STATIONARY SHOP APPLICATION

A MINI-PROJECT BY:

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CHENNAI

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BONAFIDE CERTIFICATE

Certified that this project "**STATIONARY SHOP APPLICATION**" is the bonafide work of "SHYAAM KK , ROONEY BALA" who carried out the project work under my supervision.

Submitted for the practical examination held on _____

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ABSTRACT

The Stationery Shop Application is a comprehensive software solution designed to streamline the process of managing and purchasing stationery products in a retail environment. The project leverages Java as the frontend interface, providing an intuitive and user-friendly platform for customers to browse available products, view detailed information, and make purchases.

The backend is powered by MySQL, which efficiently stores and manages product details, customer information, and transaction records. The application enables users to view a catalog of stationery items, including prices and descriptions, and facilitates seamless billing for purchased products. Additionally, it supports real-time inventory management, updating product availability as items are sold.

This solution aims to improve the customer shopping experience by offering a fast, efficient, and organized method for purchasing stationery while providing store owners with a reliable tool to track and manage sales and inventory.

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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

```java
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 {
```

```java
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);
```

```java
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);
```

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


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

DETAILS OF THE PRODUCT

```java
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() {
```

```java
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}");
```

```java
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}\\\"");
```

```java
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}");
```

```java
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}");
```

```java
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");
```

```java
        putValue(SHORT_DESCRIPTION, "Some short description");

    }

    public void actionPerformed(ActionEvent e) {

    }

    }

}
```

STAITIONERY PRICE CALCULATOR

```java
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);
```

```java
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();
```

```java
        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.");
```

```java
      }
    } 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();

  }

}
```
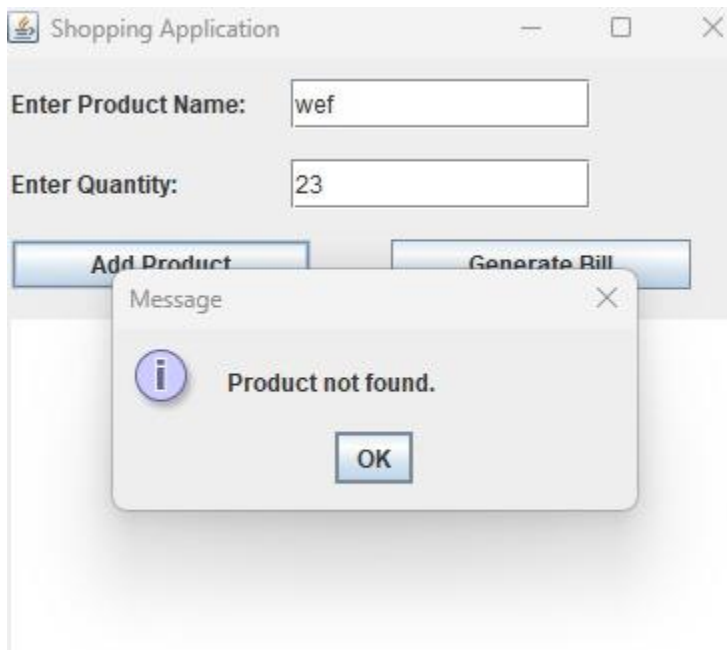
‘

SNAPSHOTS

LOGIN PAGE:

IF INVALID PW OR USERNAME IS ENTERED:

DETAILS OF THE PRODUCTS IN SHOP:

DETAILS OF THE PRODUCT

{1:'name':'Ball Point Pen','uprice':6}	{2:'name':'Gel Pen','uprice':10.0}	{3:'name':'Fountain Pen','uprice':80.0}

{4:'name':'Sketch Pen(10 colours)','uprice':10{5}'name':'Highlighter','uprice':15}	{6:'name':'White board marker','uprice':20}

{7:'name':'Roller Scale','uprice':40}	{8:'name':'Pencil','uprice':4}	{9:'name':'Eraser','uprice':5}

{10:'name':'Sharpner','uprice':3}\"	{11:'name':'Correction Pen','uprice':30}	{12:'name':'Ink filler','uprice':10}

{13:'name':'Ink bottle','uprice':50}	{14:'name':'Scale','uprice':15}	{15:'name':'Long Scale','uprice':25}

{16:'name':'Mechanical Pencil','uprice':20}	{17:'name':'Stick file','uprice':15}	{18:'name':'20 Leaf folder file','uprice':45}

{19:'name':'Folder file','uprice':30}	{20:'name':'Paper pin(1 pack)','uprice':15}{21:'name':'Gem Clip(1 Pack)','uprice':15}

{22:'name':'Binder Clip(1 Pack)','uprice':17}	{23:'name':'A4 Paper (1 Pack)','uprice':15}{24:'name':'Unruled Note (Short)','uprice':50}

{25:'name':'Ruled Note(Short)','uprice':55}	{26:'name':'Unruled Note(Long)','uprice':90}{27:'name':Ruled Note(Long)','uprice':100}

{28:'name':'Exam Pad','uprice':70}	{29:'name':'Gel Pen refill(Pack of 3)','uprice'{30}'name':'Fountain Pen refill(Pack of 5)','uprice

