STATIONARY SHOP APPLICATION

A MINI-PROJECT BY:

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INTRODUCTION

1.1 INTRODUCTION

The Stationery Shop Application is a software solution designed to streamline the management of a stationery store. Developed using Java for the frontend and MySQL for the backend, it allows customers to browse and purchase products seamlessly while providing store owners with efficient inventory and sales management tools. This application offers real-time product updates, billing, and transaction tracking.

1.2 IMPLEMENTATION

The frontend, built with Java, provides an intuitive user interface for browsing products, managing the shopping cart, and generating invoices. The backend uses MySQL to store product, customer, and transaction data, supporting features like inventory management and order tracking. The system ensures seamless billing and inventory updates with each transaction.

1.3SCOPE OF THE PROJECT

The project covers product management, customer registration, order processing, and real-time inventory updates. It also includes a billing system and reporting features to track sales. Future enhancements could include multi-store management and payment gateway integration.

1.3 WEBSITE FEATURES

* **Product Catalog**

*__Shopping Cart & Checkout__

*__Real-time Inventory Management__

*__Admin Dashboard__

SYSTEM SPECIFICATIONS

2.1 HARDWARE SPECIFICATIONS:

PROCESSOR : Intel i5

MEMORY SIZE : 4GB(Minimum)

HARD DISK : 500 GB of free space

2.2 SOFTWARE SPECIFICATIONS:

PROGRAMMING LANGUAGE : Java, MySQL

FRONT-END : Java

BACK-END : MySQL

OPERATING SYSTEM : Windows 10

SAMPLE CODE

LOGIN PAGE

```
package Frame;

import javax.swing.JFrame;

import java.awt.EventQueue;

import javax.swing.JFrame;

import javax.swing.JPanel;

import javax.swing.JPasswordField;

import javax.swing.border.EmptyBorder;

import javax.swing.JLabel;

import javax.swing.JOptionPane;

import java.awt.Color;

import javax.swing.SwingConstants;

import javax.swing.JTextField;

import java.awt.Rectangle;

import java.awt.Window;

import java.awt.Component;

import java.awt.Point;

import javax.swing.JButton;

import java.awt.event.ActionListener;

import java.awt.event.ActionEvent;

import javax.swing.JFrame;

import java.awt.Font;
```

```
public class Demoframe extends JFrame {
private static final long serialVersionUID = 1L;
private JPanel contentPane;
private final JLabel label = new JLabel("New label");
private JTextField txtUsername;
private JTextField username;
private JTextField password;
public static void main(String[] args) {
EventQueue.invokeLater(new Runnable() {
public void run() {
try {
Demoframe frame = new Demoframe();
frame.setVisible(true);
} catch (Exception e) {
e.printStackTrace();}}});}
public Demoframe() {
setTitle("Stationery");
setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
setBounds(100, 100, 450, 300);
contentPane = new JPanel();
contentPane.setAlignmentX(Component.RIGHT_ALIGNMENT);
contentPane.setBounds(new Rectangle(10, 10, 10, 10));
contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
setContentPane(contentPane);
contentPane.setLayout(null);
JLabel lblNewLabel = new JLabel("STATIONERY SHOP");
```

```
lblNewLabel.setFont(new Font("Times New Roman", Font.ITALIC, 33));
lblNewLabel.setBounds(85, 11, 385, 69);
lblNewLabel.setForeground(Color.BLACK);
contentPane.add(lblNewLabel);
JLabel USERNAME = new JLabel("USERNAME");
USERNAME.setBounds(10, 91, 108, 14);
contentPane.add(USERNAME);
JLabel PASSWORD = new JLabel("PASSWORD");
PASSWORD.setBounds(10, 149, 99, 33);
contentPane.add(PASSWORD);
username = new JTextField();
username.setBounds(182, 88, 86, 20);
contentPane.add(username);
username.setColumns(10);
password = new JTextField();
password.setBounds(182, 144, 86, 32);
contentPane.add(password);
password.setColumns(10);
JButton btnLogIn = new JButton("LOG IN");
btnLogIn.setFont(new Font("Verdana", Font.BOLD, 20));
btnLogIn.addActionListener(new ActionListener() {
public void actionPerformed(ActionEvent e) {
String uname=username.getText();
String pad=password.getText();
if(uname.equals("abc")&&pad.equals("abc"))
{
JOptionPane.showMessageDialog(btnLogIn,"you have logged in");
```

```
secondbox second=new secondbox();
second.setVisible(true);


}
else
 {
JOptionPane.showMessageDialog(btnLogIn,
        "Invalid pw or username");


}
}});
btnLogIn.setBounds(157, 197, 142, 53);
contentPane.add(btnLogIn);}}
```

