setText("1");
        String i=rs.getString("BARCODE");
        float a=rs.getFloat("TOTAL_PRICE");

        int qty=Integer.parseInt(jTextField5.getText());
        float price=Float.parseFloat(Float.toString(a*qty));
        jTextField6.setText(Float.toString(price));

        jTextField4.setText(i);

    }

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

// TODO add your handling code here:
}
```

(THIS CODE ALLOW THE PROGRAME TO AUTOMACTICALLY LOAD THE PRICE, VAT, BARCODE FROM THE DATABASE BASED ON THE PRODUCT SELECTED INTO THE TABLE ALONG)

SOURCE CODE(UNDER CUSTOMER ID) JTEXTFIELD1

```
private void jTextField1KeyTyped(java.awt.event.KeyEvent evt) {  
jButton5.setVisible(true);           // TODO add your handling code here:  
}
```

(THIS CODE DISPLAYS THE BUTTON TO SEARCH FOR THE CUSTOMER
BASED ON CUSTOMER ID ENTERED)

SOURCE CODE(UNDER CUSTOMER ID) JTEXTFIELD1

```
private void jTextField1KeyReleased(java.awt.event.KeyEvent evt) {  
    int id=Integer.parseInt(jTextField1.getText());  
  
    try  
    {Class.forName("java.sql.DriverManager");  
        Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
        Statement stmt=con.createStatement();  
  
        String combo="SELECT * FROM CUSTOMER WHERE CUST_ID='"+id+"'";  
        ResultSet as=stmt.executeQuery(combo);  
        {  
            if(as.next()){  
                String cusname=as.getString("NAME");  
                String phone2=as.getString("PHONE");  
                String date2=as.getString("DATE");  
                jComboBox1.setSelectedItem(cusname);  
                jTextField2.setText(phone2);  
                jTextField3.setText(date2);  
            }  
        }  
    }  
    catch(Exception e){  
        System.out.println(e);  
    }  
    // TODO add your handling code here:  
    // TODO add your handling code here:  
}
```

(THIS CODE DISPLAYS THE DETAILS OF THE CUSTOMER
AUTOMATICALLY BASED ON CUSTOMER ID ENTERED)

SOURCE CODE(UNDER BARCODE) JTEXTFIELD4

```
private void jTextField4ActionPerformed(java.awt.event.ActionEvent evt) {  
    int bar=Integer.parseInt(jTextField4.getText());  
    jComboBox3.removeAllItems();  
  
    try  
    {Class.forName("java.sql.DriverManager");  
    Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
    Statement stmt=con.createStatement();  
  
  
    String combo="SELECT * FROM PRODUCT WHERE BARCODE='"+bar+"'";  
    ResultSet as=stmt.executeQuery(combo);  
    {  
        if(as.next()){  
            String cat=as.getString("CATEGORY");  
            String nam=as.getString("NAME");  
            jComboBox2.setSelectedItem(cat);  
            jComboBox3.setSelectedItem(nam);  
        }  
        else(  
            JOptionPane.showMessageDialog(this,"No Product Found!");  
            jComboBox2.setSelectedIndex(0);  
            jTextField6.setText("");  
        )}  
    }  
    catch(Exception e){  
        JOptionPane.showMessageDialog(this,"No Product Found!");  
  
        System.out.println(e);  
    } // TODO add your handling code here:  
}
```

(THIS CODE SETS THE CATEGORY AND NAME OF THE PRODUCT AUTOMATICALLY BASED ON BARCODE ENTERED)

SOURCE CODE(**UNDER BARCODE**) JTEXTFIELD5

```
private void jTextField5KeyReleased(java.awt.event.KeyEvent evt) {  
int bar=Integer.parseInt(jTextField4.getText());  
    try  
    {  
        Class.forName("java.sql.DriverManager");  
        Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
        Statement stmt=con.createStatement();  
  
        String cate="SELECT * FROM PRODUCT WHERE BARCODE='"+bar+"'";  
  
        ResultSet rs=stmt.executeQuery(cate);  
  
        while(rs.next())  
        {  
            float a=rs.getFloat("TOTAL_PRICE");  
  
            int qty=Integer.parseInt(jTextField5.getText());  
            float price=Float.parseFloat(Float.toString(a*qty));  
            jTextField6.setText(Float.toString(price));  
        }  
    }  
catch(Exception e)  
    {  
        System.out.println(e);  
    }  
    // TODO add your handling code here:  
}
```

(THIS CODE DISPLAYS AND SETS THE PRICE OF THE PRODUCT
AUTOMATICALLY BASED ON BARCODE ENTERED)

JFRAME8(PAYMENT FRAME)

The screenshot shows a Java Swing window titled "Payment". It has a blue header bar with the title and an "EXIT" button. The main area is divided into two sections: "Details" and "Payment Details".

Details Section:

- Customer ID: 0
- Customer Name: WALK-IN/GUEST
- Phone: NIL
- Payment Method: ☒ Cash ☐ Credit Card

Payment Details Section:

- Bill Total: [Empty Text Field]
- Cash Received: [Empty Text Field]
- Balance: [Empty Text Field]

At the bottom, there are two buttons: "CANCEL" and "PAY". The version "v1.0" is displayed in the bottom right corner.

SOURCE CODE(UNDER FRAME EVENT, FORM WINDOW OPENED)

