**Source Code**

Java code to connect Microsoft Access and Netbeans IDE 8.2 using Ucanaccess

Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");

Connection c=DriverManager.getConnection("jdbc:ucanaccess://C:\\RISHI\_CS\_IA\\VID\_INV.accdb");

System.out.println("Database Connected");

Java code to create a smooth transition from one screen to another

ViewHome ob1 = new ViewHome();

ob1.setVisible(true);

this.setVisible(false);

Java code to login to the software (Usernames and Passwords stored on access)

private void btnLoginActionPerformed(java.awt.event.ActionEvent evt) {

Connection con =null;

PreparedStatement pst = null;

ResultSet rs = null;

try{

Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");

con = DriverManager.getConnection("jdbc:ucanaccess://C:\\RISHI\_CS\_IA\\VID\_INV.accdb");

String sql = "select \* from Login where Username='"+txtUsername.getText() +"' and password='"+txtPassword.getText() +"' ";

pst = con.prepareStatement(sql);

rs=pst.executeQuery();

if(rs.next())

{

Home ob1 = new Home();

ob1.setVisible(true);

this.setVisible(false);

}

else

{

JOptionPane.showMessageDialog(null, "Login Failed");

}

}

catch(Exception e)

{

System.out.println(e);

}

}

Java code to extract and view the records contained in MS Access on Java

private void formWindowActivated(java.awt.event.WindowEvent evt) {

try

{

Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");

Connection c=DriverManager.getConnection("jdbc:ucanaccess://C:\\RISHI\_CS\_IA\\VID\_INV.accdb");

System.out.println("Database Connected");

Statement s=c.createStatement();

ResultSet rs = s.executeQuery("select \* from Stationery");

DefaultTableModel tblModel = (DefaultTableModel)StationeryTable.getModel();

//JTableHeader th = StudentTable.getTableHeader();

//th.setFont(new Font("Verdana", Font.BOLD, 14));

tblModel.getDataVector().removeAllElements();

revalidate();

while(rs.next())

{

String stid = rs.getString("StationeryID");

String stnm = rs.getString("StationeryName");

String stp = rs.getString("StationeryType");

String sih = String.valueOf(rs.getInt("StockInHand"));

String rl = String.valueOf(rs.getInt("ReorderLevel"));;

String up = rs.getString("UnitPrice");

String sid = rs.getString("SupplierID");

System.out.println(stid+ stnm+ stp+ sih+ rl+ up+ sid);

String tbData[] = {stid, stnm, stp, sih, rl, up, sid};

tblModel.addRow(tbData);

}

} catch (ClassNotFoundException | SQLException ex) {

System.out.println(E);

}

}

Java code to Insert any new records in the database via Java

private void btnAddActionPerformed(java.awt.event.ActionEvent evt) {

try

{

this.btnAdd.setEnabled(false);

this.btnSave.setEnabled(true);

Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");

Connection c=DriverManager.getConnection("jdbc:ucanaccess://C:\\RISHI\_CS\_IA\\VID\_INV.accdb");

//System.out.println("Database Connected");

Statement s=c.createStatement();

ResultSet rs = s.executeQuery("select \* from Stationery");

String s1 = "";

while(rs.next())

{

s1 = rs.getString("StationeryID");

}

String s11 = s1.substring(2, 6);

int s2 = Integer.parseInt(s11) + 1;

String s12 = s1.substring(0,2) + String.valueOf(s2);

this.txtStationeryID.setText(s12);

this.txtStationeryName.requestFocus();

}

catch (ClassNotFoundException | SQLException ex)

{

System.out.println(E);

}

}

private void btnSaveActionPerformed(java.awt.event.ActionEvent evt) {

try

{

String a1 = this.txtStationeryID.getText();

String a2 = this.txtStationeryName.getText();

String a3 = this.txtStationeryType.getText();

int a4 = Integer.parseInt(this.txtStockInHand.getText());

int a5 = Integer.parseInt(this.txtReorderLevel.getText());

double a6 = Double.parseDouble(this.txtUnitPrice.getText());

String a7 = String.valueOf(cboSupplierID.getSelectedItem());

Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");

Connection c=DriverManager.getConnection("jdbc:ucanaccess://C:\\RISHI\_CS\_IA\\VID\_INV.accdb");

Statement s=c.createStatement();

String sql = "INSERT INTO Stationery (StationeryID, StationeryName, StationeryType, StockInHand, ReorderLevel, UnitPrice, SupplierID) VALUES ('" + a1 + "','" + a2 + "','" + a3 + "'," + a4 + "," + a5 + "," + a6 + ",'" + a7 + "')";

System.out.println(sql);

s.executeUpdate(sql);

ResultSet rs = s.executeQuery("select \* from Stationery");

JOptionPane.showMessageDialog(this,"Record Added Successfully");

DefaultTableModel tblModel = (DefaultTableModel)StationeryTable.getModel();

JTableHeader th = StationeryTable.getTableHeader();

th.setFont(new Font("Verdana", Font.BOLD, 14));

tblModel.getDataVector().removeAllElements();

revalidate();

while(rs.next())

{

String s1 = rs.getString("StationeryID");

String s2 = rs.getString("StationeryName");

String s3 = rs.getString("StationeryType");

String s4 = String.valueOf(rs.getInt("StockInHand"));

String s5 = String.valueOf(rs.getInt("ReorderLevel"));

String s6 = String.valueOf(rs.getDouble("UnitPrice"));

String s7 = rs.getString("SupplierID");

String tbData[] = {s1, s2, s3, s4, s5, s6, s7};

tblModel.addRow(tbData);

}

}

catch(HeadlessException | NumberFormatException | SQLException E)

{

System.out.println(E);

} catch (ClassNotFoundException ex) {

Logger.getLogger(InsertRecordStationary.class.getName()).log(Level.SEVERE, null, ex);

}

}

private void formWindowActivated(java.awt.event.WindowEvent evt) {

try

{

this.txtStationeryID.setEditable(false);

this.btnSave.setEnabled(false);

Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");

Connection c=DriverManager.getConnection("jdbc:ucanaccess://C:\\RISHI\_CS\_IA\\VID\_INV.accdb");