BILL

STATIONARY PRODUCT AND PRICE CALCULATOR:
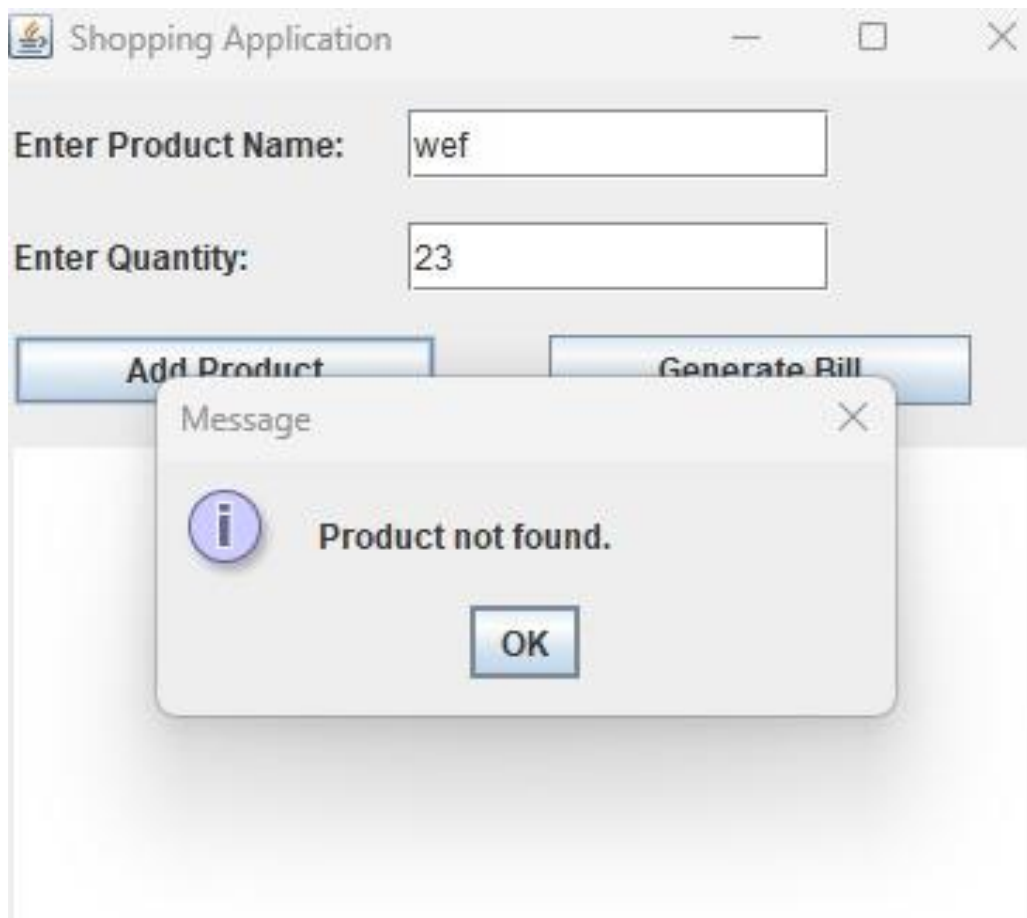
Shopping Application

Enter Product Name: [   ]

Enter Quantity: [   ]
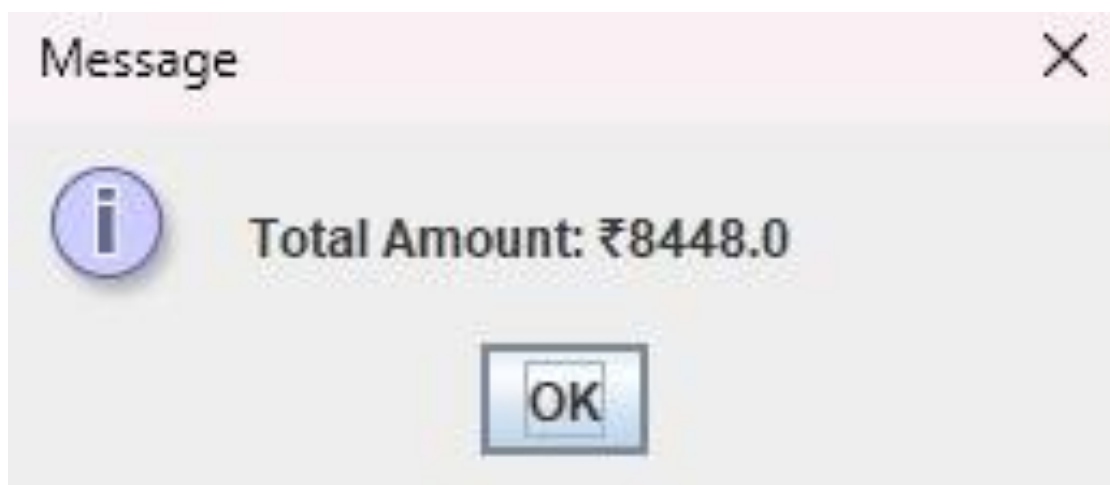
Add Product   **Generate Bill**

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:

TOTAL BILL:

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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4. SQL | Codecademy