```
private void formWindowOpened(java.awt.event.WindowEvent evt) {  
    int cust=Integer.parseInt(Order.jTextField1.getText());  
    String name=(String)Order.jComboBox1.getSelectedItem();  
    String phone=(String)Order.jTextField2.getText();  
    jTextField5.setText(Integer.toString(cust));  
    jTextField4.setText(name);  
    jTextField2.setText(phone);  
    float tpay=Float.parseFloat(Order.jTextField9.getText());  
    jTextField6.setText(Float.toString(tpay));  
    jTextField3.setText("0");  
    jTextField1.setText("0");  
  
    jLabel8.setVisible(false);  
    jLabel14.setVisible(false);  
    jTextField9.setVisible(false);  
    jLabel15.setVisible(false);  
    jTextField10.setVisible(false);  
    jButton6.setVisible(false);  
    jLabel10.setVisible(false);  
  
    //631  
  
    jTextField3.setVisible(false);  
    jTextField1.setVisible(false);  
}
```

SOURCE CODE(UNDER CASH BUTTON) JRADIOBUTTON1

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {  
    if (jRadioButton1.isSelected()==true)  
    {jButton6.setVisible(true);  
      jLabel8.setVisible(true);  
      jLabel10.setVisible(true);  
      jButton7.setVisible(false);  
      jLabel14.setVisible(false);  
      jTextField9.setVisible(false);  
      jLabel15.setVisible(false);  
      jTextField10.setVisible(false);  
      //631  
  
      jTextField3.setVisible(true);  
      jTextField1.setVisible(true); }  
  
    // TODO add your handling code here:  
}
```

(THIS CODE DISPLAYS CERTAIN TEXTFIELDS, LABELS & BUTTONS
BASED ON RADIO BUTTON SELECTED)

SOURCE CODE(UNDER CARD BUTTON) JRADIOBUTTON2

```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {  
    if(jRadioButton2.isSelected()==true)  
    {  
        jLabel8.setVisible(false);  
        jLabel10.setVisible(false);  
        jButton6.setVisible(false);  
        jLabel14.setVisible(true);  
        jTextField9.setVisible(true);  
        jLabel15.setVisible(true);  
        jTextField10.setVisible(true);  
        jButton7.setVisible(true);  
  
        //631  
        jTextField3.setText("0");  
        jTextField1.setText("0");  
        jTextField3.setVisible(false);  
        jTextField1.setVisible(false);  
  
    }  
    // TODO add your handling code here:  
}
```

(THIS CODE DISPLAYS CERTAIN TEXTFIELDS, LABELS & BUTTONS
BASED ON RADIO BUTTON SELECTED)

SOURCE CODE(UNDER CANCEL BUTTON) JBUTTON4

```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {  
new Order().setVisible(true);  
  
    this.setVisible(false);        // TODO add your handling code here:  
}
```

(THIS BUTTON WILL REDIRECT THE USER TO ORDER PRODUCT FRAME)

SOURCE CODE(UNDER AMOUNT RECEIVED) JTEXTFIELD3

```
private void jTextField3KeyReleased(java.awt.event.KeyEvent evt) {  
float amt=Float.parseFloat(jTextField6.getText());  
float cas=Float.parseFloat(jTextField3.getText());  
  
float t=amt-cas;  
jTextField1.setText(Float.toString(t));  
  
// TODO add your handling code here:  
}
```

(THIS CODE AUTOMATICALLY CALCULATE AND DISPLAYS THE BALANCE NEED TO BE PAID BY THE USER)

SOURCE CODE (UNDER CASH BUTTON) JBUTTON6

```
private void jButton6ActionPerformed(java.awt.event.ActionEvent evt) {  
int bid=Integer.parseInt(Order.jLabel19.getText());  
int id=Integer.parseInt(jTextField5.getText());  
float total=Float.parseFloat(jTextField6.getText());  
float recd=Float.parseFloat(jTextField3.getText());  
float bal=Float.parseFloat(jTextField1.getText());  
  
try  
{Class.forName("java.sql.DriverManager");  
Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
Statement stmt=con.createStatement();  
  
String query="INSERT INTO CASH VALUES (" +bid+", "+id+", '"+total+"', '"+recd+"', '"+bal+"')";  
stmt.executeUpdate(query);  
String iid="INSERT INTO BILL_ID VALUES (" +bid+"')";  
  
stmt.executeUpdate(iid);  
  
{  
JOptionPane.showMessageDialog(this,"Order Processed along with Payment \n Press OK to Close form");  
this.setVisible(false);  
new Main().setVisible(true);  
}  
catch(Exception e)  
{  
// JOptionPane.showMessageDialog(this, "ERROR");  
int cus=JOptionPane.showConfirmDialog(this,"Error during Processing!!\n Redo Payment?", "ERROR",JOptionPane.YES_NO_OPTION);  
if (cus==0){  
this.setVisible(false);  
new Main().setVisible(true);  
}  
  
// TODO add your handling code here:  
}  
}
```