DETAILS OF THE PRODUCT

```
package Frame;
import java.awt.Color;
import java.awt.Component;
import java.awt.EventQueue;
import java.awt.Font;
import java.awt.Rectangle;
import java.sql.*;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JButton;
import java.awt.SystemColor;
import javax.swing.AbstractAction;
import java.awt.event.ActionEvent;
import javax.swing.Action;
import java.awt.event.ActionListener;

public class secondbox extends JFrame {
private JPanel contentPane;
private final JLabel label = new JLabel("New label");
private static final long serialVersionUID = 1L;
private final Action action = new SwingAction();
/* Launch the application. */
```

```
public static void main(String[] args) {
EventQueue.invokeLater(new Runnable() {
public void run() {
try {
secondbox frame = new secondbox();
frame.setVisible(true);
} catch (Exception e) {
e.printStackTrace();
}
}
});
}

/* Create the frame. */
public secondbox() {
contentPane = new JPanel();
contentPane.setAlignmentX(Component.RIGHT_ALIGNMENT);
contentPane.setBounds(new Rectangle(10, 10, 10, 10));
contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
setContentPane(contentPane);
contentPane.setLayout(null);
setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
setBounds(100, 100, 799, 470);
JLabel bill = new JLabel("DETAILS OF THE PRODUCT ");
bill.setFont(new Font("Tahoma", Font.BOLD, 35));
bill.setBounds(141, 10, 773, 32);
bill.setForeground(new Color(0, 0, 0));
```

```
contentPane.add(bill);
JLabel aa=new JLabel("{1:'name':'Ball Point Pen','uprice':6}");
aa.setBounds(10, 10, 6319, 93);
contentPane.add(aa);
JLabel bb=new JLabel("{2:'name':'Gel Pen','uprice':10.0}");
bb.setBounds(264, 18, 5969, 76);
contentPane.add(bb);
JLabel cc=new JLabel("{3:'name':'Fountain Pen','uprice':80.0}");
cc.setBounds(499, 27, 6401, 58);
contentPane.add(cc);
JLabel dd=new JLabel("{4:'name':'Sketch Pen(10 colours)','uprice':100}");
dd.setBounds(10, 11, 6585, 144);
contentPane.add(dd);
JLabel ee=new JLabel("{5:'name':'Highlighter','uprice':15}");
ee.setBounds(264, 41, 6585, 84);
contentPane.add(ee);
JLabel ff=new JLabel("{6:'name':'White board marker','uprice':20}");
ff.setBounds(499, 10, 6585, 144);
contentPane.add(ff);
JLabel gg=new JLabel("{7:'name':'Roller Scale','uprice':40}");
gg.setBounds(10, 40, 6585, 144);
contentPane.add(gg);
JLabel hh=new JLabel("{8:'name':'Pencil','uprice':4}");
hh.setBounds(264, 40, 6585, 144);
contentPane.add(hh);
JLabel ii=new JLabel("{9:'name':'Eraser','uprice':5}");
ii.setBounds(499, 66, 6401, 93);
```

```
contentPane.add(ii);
JLabel jj=new JLabel("{10:'name':'Sharpner','uprice':3}\\\"");
jj.setBounds(10, 88, 6473, 93);
contentPane.add(jj);
JLabel kk=new JLabel("{11:'name':'Correction Pen','uprice':30}");
kk.setBounds(264, 62, 6585, 144);
contentPane.add(kk);
JLabel ll=new JLabel("{12:'name':'Ink filler','uprice':10}");
ll.setBounds(499, 62, 6585, 144);