//System.out.println("Database Connected");

Statement s=c.createStatement();

ResultSet rs = s.executeQuery("select \* from Stationery");

DefaultTableModel tblModel = (DefaultTableModel)StationeryTable.getModel();

JTableHeader th = StationeryTable.getTableHeader();

th.setFont(new Font("Verdana", Font.BOLD, 14));

tblModel.getDataVector().removeAllElements();

revalidate();

while(rs.next())

{

String s1 = rs.getString("StationeryID");

String s2 = rs.getString("StationeryName");

String s3 = rs.getString("StationeryType");

String s4 = String.valueOf(rs.getInt("StockInHand"));

String s5 = String.valueOf(rs.getInt("ReorderLevel"));

String s6 = String.valueOf(rs.getDouble("UnitPrice"));

String s7 = rs.getString("SupplierID");

String tbData[] = {s1, s2, s3, s4, s5, s6, s7};

tblModel.addRow(tbData);

}

(Code used to connect and extract elements in the database into the combo box for greater versatility)

Statement s1=c.createStatement();

ResultSet rs1 = s1.executeQuery("select \* from Suppliers");

System.out.println("dfgdfgdfgdfgdf");

int itemCount = cboSupplierID.getItemCount();

for(int i = 0; i < itemCount; i++){

cboSupplierID.removeItemAt(0);

}

while (rs1.next()) {

//System.out.println(rs.getString(1)+"\t"+rs.getString(2));

cboSupplierID.addItem(rs1.getString("SupplierID"));

}

} catch (ClassNotFoundException | SQLException ex) {

System.out.println(E);

}

}

Java code to Delete any previous records in the database via Java

private void formWindowActivated(java.awt.event.WindowEvent evt) {

try

{

Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");

Connection c=DriverManager.getConnection("jdbc:ucanaccess://C:\\RISHI\_CS\_IA\\VID\_INV.accdb");

System.out.println("Database Connected");

Statement s=c.createStatement();

ResultSet rs = s.executeQuery("select \* from Stationery");

DefaultTableModel tblModel = (DefaultTableModel)StationeryTable.getModel();

//JTableHeader th = StudentTable.getTableHeader();

//th.setFont(new Font("Verdana", Font.BOLD, 14));

tblModel.getDataVector().removeAllElements();

revalidate();

while(rs.next())

{

String stid = rs.getString("StationeryID");

String stnm = rs.getString("StationeryName");

String stp = rs.getString("StationeryType");

String sih = String.valueOf(rs.getInt("StockInHand"));

String rl = String.valueOf(rs.getInt("ReorderLevel"));;

String up = rs.getString("UnitPrice");

String sid = rs.getString("SupplierID");

System.out.println(stid+ stnm+ stp+ sih+ rl+ up+ sid);

String tbData[] = {stid, stnm, stp, sih, rl, up, sid};

tblModel.addRow(tbData);

}

} catch (ClassNotFoundException | SQLException ex) {

System.out.println(E);

}

}

private void btnDeleteActionPerformed(java.awt.event.ActionEvent evt) {

int number = StationeryTable.getSelectedRow();

try

{

Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");

Connection c=DriverManager.getConnection("jdbc:ucanaccess://C:\\RISHI\_CS\_IA\\VID\_INV.accdb");

Statement s=c.createStatement();

String sql = "Delete from Stationery WHERE StationeryID = '" + StationeryTable.getValueAt(number,0).toString() + "'";

s.executeUpdate(sql);

ResultSet rs = s.executeQuery("select \* from Stationery");

JOptionPane.showMessageDialog(this,"Record Deleted Successfully");

DefaultTableModel tblModel = (DefaultTableModel)StationeryTable.getModel();

tblModel.removeRow(number);

revalidate();

}

catch(HeadlessException | ClassNotFoundException | SQLException E)

{

System.out.println(E);

}

}

Java code to fetch the price of an item when chosen from the combo box and the fetch button is clicked

private void btnFetchPriceActionPerformed(java.awt.event.ActionEvent evt) {

try {

Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");

Connection c=DriverManager.getConnection("jdbc:ucanaccess://C:\\RISHI\_CS\_IA\\VID\_INV.accdb");

//System.out.println("Database Connected");

Statement s=c.createStatement();

String S = cboItemName.getSelectedItem().toString();

System.out.println(S);

String sql = "Select \* from Uniform where UniformName = '" + S + "';";

System.out.println(sql);

ResultSet rs2 = s.executeQuery(sql);

double price = 0.0;

while(rs2.next()){

price = rs2.getDouble("UnitPrice");

}

System.out.println(price);

// String price = rs2.getDouble("UnitPrice");

System.out.println(rs2.getRow());

System.out.println(price);

txtUnitPrice.setText(Double.toString(price));

}

catch (ClassNotFoundException | SQLException ex)

{

System.out.println(E);

}

}

import static java.lang.Math.E;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import java.awt.Font;

import java.awt.HeadlessException;

import static java.lang.Math.E;

import java.sql.PreparedStatement;

import java.sql.ResultSetMetaData;

import java.text.SimpleDateFormat;

import java.util.Calendar;

import java.util.logging.Level;

import java.util.logging.Logger;

import javax.swing.JOptionPane;

import javax.swing.table.DefaultTableModel;

import javax.swing.table.JTableHeader;

private void formWindowActivated(java.awt.event.WindowEvent evt) {

Calendar now = Calendar.getInstance();

int month = now.get(Calendar.MONTH);

int day = now.get(Calendar.DAY\_OF\_MONTH);

int year = now.get(Calendar.YEAR);

txtBillDate.setText("" + day + "/" + (month + 1) + "/" + year);

netTotal = 0;

}

double Quantity = Double.parseDouble(txtQuantity.getText());

double untPrice = Double.parseDouble(txtUnitPrice.getText());

txtItemTotal.setText(String.valueOf(Quantity \* untPrice));

netTotal = netTotal + (double)(Quantity \* untPrice);

Statement s1=c.createStatement();

String S = cboItemName.getSelectedItem().toString();

//System.out.println(S);