(THIS BUTTON WILL TAKE THE AMOUNTS, CUSTOMER DETAILS, ETC INTO THE DATABASE AND THEN REDIRECT TO THE MAIN FRAME)

SOURCE CODE (UNDER CARD BUTTON) JBUTTON7

```
private void jButton7ActionPerformed(java.awt.event.ActionEvent evt) {  
    int bid=Integer.parseInt(Order.jLabel19.getText());  
    int id=Integer.parseInt(jTextField5.getText());  
    float total=Float.parseFloat(jTextField6.getText());  
    float card=Float.parseFloat(jTextField9.getText());  
    float an=Float.parseFloat(jTextField10.getText());  
    try  
    {Class.forName("java.sql.DriverManager");  
    Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
    Statement stmt=con.createStatement();  
  
    String query="INSERT INTO CARD VALUES("+bid+","+id+", '"+total+"', '"+card+"', '"+an+"')";  
    stmt.executeUpdate(query);  
    String iid="INSERT INTO BILL_ID VALUES ('"+bid+"')";  
  
    stmt.executeUpdate(iid);  
  
    {  
        JOptionPane.showMessageDialog(this,"Order Processed along with Payment \n Press OK to Close form");  
        this.setVisible(false);  
        new Main().setVisible(true);}  
    }  
catch(Exception e)  
    {  
        // JOptionPane.showMessageDialog(this, "ERROR");  
        int cus=JOptionPane.showConfirmDialog(this,"Error during Processing!!\n Redo Payment?", "ERROR",JOptionPane.YES_NO_OPTION);  
        if (cus==0){  
            this.setVisible(false);  
            new Order().setVisible(true);}  
  
        } // TODO add your handling code here:  
    }  
}
```

(THIS BUTTON WILL TAKE THE AMOUNTS, CUSTOMER DETAILS, CARD NUMBER, ETC INTO THE DATABASE AND THEN REDIRECT TO THE MAIN FRAME)

JFRAME9(ADD FRAME)



SOURCE CODE(UNDER TIME LABEL)

```
public class Add extends javax.swing.JFrame {
    public void clock()
    {
        Thread clock;
        clock = new Thread()
        {public void run()
        {
            try{
                for(;;){
                    Calendar cal=new GregorianCalendar();
                    LocalDateTime thisTime = LocalDateTime.now();
                    DateTimeFormatter myFormatObj=DateTimeFormatter.ofPattern(" dd-MM-yyyy HH:mm:ss");
                    String formattedDate=thisTime.format(myFormatObj);

                    int second=cal.get(Calendar.SECOND);
                    int minute=cal.get(Calendar.MINUTE);
                    int hour=cal.get(Calendar.HOUR);

                    jLabel14.setText(formattedDate);
                    sleep(1000);

                }
            } catch (InterruptedException e) {
                e.printStackTrace();
            }
        }
    };

    clock.start(); }

/**
 * Creates new form LoginHome
 */
public Add() {
    initComponents();
    clock();
}
```

(THIS CODE DISPLAYS THE REAL TIME ,THE DATE AND TIME FORMAT ACCORDING TO THE GREGORIAN CALENDAR FORMAT)

SOURCE CODE(UNDER ADD CUSTOMER BUTTON) JBUTTON1

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    Customer log = new Customer();
    log.setVisible(true);

    this.setVisible(false); // TODO add your handling code here
}
```

(THIS BUTTON REDIRECTS THE USER TO THE ADD CUSTOMER FRAME)

SOURCE CODE(UNDER HOME BUTTON) JBUTTON4

```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {  
    Main log = new Main();  
    log.setVisible(true);  
  
    this.setVisible(false);        // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE USER TO THE MAIN FRAME)

SOURCE CODE(UNDER ADD CATEGORY BUTTON) JBUTTON2

```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {  
Category log = new Category();  
    log.setVisible(true);  
  
    this.setVisible(false);        // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE USER TO THE ADD CATEGORY FRAME)

SOURCE CODE(UNDER ADD USER BUTTON) JBUTTON5

```
private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {  
  
    new User().setVisible(true);  
  
    this.setVisible(false);        // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE USER TO THE ADD USER FRAME)