contentPane.add(ll);
JLabel mm=new JLabel("{13:'name':'Ink bottle','uprice':50}");
mm.setBounds(10, 88, 6585, 144);
contentPane.add(mm);
JLabel nn=new JLabel("{14:'name':'Scale','uprice':15}");
nn.setBounds(264, 88, 6585, 144);
contentPane.add(nn);
JLabel oo=new JLabel("{15:'name':'LongScale','uprice':25}");
oo.setBounds(499, 114, 6570, 93);
contentPane.add(oo);
JLabel pp=new JLabel("{16:'name':'Mechanical Pencil','uprice':20}");
pp.setBounds(10, 139, 6575, 93);
contentPane.add(pp);
JLabel qq=new JLabel("{17:'name':'Stick file','uprice':15}");
qq.setBounds(264, 136, 6352, 93);
contentPane.add(qq);
JLabel rr=new JLabel("{18:'name':'20 Leaf folder file','uprice':45}");
rr.setBounds(499, 149, 6505, 72);
```

```
contentPane.add(rr);
JLabel ss=new JLabel("{19:'name':'Folder file','uprice':30}");
ss.setBounds(10, 166, 6473, 88);
contentPane.add(ss);
JLabel tt=new JLabel("{20:'name':'Paper pin(1 pack)','uprice':15}");
tt.setBounds(264, 136, 6585, 144);
contentPane.add(tt);
JLabel uu=new JLabel("{21:'name':'Gem Clip(1 Pack)','uprice':15}");
uu.setBounds(499, 181, 6505, 58);
contentPane.add(uu);
JLabel vv=new JLabel("{22:'name':'Binder Clip(1 Pack)','uprice':17}");
vv.setBounds(10, 166, 6585, 144);
contentPane.add(vv);
JLabel ww=new JLabel("{23:'name':'A4 Paper (1 Pack)','uprice':15}");
ww.setBounds(264, 166, 6585, 144);
contentPane.add(ww);
JLabel xx=new JLabel("{24:'name':'Unruled Note (Short)','uprice':50}");
xx.setBounds(499, 166, 6585, 144);
contentPane.add(xx);
JLabel yy=new JLabel("{25:'name':'Ruled Note(Short)','uprice':55}");
yy.setBounds(10, 222, 6401, 88);
contentPane.add(yy);
JLabel zz=new JLabel("{26:'name':'Unruled Note(Long)','uprice':90}");
zz.setBounds(264, 195, 6585, 144);
contentPane.add(zz);
JLabel aaa=new JLabel("\"{27:'name':Ruled Note(Long)','uprice':100}");
aaa.setBounds(499, 194, 6585, 144);
```

```
contentPane.add(aaa);
JLabel bbb=new JLabel("{28:'name':'Exam Pad','uprice':70}");
bbb.setBounds(10, 225, 6585, 144);
contentPane.add(bbb);
JLabel ccc=new JLabel("{29:'name':'Gel Pen refill(Pack of 3)','uprice':25}");
ccc.setBounds(264, 225, 6585, 144);
contentPane.add(ccc);
JLabel ddd=new JLabel("{30:'name':'Fountain Pen refill(Pack of 5)','uprice:25}");
ddd.setBounds(509, 225, 6585, 144);
contentPane.add(ddd);


JButton billbutton = new JButton("BILL");
billbutton.addActionListener(new ActionListener() {
public void actionPerformed(ActionEvent e) {
StationeryPriceCalculator detailss = new StationeryPriceCalculator();
}

});
billbutton.setAction(action);
billbutton.setFont(new Font("Serif", Font.BOLD, 40));
billbutton.setBounds(309, 336, 142, 45);
contentPane.add(billbutton);



}
private class SwingAction extends AbstractAction {
```

```
public SwingAction() {
putValue(NAME, "BILL");
putValue(SHORT_DESCRIPTION, "Some short description");
}
public void actionPerformed(ActionEvent e) {
}
}
}
```