String sql111 = "Select \* from Stationery where StationeryName = '" + S + "';";

ResultSet rs111 = s1.executeQuery(sql111);

rs111.next();

int qty = rs111.getInt("StockInHand");

System.out.println(qty);

int qty1 = Integer.parseInt(txtQuantity.getText());

System.out.println(qty1);

int finalQty = qty - qty1;

rs111.close();

/\*String sql112 = "UPDATE Stationery SET StockInHand = " + finalQty + " where StationeryName = '" + S + "'";

s1.executeUpdate(sql112);

rs111 = s1.executeQuery(sql111);\*/

PreparedStatement pstmt = c.prepareStatement("UPDATE Stationery SET StockInHand = ? WHERE StationeryName = ?");

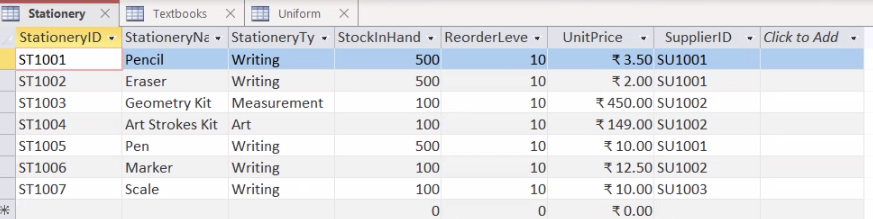
pstmt.setInt(1, finalQty);

pstmt.setString(2, S);

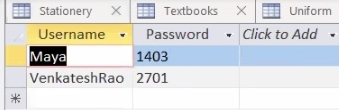
int numUpd = pstmt.executeUpdate();

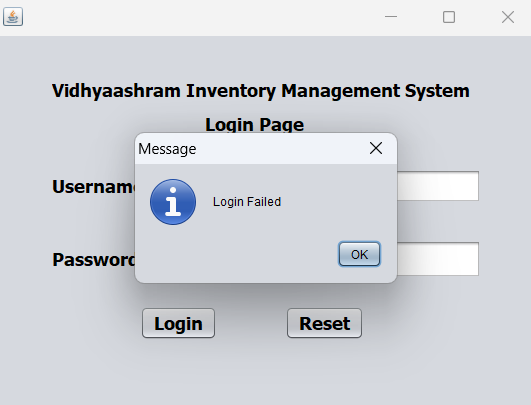
pstmt.close();

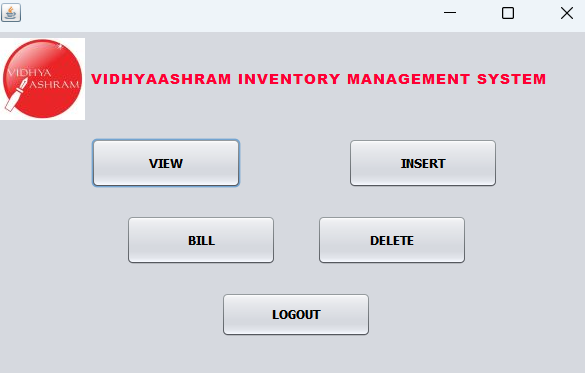
Format to store records in Access (Stationery taken as example)

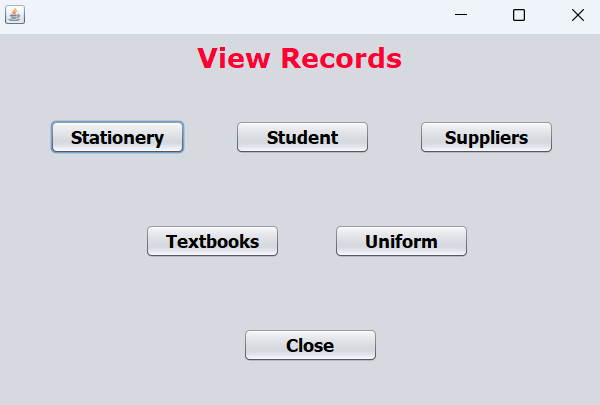


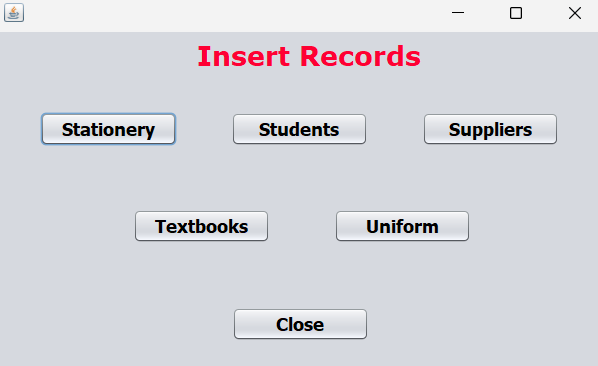
Format to store username and password to be used in the login page