SOURCE CODE(UNDER FRAME EVENT, FORM WINDOW OPENED)

```
private void formWindowOpened(java.awt.event.WindowEvent evt) {  
int user=Integer.parseInt(LoginHome.empid.getText());  
if (user==0)  
jButton5.setVisible(true);  
else  
jButton5.setVisible (false);// TODO add your handling code here:  
}
```

(THIS BUTTON CHECKS IF THE USER IS ADMIN/ NORMAL USER AND REDIRECTS TO THE REQUIRED FRAME)

JFRAME10(ADD CUSTOMER FRAME)

HOME EXIT

Customer Master

ID: 3

Name: John Jacobs

Phone: 00971561842067

Date: 2019-10-13

ADD CUSTOMER DELETE CUSTOMER

CANCEL v1.0

SOURCE CODE(UNDER TIME LABEL)

```
public class Customer extends javax.swing.JFrame {
    public void clock()
    {
        Thread clock;
        clock = new Thread()
        {public void run()
        {
            try{
                for(;;){
                    Calendar cal=new GregorianCalendar();
                    LocalDateTime thisTime = LocalDateTime.now();
                    DateTimeFormatter myFormatObj=DateTimeFormatter.ofPattern("yyyy-MM-dd");
                    String formattedDate=thisTime.format(myFormatObj);
                    jTextField2.setText(formattedDate);
                    sleep(1000);
                }
            } catch (InterruptedException e) {
                e.printStackTrace();
            }
        };

        clock.start(); }

    public Customer() {
        initComponents();
        clock();
    }

    public Customer(String para){
        initComponents();
        jTextField1.setText(para);
    }
}
```

(THIS CODE DISPLAYS THE REAL TIME ,THE DATE AND TIME FORMAT ACCORDING TO THE GREGORIAN CALENDAR FORMAT)

SOURCE CODE(UNDER ADD BUTTON) JBUTTON1

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {  
int id=Integer.parseInt(jTextField4.getText());  
String name=jTextField1.getText();  
String phone=jTextField3.getText();  
String date=jTextField2.getText();  
  
try  
{Class.forName("java.sql.DriverManager");  
Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
Statement stmt=con.createStatement();  
  
String query="INSERT INTO CUSTOMER VALUES (" +id+", '"+name+"', '"+phone+"', '"+date+"')";  
stmt.executeUpdate(query);  
  
JOptionPane.showMessageDialog(null,"Customer Added");  
Add log = new Add();  
log.setVisible(true);  
  
this.setVisible(false);  
}  
catch(Exception e)  
{JOptionPane.showMessageDialog(null,"Unsuccessful!\n Please Try Again Later");  
jTextField1.setText("");  
jTextField2.setText("");  
jTextField3.setText("");  
jTextField4.setText("");  
}  
}
```

SOURCE CODE(UNDER CANCEL BUTTON) JBUTTON4

```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {  
Add log = new Add();  
log.setVisible(true);  
  
this.setVisible(false); // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE USER TO THE ADD FRAME)

SOURCE CODE(UNDER HOME BUTTON) JBUTTON7

```
private void jButton7ActionPerformed(java.awt.event.ActionEvent evt) {  
Main log = new Main();  
log.setVisible(true);  
  
this.setVisible(false); // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE USER TO THE MAIN FRAME)

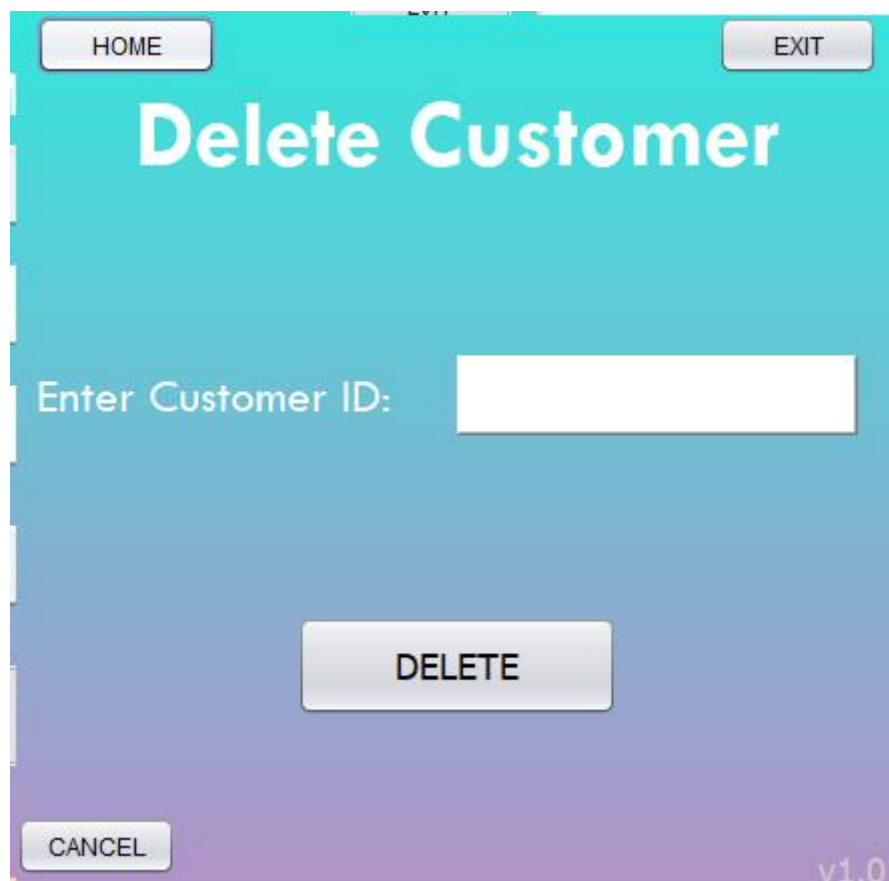
SOURCE CODE(UNDER DELETE CUSTOMER BUTTON)

JBUTTON2