STAITIONERY PRICE CALCULATOR

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

public class StationeryPriceCalculator {
    private JFrame frame;
    private JTextField productField;
    private JTextField quantityField;
    private JTextArea billArea;
    private double totalAmount = 0;

    public StationeryPriceCalculator() {
        frame = new JFrame("Shopping Application");
        frame.setSize(400, 400);
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.setLayout(null);

        JLabel label = new JLabel("Enter Product Name:");
        label.setBounds(10, 10, 150, 25);
        frame.add(label);

        productField = new JTextField();
        productField.setBounds(150, 10, 150, 25);
```

```
frame.add(productField);

JLabel quantityLabel = new JLabel("Enter Quantity:");
quantityLabel.setBounds(10, 50, 150, 25);
frame.add(quantityLabel);

quantityField = new JTextField();
quantityField.setBounds(150, 50, 150, 25);
frame.add(quantityField);

JButton addButton = new JButton("Add Product");
addButton.setBounds(10, 90, 150, 25);
addButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        addProduct();
    }
});
frame.add(addButton);

JButton billButton = new JButton("Generate Bill");
billButton.setBounds(200, 90, 150, 25);
billButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        generateBill();
    }
});
frame.add(billButton);
```

```
        billArea = new JTextArea();
        billArea.setBounds(10, 130, 360, 220);
        billArea.setEditable(false);
        frame.add(billArea);

        frame.setVisible(true);
    }

    private void addProduct() {
        String productName = productField.getText();
        int quantity = Integer.parseInt(quantityField.getText());

        try (Connection conn =
DriverManager.getConnection("jdbc:mysql://localhost:3306/jdbcdemo       ", "root", "shyaam"))
{
            PreparedStatement stmt = conn.prepareStatement("SELECT price FROM stationery
            WHERE name = ?");
            stmt.setString(1, productName);
            ResultSet rs = stmt.executeQuery();

            if (rs.next()) {
                double price = rs.getDouble("price");
                double totalPriceForItem = price * quantity;
                totalAmount += totalPriceForItem;
                billArea.append(productName + " (x" + quantity + "): ₹" + totalPriceForItem + "\n");
                productField.setText("");
                quantityField.setText("");
```

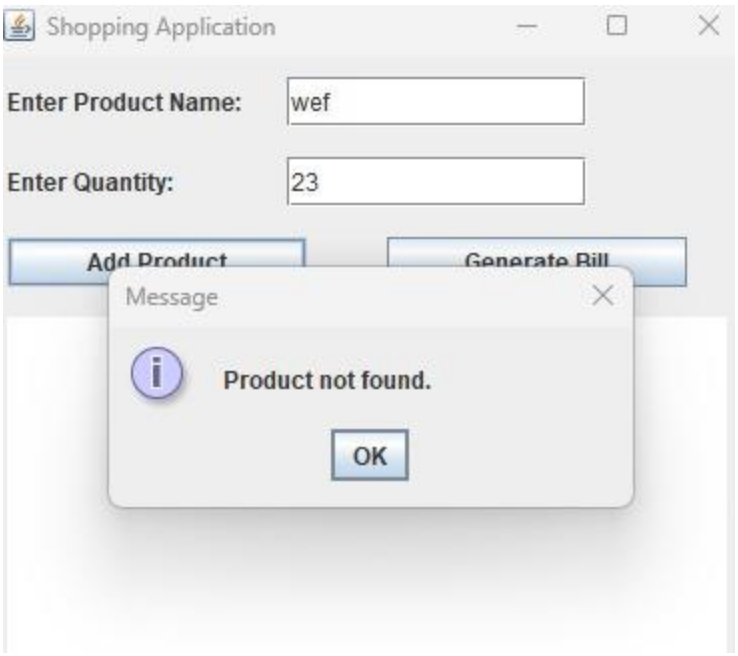
```
            } else {
                JOptionPane.showMessageDialog(frame, "Product not found.");
            }
        } catch (SQLException ex) {
            ex.printStackTrace();
        }
    }

    private void generateBill() {
        JOptionPane.showMessageDialog(frame, "Total Amount: ₹" + totalAmount);
        // Reset for next transaction
        totalAmount = 0;
        billArea.setText(""); // Clear the bill area
    }