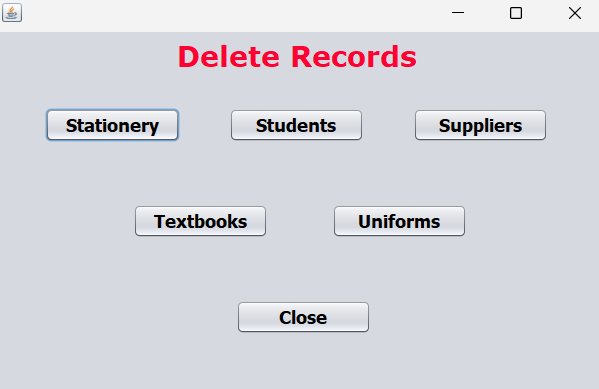


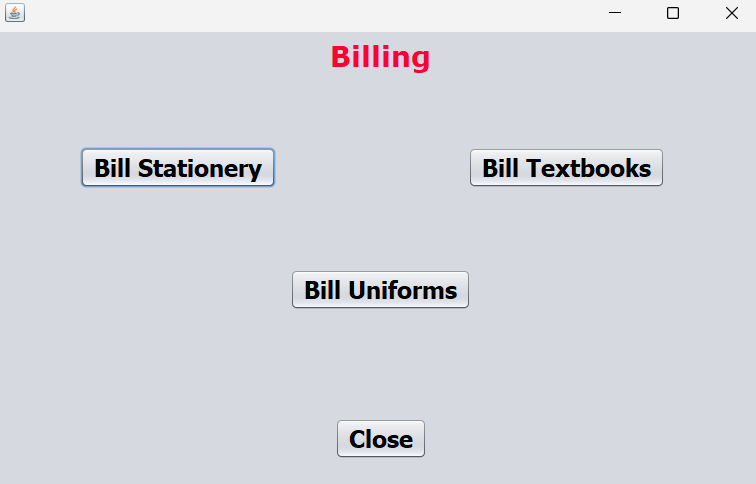


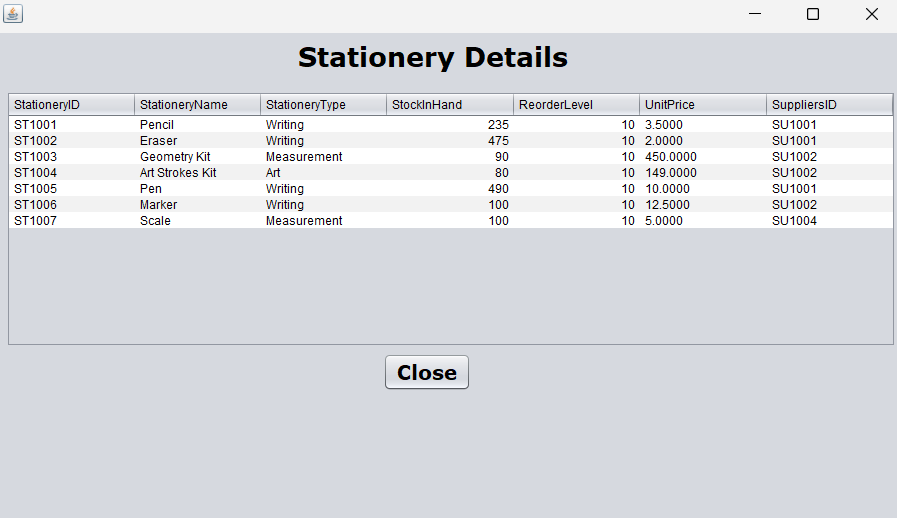


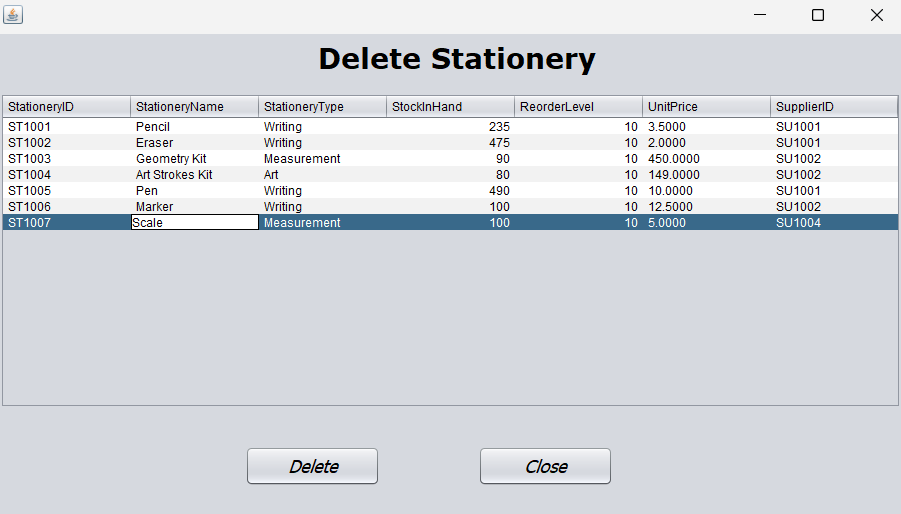


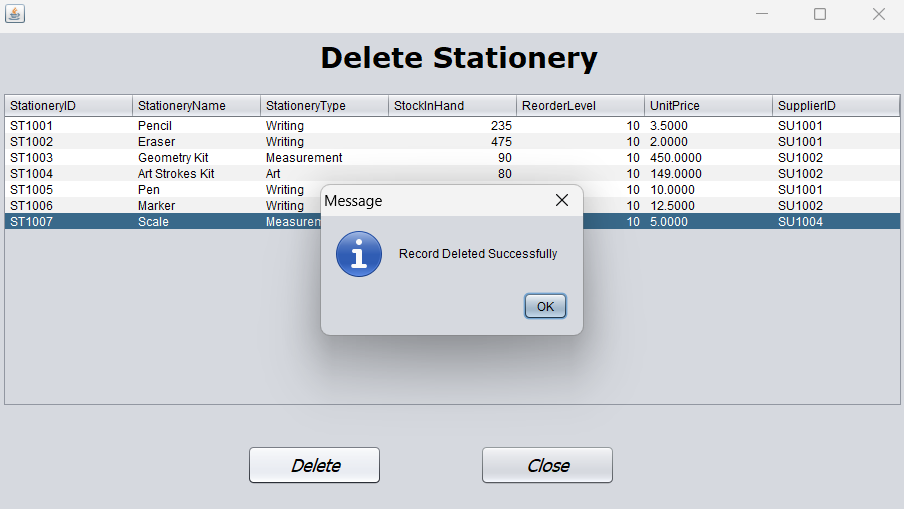


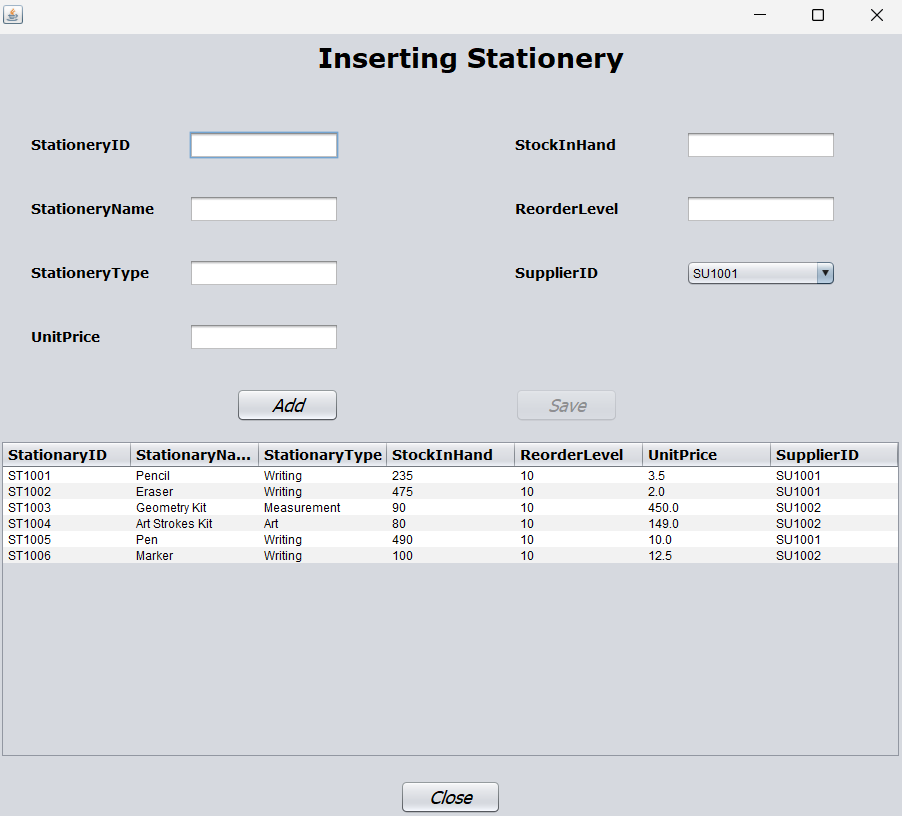


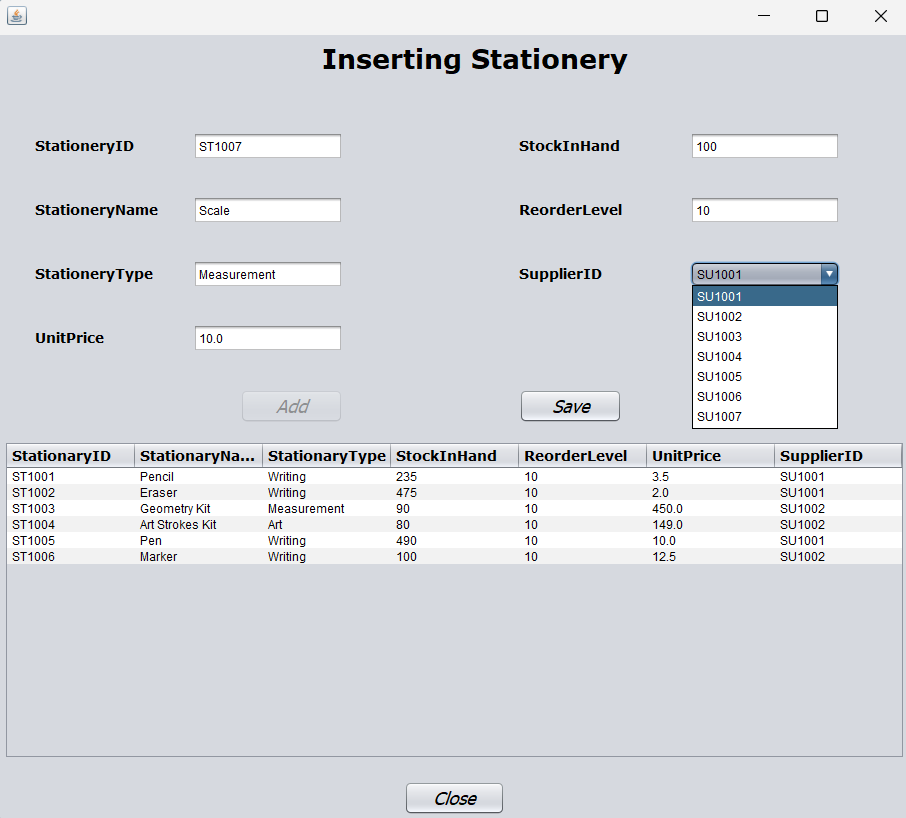


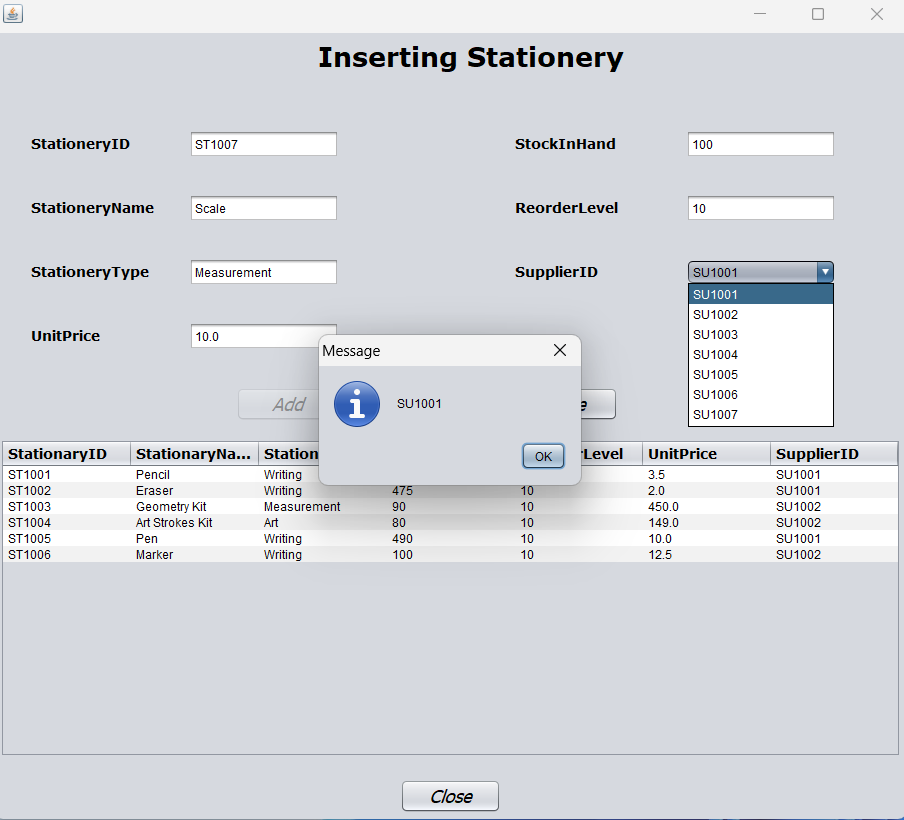


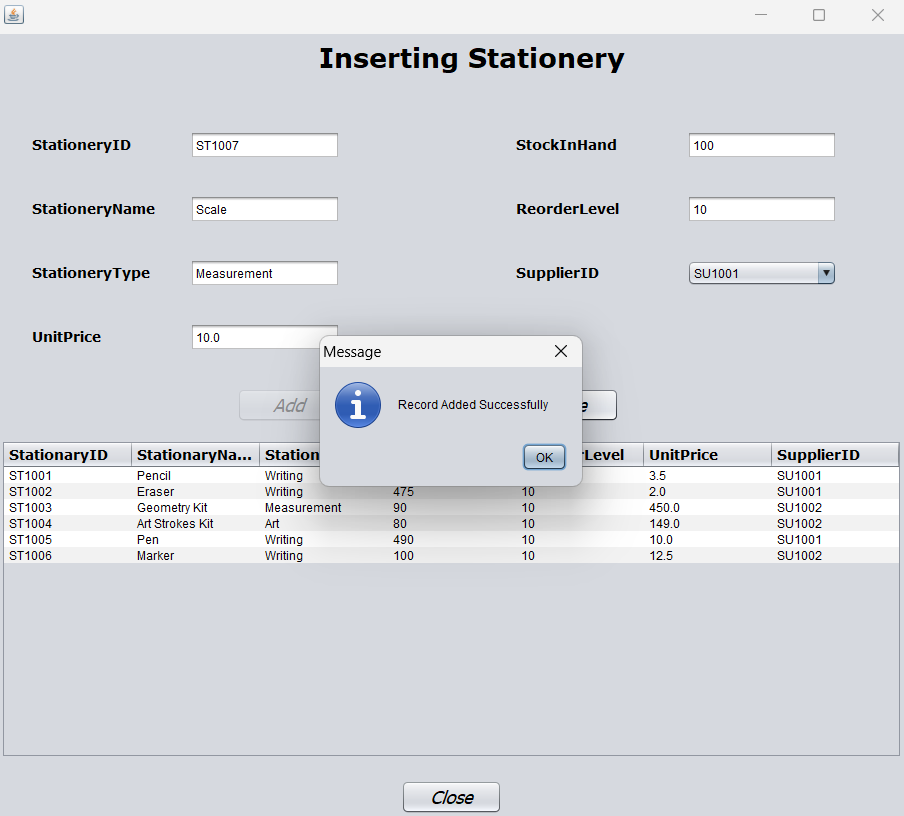


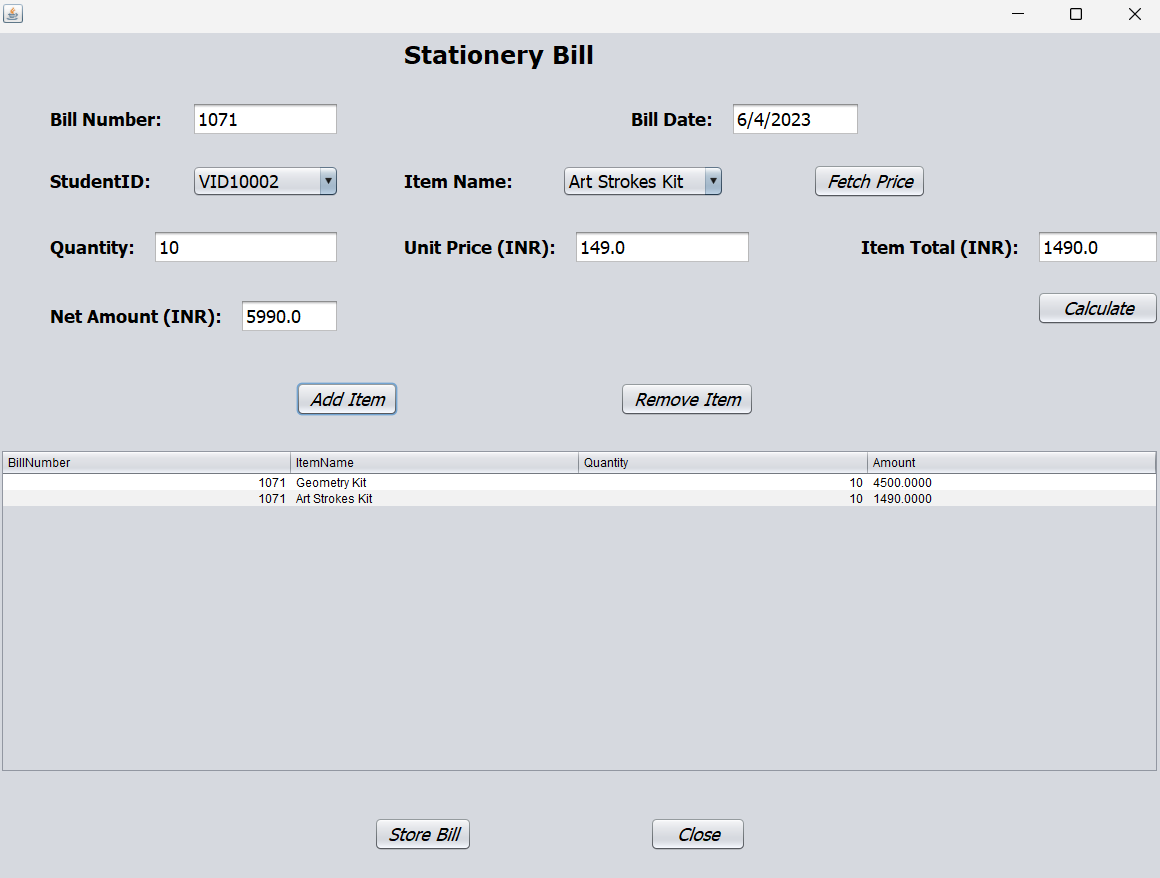








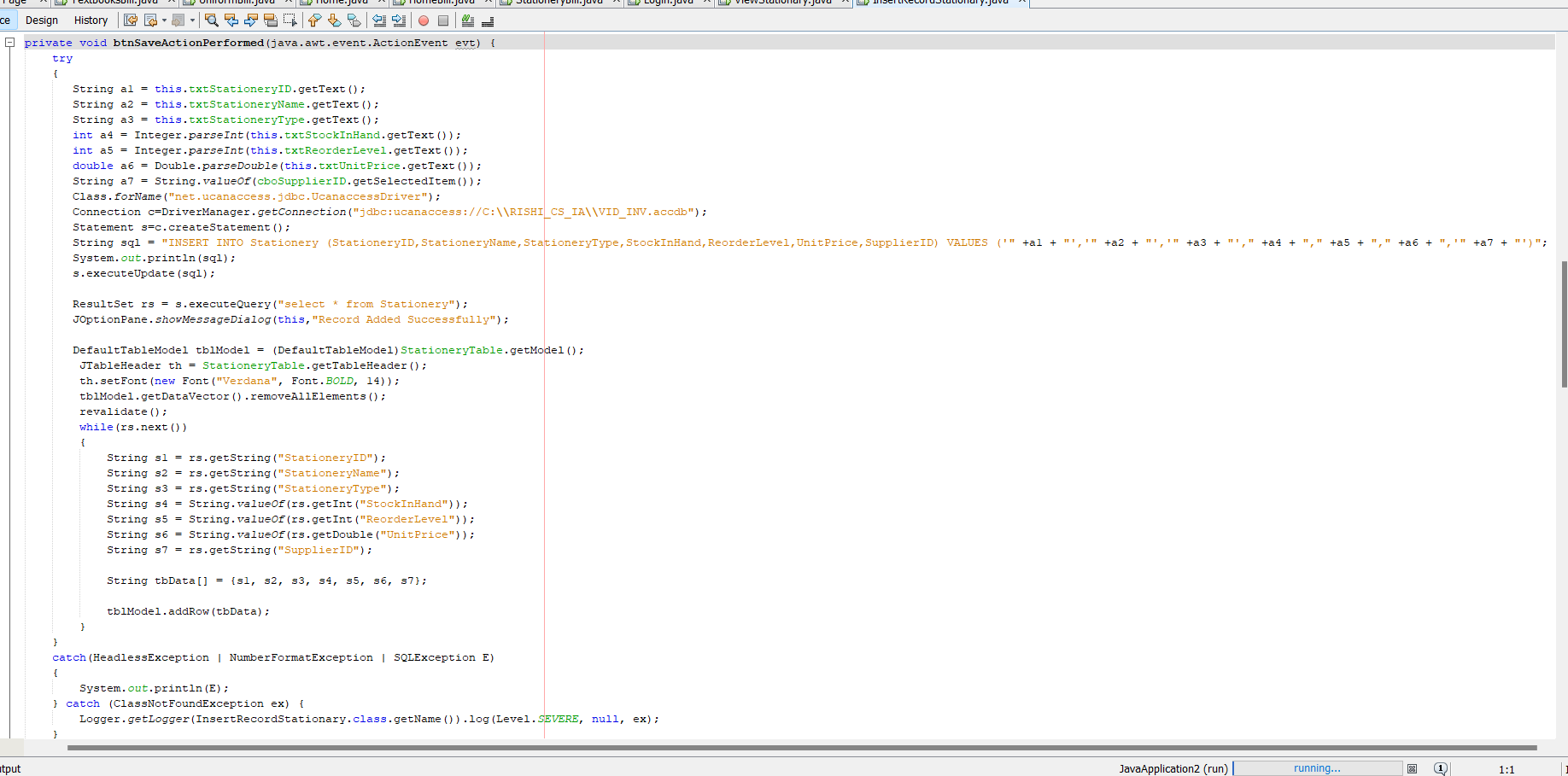