```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {  
    new Custdel().setVisible(true);  
    this.setVisible(false);  
    // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE USER TO THE DELETE CUSTOMER FRAME)

JFRAME11(DELETE CUSTOMER FRAME)



SOURCE CODE(UNDER DELETE BUTTON) JBUTTON1

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {  
String id=jTextField1.getText();  
    try  
    {Class.forName("java.sql.DriverManager");  
      Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
      Statement stmt=con.createStatement();  
  
      String query="DELETE FROM CUSTOMER WHERE CUST_ID="+id+";"  
      stmt.executeUpdate(query);  
      JOptionPane.showMessageDialog(this,"CUSTOMER Deleted from Records");  
      Add log = new Add();  
      log.setVisible(true);  
  
      this.setVisible(false);  
    }  
    catch(Exception e)  
    {System.out.println(e);  
    }  
    // TODO add your handling code here:  
}
```

(THIS BUTTON DELETES THE CUSTOMER FROM THE DATABASE
BASED ON CUSTOMER ID)

SOURCE CODE(UNDER CANCEL BUTTON) JBUTTON4

```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {  
    Add log = new Add();  
    log.setVisible(true);  
  
    this.setVisible(false);    // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE USER TO THE ADD FRAME)

SOURCE CODE(UNDER EXIT BUTTON) JBUTTON3

```
private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {  
    System.exit(0);    // TODO add your handling code here:  
}
```

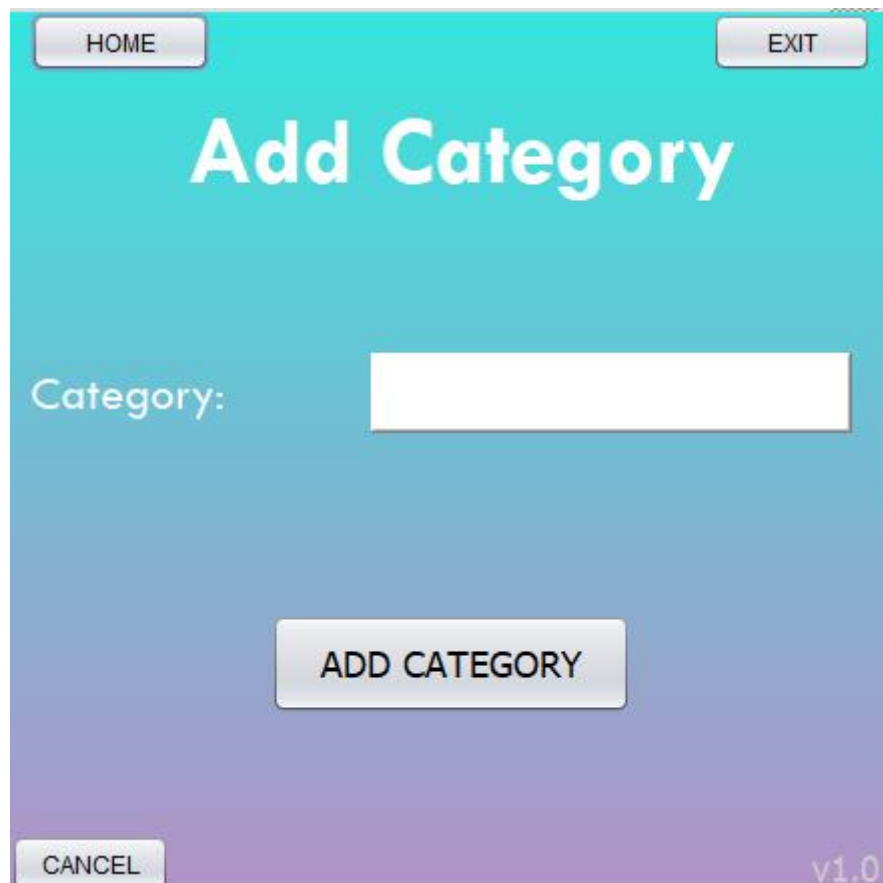
(THIS BUTTON TERMINATES THE PROGRAM)