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

‘

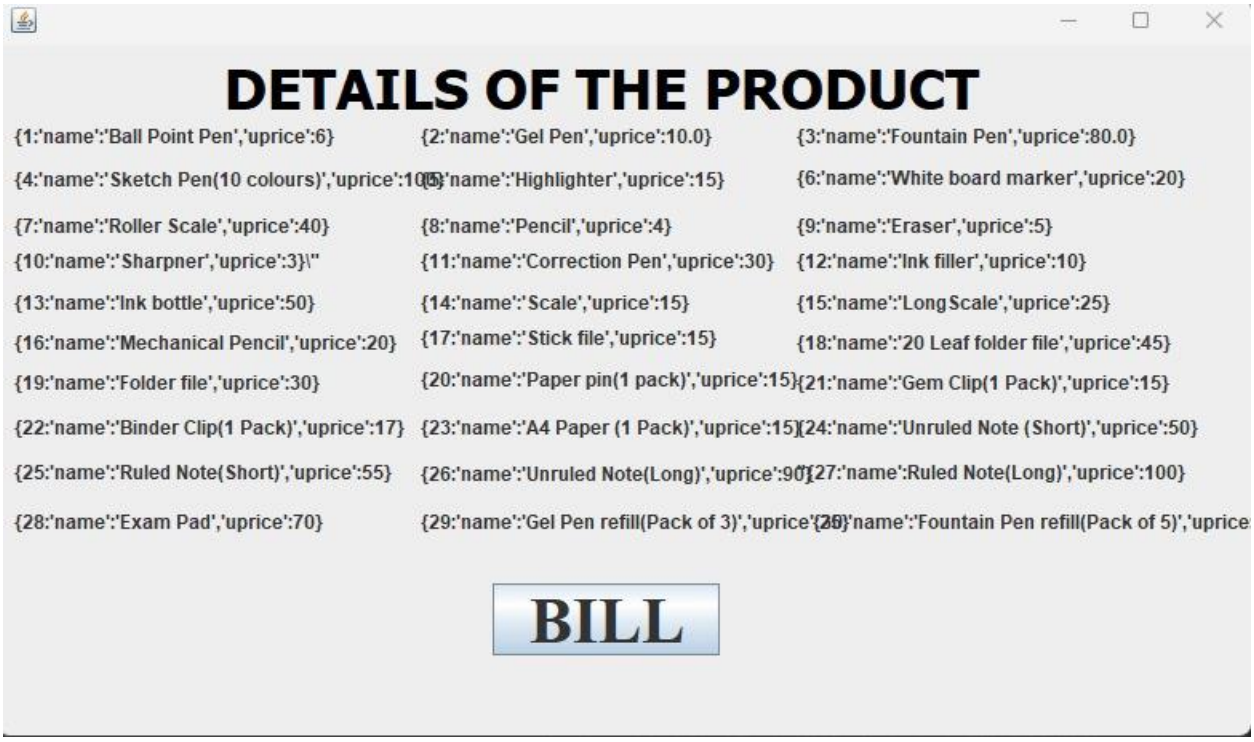
SNAPSHOTS

LOGIN PAGE:

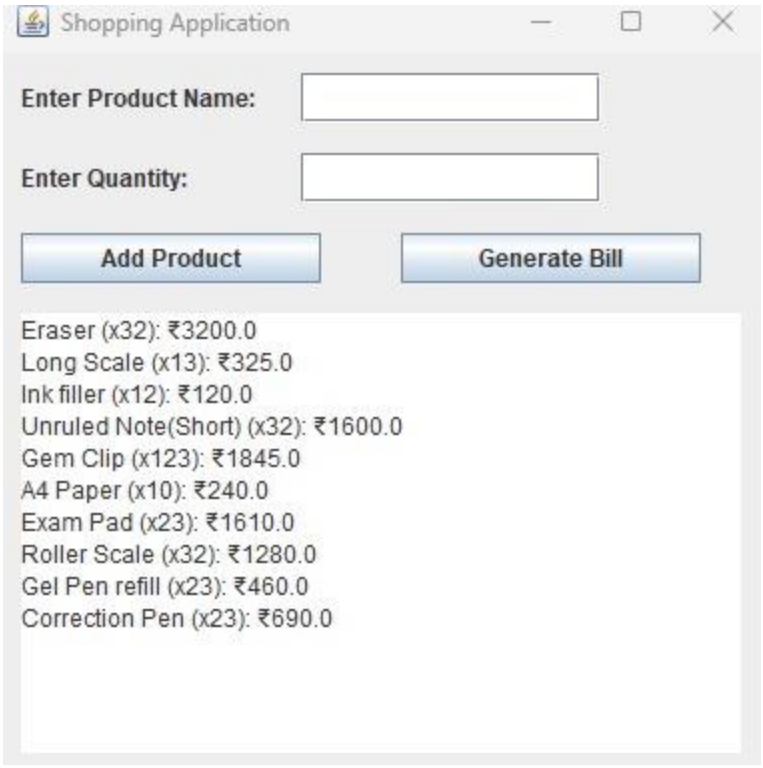
IF INVALID PW OR USERNAME IS ENTERED:



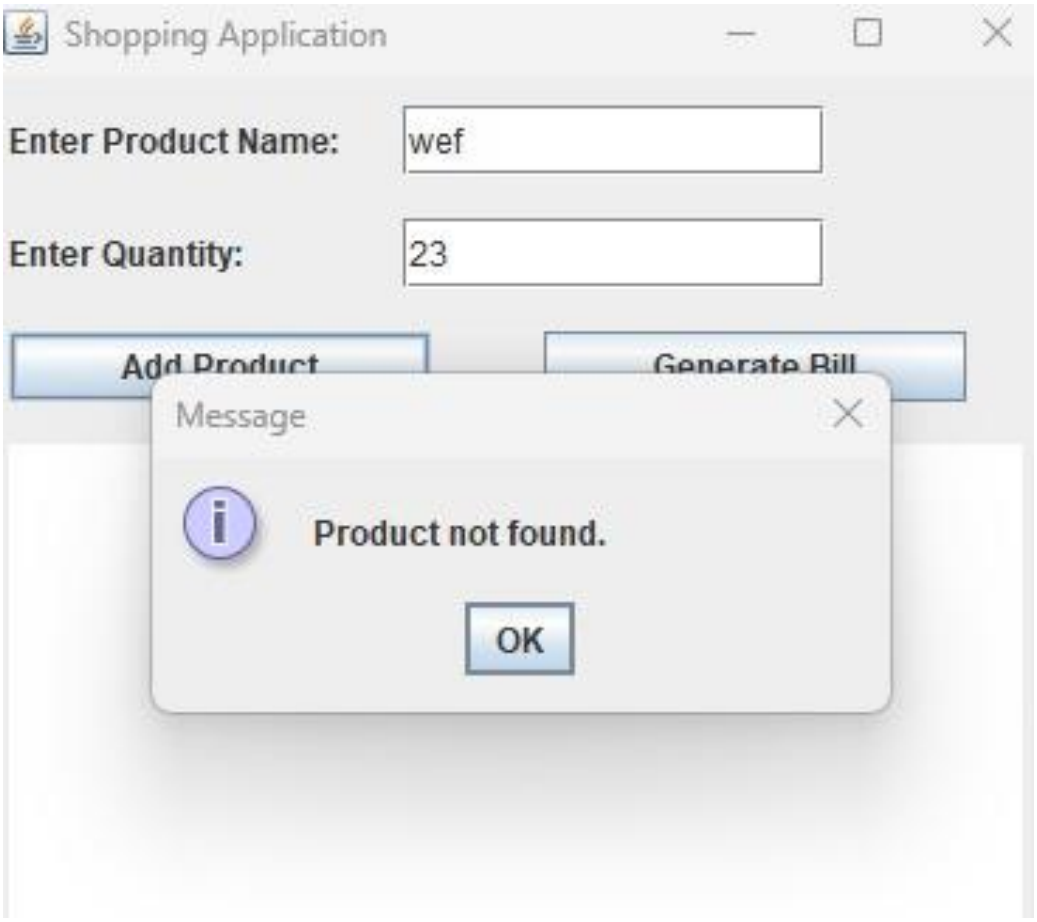
DETAILS OF THE PRODUCTS IN SHOP:



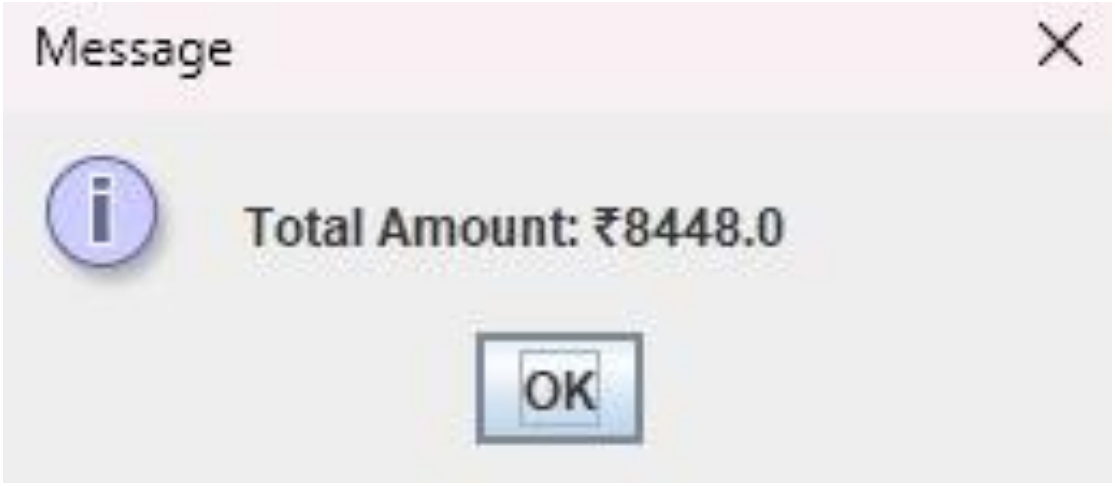
STATIONARY PRODUCT AND PRICE CALCULATOR:


Shopping Application
Enter Product Name:
Enter Quantity:
Add Product
Generate Bill
Eraser (x32): ₹3200.0
Long Scale (x13): ₹325.0
Ink filler (x12): ₹120.0
Unruled Note(Short) (x32): ₹1600.0
Gem Clip (x123): ₹1845.0
A4 Paper (x10): ₹240.0
Exam Pad (x23): ₹1610.0
Roller Scale (x32): ₹1280.0
Gel Pen refill (x23): ₹460.0
Correction Pen (x23): ₹690.0

EXCEPTIONS:


Shopping Application
Enter Product Name:
wef
Enter Quantity:
23
Add Product
Generate Bill
Message
Product not found.
OK

TOTAL BILL:


Message
Total Amount: ₹8448.0
OK

CONCLUSION

The Stationery Shop Application provides an efficient and user-friendly platform for both customers and store owners. It simplifies product browsing, purchasing, and billing while ensuring real-time inventory management and secure transactions. With its intuitive interface and robust backend, the system enhances the shopping experience and streamlines store operations. This project offers a scalable solution for managing a stationery store and can be further expanded with additional features in the future.

REFERENCES

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3. https://www.w3schools.com/sql/
4. SQL | Codecademy