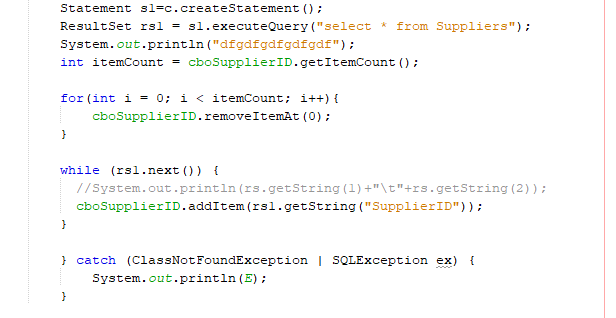


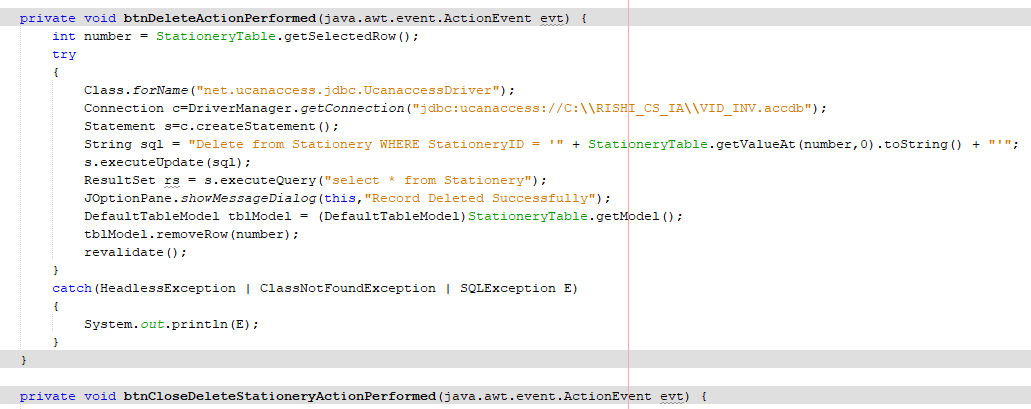


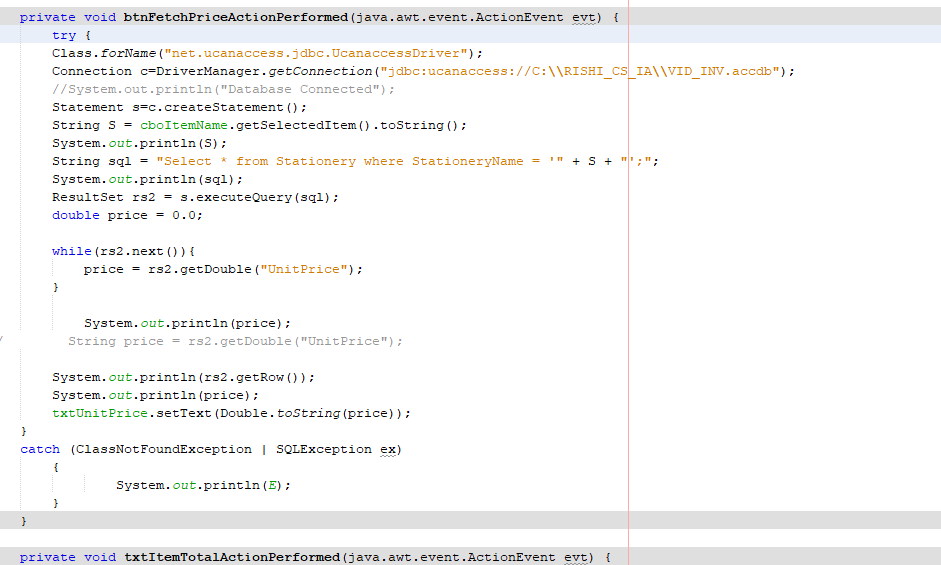


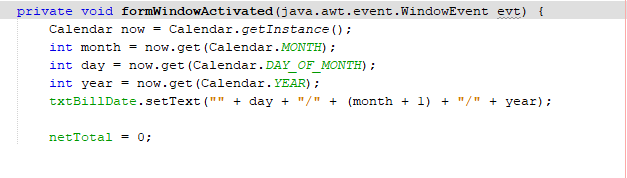


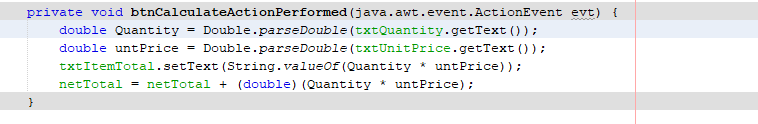


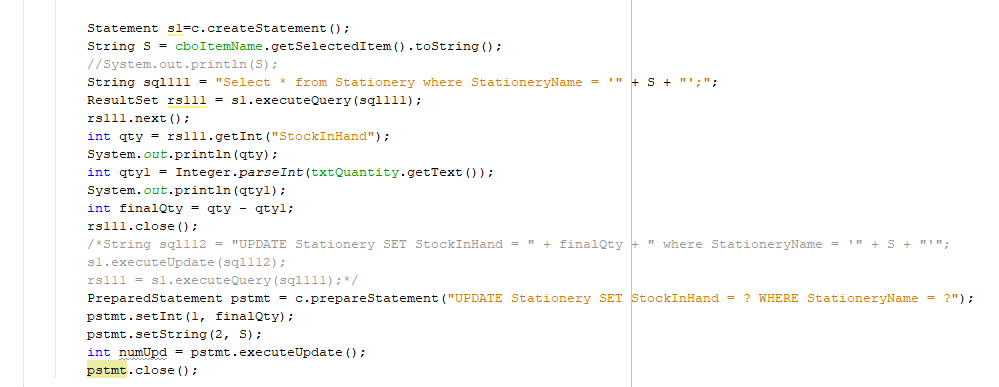












jLabel1 = new javax.swing.JLabel();

jLabel2 = new javax.swing.JLabel();

jLabel3 = new javax.swing.JLabel();

jLabel4 = new javax.swing.JLabel();

jLabel5 = new javax.swing.JLabel();

jLabel6 = new javax.swing.JLabel();