SOURCE CODE(UNDER HOME BUTTON) JBUTTON5

```
private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {  
    Main log = new Main();  
    log.setVisible(true);  
  
    this.setVisible(false);    // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE USER TO THE MAIN FRAME)

JFRAME12(ADD CATEGORY FRAME)



SOURCE CODE(UNDER ADD CATEGORY BUTTON) JBUTTON1

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {  
    String cat=jTextField1.getText();  
    try  
    {Class.forName("java.sql.DriverManager");  
    Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
    Statement stmt=con.createStatement();  
  
    String query="INSERT INTO CATEGORY VALUES ('"+cat+"');"  
    stmt.executeUpdate(query);  
  
    JOptionPane.showMessageDialog(null,"Category Added");  
    Add log = new Add();  
    log.setVisible(true);  
  
    this.setVisible(false);  
  
    }  
catch(Exception e)  
    {  
        JOptionPane.showMessageDialog(null,"Unsuccessful!\n Please Try Again Later");  
        jTextField1.setText("");  
    }  
  
    // TODO add your handling code here:
```

(THIS BUTTON ADDS THE NEW CATEGORY INTO THE DATABASE)

SOURCE CODE(UNDER EXIT BUTTON) JBUTTON3

```
private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {  
    System.exit(0);        // TODO add your handling code here:  
}
```

(THIS BUTTON TERMINATES THE PROGRAM)

SOURCE CODE(UNDER CANCEL BUTTON) JBUTTON4

```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {  
    Add log = new Add();  
    log.setVisible(true);  
  
    this.setVisible(false);        // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE USER TO THE ADD FRAME)

SOURCE CODE(UNDER HOME BUTTON) JBUTTON5

```
private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {  
    Main log = new Main();  
    log.setVisible(true);  
  
    this.setVisible(false);    // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE USER TO THE MAIN FRAME)

JFRAME13(ADD PRODUCT FRAME)

HOME **Add Product** EXIT

Category Name: Electronics

Product Name: iPhone 11 Pro Max

Barcode No.: 7213568124

Price: 5199.99

VAT: 260

CANCEL ADD PRODUCT v1.0

SOURCE CODE(UNDER ADD PRODUCT BUTTON) JBUTTON1

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {  
    float price=Float.parseFloat(jTextField1.getText());  
    float vat=Float.parseFloat(jTextField4.getText());  
  
    float tprice=price+vat;  
    int bar=Integer.parseInt(jTextField2.getText());  
    String name=jTextField3.getText();  
    String cat=jComboBox1.getSelectedItem().toString();  
  
    try  
    {  
        Class.forName("java.sql.DriverManager");  
        Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
        Statement stmt=con.createStatement();  
  
        String query="INSERT INTO PRODUCT VALUES ('"+bar+"','"+name+"','"+cat+"','"+price+"','"+vat+"','"+tprice+"');";  
        stmt.executeUpdate(query);  
  
        JOptionPane.showMessageDialog(null,"Product Added");  
        Add log = new Add();  
        log.setVisible(true);  
  
        this.setVisible(false);  
    }  
    catch(Exception e)  
    {  
        JOptionPane.showMessageDialog(null,"Unsuccessful!\n Please Try Again Later");  
        jTextField1.setText("");  
    }  
}
```

(THIS BUTTON ADDS A NEW PRODUCT TO THE DATABASE)

SOURCE CODE(UNDER CANCEL BUTTON) JBUTTON4

```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {  
    Add log = new Add();  
    log.setVisible(true);  
  
    this.setVisible(false);    // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE USER TO THE ADD FRAME)

SOURCE CODE(UNDER HOME BUTTON) JBUTTON5

```
private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {  
    Main log = new Main();  
    log.setVisible(true);  
  
    this.setVisible(false);          // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE USER TO THE HOME FRAME)

SOURCE CODE(UNDER EXIT BUTTON) JBUTTON9

```
private void jButton9ActionPerformed(java.awt.event.ActionEvent evt) {  
    System.exit(0);          // TODO add your handling code here:  
}
```

(THIS BUTTON TERMINATES THE PROGRAM)

SOURCE CODE(UNDER VAT TEXTFIELD) JTEXTFIELD1

```
private void jTextField1KeyReleased(java.awt.event.KeyEvent evt) {  
    float price=Float.parseFloat(jTextField1.getText());  
float vat=price*5/100;  
jTextField4.setText(new DecimalFormat("#####.##").format(vat));  
    // TODO add your handling code here:  
}
```

(THIS CODE AUTOMATICALLY CALCULATES THE VAT BASED IN THE PRICE AND DISPLAYS IT IN THE TEXTFIELD)

SOURCE CODE (UNDER FORM OPENED) FRAME WINDOW

```
private void formWindowOpened(java.awt.event.WindowEvent evt) {  
  
    try  
    {  
        Class.forName("java.sql.DriverManager");  
        Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
        Statement stmt=con.createStatement();  
  
        String query="SELECT * FROM CATEGORY;";  
        ResultSet rs=stmt.executeQuery(query);  
        while(rs.next())  
        {  
            String i=rs.getString("CATEGORY");  
  
            jComboBox1.addItem(i);  
  
        }  
    }  
    catch(Exception e)  
    {  
        System.out.println(e);  
    }  
  
    // TODO add your handling code here:  
}
```

(THIS CODE AUTOMATICALLY GETS THE CATEGORY FROM THE DATABASE AND INSERTS THEM INTO A COMBO BOX)

JFRAME14(USER MASTER FRAME[ONLY FOR ADMIN])



A screenshot of a Java Swing window titled "User Master". The window has a light blue header bar with "HOME" and "EXIT" buttons. The main area has a light blue background with the title "User Master" in large white font. Below the title are four text input fields: "ID:" with value "3", "Name:" with value "John Jacobs", "Phone:" with value "97153278432", and "Email:" with value "john@xyz.com". At the bottom, there are three buttons: "ADD USER", "DELETE USER", and "CANCEL". The version "v1.0" is displayed in the bottom right corner.

Field	Value
ID:	3
Name:	John Jacobs
Phone:	97153278432
Email:	john@xyz.com

Buttons: HOME, EXIT, ADD USER, DELETE USER, CANCEL

Version: v1.0

SOURCE CODE(UNDER ADD USER BUTTON) JBUTTON 1

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {  
    int id=Integer.parseInt(jTextField4.getText());  
    String name=jTextField1.getText();  
    String phone=jTextField3.getText();  
    String email=jTextField2.getText();  
    String pass="0000";  
  
    try  
    {Class.forName("java.sql.DriverManager");  
      Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
      Statement stmt=con.createStatement();  
  
      String query="INSERT INTO USERS VALUES ('+id+', '"+name+', '"+email+', '"+phone+', '"+pass+'";  
      stmt.executeUpdate(query);  
  
      JOptionPane.showMessageDialog(null,"User Added!\n DEFAULT PASSWORD FOR USER IS '0000'.");  
  
      Add log = new Add();  
      log.setVisible(true);  
  
      this.setVisible(false);  
    }  
    catch(Exception e)  
    {  
        JOptionPane.showMessageDialog(null,"Unsuccessful!\n Please Try Again Later");  
        jTextField1.setText("");  
        jTextField2.setText("");  
        jTextField3.setText("");  
        jTextField4.setText("");  
    }  
  
    // TODO add your handling code here:  
}
```

(THIS BUTTON ADDS THE NEW USER TO THE DATABASE)

SOURCE CODE(UNDER DELETE USER BUTTON) JBUTTON 2

```
private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {  
    new Userdel().setVisible(true);  
    this.setVisible(false); // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE ADMIN TO THE DELETE USER FRAME)

SOURCE CODE(UNDER CANCEL BUTTON) JBUTTON 4

```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {  
    Add log = new Add();  
    log.setVisible(true);  
  
    this.setVisible(false);          // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE ADMIN TO THE ADD FRAME)

SOURCE CODE(UNDER HOME BUTTON) JBUTTON 7

```
private void jButton7ActionPerformed(java.awt.event.ActionEvent evt) {  
    Main log = new Main();  
    log.setVisible(true);  
  
    this.setVisible(false);          // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE ADMIN TO THE MAIN FRAME)

SOURCE CODE(UNDER EXIT BUTTON) JBUTTON 9

```
private void jButton9ActionPerformed(java.awt.event.ActionEvent evt) {  
    System.exit(0);          // TODO add your handling code here:  
}
```

(THIS BUTTON TERMINATES THE PROGRAM)

SOURCE CODE(UNDER FORM OPENED) FRAME WINDOW

```
private void formWindowOpened(java.awt.event.WindowEvent evt) {  
try  
    {Class.forName("java.sql.DriverManager");  
    Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
    Statement stmt=con.createStatement();  
  
    String query="SELECT * FROM USERS ORDER BY EMPLOYEE_ID DESC;";  
    ResultSet rs=stmt.executeQuery(query);  
    if(rs.next())  
    {  
        int i=rs.getInt("EMPLOYEE_ID");  
  
        jTextField4.setText(Integer.toString(i+1));  
    }  
} catch (Exception e)  
    {System.out.println(e);  
    }  
  
    // TODO add your handling code here:  
}
```

(THIS CODE AUTOMATICALLY SETS USER ID)

JFRAME14(DELETE USER FRAME)



SOURCE CODE(UNDER DELETE BUTTON) JBUTTON 1

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {  
String id=jTextField1.getText();  
try  
{Class.forName("java.sql.DriverManager");  
Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/BILLING", "root", "0000");  
  
Statement stmt=con.createStatement();  
  
String query="DELETE FROM USERS WHERE EMPLOYEE_ID="+id+";"  
stmt.executeUpdate(query);  
JOptionPane.showMessageDialog(this,"User Deleted from Records");  
Add log = new Add();  
log.setVisible(true);  
  
this.setVisible(false);  
}  
catch(Exception e)  
{System.out.println(e);  
}  
// TODO add your handling code here:  
}
```