jLabel7 = new javax.swing.JLabel();

jLabel8 = new javax.swing.JLabel();

btnAddItem = new javax.swing.JButton();

btnRemoveItem = new javax.swing.JButton();

jScrollPane1 = new javax.swing.JScrollPane();

tblStationeryBill = new javax.swing.JTable();

btnStoreBill = new javax.swing.JButton();

btnClose = new javax.swing.JButton();

txtBillNumber = new javax.swing.JTextField();

txtUnitPrice = new javax.swing.JTextField();

txtQuantity = new javax.swing.JTextField();

txtBillDate = new javax.swing.JTextField();

txtNetAmount = new javax.swing.JTextField();

txtItemTotal = new javax.swing.JTextField();

cboItemName = new javax.swing.JComboBox<>();

jLabel9 = new javax.swing.JLabel();

cboStudentID = new javax.swing.JComboBox<>();

btnFetchPrice = new javax.swing.JButton();

btnCalculate = new javax.swing.JButton();

jLabel1.setFont(new java.awt.Font("Verdana", 1, 24)); // NOI18N

jLabel1.setText("Stationery Bill");

jLabel2.setFont(new java.awt.Font("Tahoma", 1, 18)); // NOI18N

jLabel2.setText("Bill Number:");

btnAddItem.setFont(new java.awt.Font("Tahoma", 2, 18)); // NOI18N

btnAddItem.setText("Add Item");

btnAddItem.addActionListener(new java.awt.event.ActionListener()

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());

getContentPane().setLayout(layout);

layout.setHorizontalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addContainerGap()

.addComponent(jScrollPane1))