SOURCE CODE(UNDER EXIT BUTTON) JBUTTON 3

```
private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {  
    System.exit(0);          // TODO add your handling code here:  
}
```

(THIS BUTTON TERMINATES THE PROGRAM)

SOURCE CODE(UNDER CANCEL BUTTON) JBUTTON 4

```
private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {  
    Add log = new Add();  
    log.setVisible(true);  
  
    this.setVisible(false);          // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE ADMIN TO ADD FRAME)

SOURCE CODE(UNDER HOME BUTTON) JBUTTON 5

```
private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {  
    Main log = new Main();  
    log.setVisible(true);  
  
    this.setVisible(false);          // TODO add your handling code here:  
}
```

(THIS BUTTON REDIRECTS THE ADMIN TO THE MAIN FRAME)

SOURCE CODE(UNDER FORM OPENED) FRAME WINDOW

```
private void formWindowOpened(java.awt.event.WindowEvent evt) {  
    int id=Integer.parseInt(Account.empid2.getText());  
    jTextField2.setText(Integer.toString(id));  
    // TODO add your handling code here:  
}
```


MySQL Tables

BILL_ID

```
mysql> DESC BILL_ID;
+-----+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| ID    | int(200) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

CARD

```
mysql> DESC CARD;
+-----+-----+-----+-----+-----+-----+
| Field      | Type           | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| BILL_ID   | int(200)       | YES  |     | NULL    |       |
| CUST_ID   | int(200)       | YES  |     | NULL    |       |
| TOTAL     | decimal(15,2)  | YES  |     | NULL    |       |
| CARD_NUMBER | int(200)       | YES  |     | NULL    |       |
| AUTH_NO   | int(200)       | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.01 sec)
```

CASH

```
mysql> DESC CASH;
+-----+-----+-----+-----+-----+-----+
| Field      | Type           | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| BILL_ID   | int(200)       | YES  |     | NULL    |       |
| CUST_ID   | int(200)       | YES  |     | NULL    |       |
| TOTAL     | decimal(15,2)  | YES  |     | NULL    |       |
| RECEIVED  | decimal(15,2)  | YES  |     | NULL    |       |
| BALANCE   | decimal(15,2)  | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

CATEGORY

```
mysql> DESC CATEGORY;
+-----+-----+-----+-----+-----+-----+
| Field      | Type           | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| CATEGORY   | varchar(100)   | YES  | UNI | NULL    |       |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

CUSTOMER

```
mysql> DESC CUSTOMER;
```

Field	Type	Null	Key	Default	Extra
CUST_ID	int(20)	YES	UNI	NULL	
NAME	varchar(150)	YES		NULL	
PHONE	varchar(200)	YES	UNI	NULL	
DATE	date	YES		NULL	

```
4 rows in set (0.00 sec)
```

PRODUCT

```
mysql> DESC PRODUCT;
```

Field	Type	Null	Key	Default	Extra
Barcode	int(200)	YES	UNI	NULL	
Name	varchar(100)	YES		NULL	
Category	varchar(100)	YES		NULL	
Price	decimal(15,2)	YES		NULL	
UAT	decimal(15,2)	YES		NULL	
Total_Price	decimal(15,2)	YES		NULL	

```
6 rows in set (0.05 sec)
```

USERS

```
mysql> DESC USERS;
```

Field	Type	Null	Key	Default	Extra
EMPLOYEE_ID	int(70)	NO	PRI	NULL	
NAME	varchar(100)	YES		NULL	
EMAIL	char(100)	YES	UNI	NULL	
PHONE	char(100)	YES	UNI	NULL	
PASSWORD	char(200)	YES		NULL	

```
5 rows in set (0.00 sec)
```

CONCLUSION

BASED ON THE CONTEXT; I, HEREBY CONCLUDE THAT THE TOPIC PRODUCT BILLING SYSTEM TELLS US ABOUT THE DIFFERENT CONTROLS AND DATA THAT CAN BE STORED, EXECUTED AND COLLECTED ACCORDING TO THE INPUTS AND OUTPUTS THAT COMPREHENSIVELY DEFINES THE MAIN ATTRIBUTE OF THE PROJECT.

I GOT TO KNOW ABOUT DIFFERENT WAYS AND TECHNIQUES ON HOW ANY BILLING SYSTEM WORKS AND DATA IS STORED AND VIEWED ACCORDING TO THE USERS NEED.

THE PROJECT HAS BEEN COMPLETED ACCORDING TO THE GUIDELINES.