Food Delivery Application MINI PROJECT REPORT

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NOVEMBER 2021

ABSTRACT

OUR PROJECT IS TO:

- 1. Display the details of the food products
- 2. Display the bill amount of the customer after each order
- 3. Display the products ordered by the customer with the following options based on price

Scope of the Project:

- A big boost to customer experience
- Best GUI Design
- Competitive Prices
- People of Remote places can order easily
- Build a visible menu
- The data of customers such as name number address amount ordered are stored safely in file for later reference
- Exceptions are handled efficiently

METHODS IN THE PROGRAM:

actionPerformed():

This method is used to get action of button and perform the action assigned to corresponding buttons.

getClass():

This method returns the runtime class of an object.

dispose():

This method causes the JFrame window to be destroyed and cleaned up by the operating system.

getContentPane():

This method retrieves the content pane layer so that you can add an object to it.

setVisible():

This method is used to make frame to visible by passing arguments as true.

AIM:

To design an object oriented programming model for food delivery application with the

following modules.

PROGRAM:

```
package mainmenu;
import java.util.*;
import java.awt.BorderLayout;
import java.awt.Color;
import java.awt.Component;
import java.awt.Font;
import java.awt.lmage;
import java.awt.image.BufferedImage:
import java.io.File;
import java.io.FileInputStream;
import java.io.FileNotFoundException;
import java.io.IOException:
import java.io.InputStream;
import javax.imageio.lmageIO;
import javax.swing.Box;
import javax.swing.lmagelcon;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JPanel;
import javax.swing.SwingConstants;
import java.awt.Panel;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.io.BufferedReader;
import java.io.FileReader;
@SuppressWarnings("serial")
public class MainMenu extends JPanel {
        JLabel picLabel, title;
        JButton button:
        private Panel panel 1;
        private Panel panel_2;
        static JFrame frame:
        public void createAndShowGUI() throws IOException {
                JPanel panel = new JPanel(new BorderLayout());
                Image image =
ImageIO.read(this.getClass().getResource("food_logo.png"));
                Image imageScaled = image.getScaledInstance(350,
300, Image.SCALE_SMOOTH);
                 Imagelcon imagelcon = new
ImageIcon(imageScaled);
```

```
picLabel = new JLabel(imagelcon);
                         Box right = Box.createVerticalBox();
                         panel 1 = new Panel();
           title = new JLabel("898 Food Restaurant");
           title.setAlignmentX(Component.CENTER ALIGNMENT);
           title.setAlignmentY(0.0f);
           title.setHorizontalAlignment(SwingConstants.CENTER);
           title.setFont(new Font("Serif", Font.ITALIC + Font.BOLD, 18));
           title.setForeground(Color.BLUE);
           // Button, with filler
           button = new JButton("Order Food Now >>");
           panel_1.add(button);
           button.setAlignmentX(Component.LEFT_ALIGNMENT);
           panel.add(picLabel, BorderLayout.CENTER);
           panel.add(right, BorderLayout.SOUTH);
           right.add(title):
           right.add(panel_1);
           add(panel);
           button.addActionListener(new ActionListener() {
                    public void actionPerformed(ActionEvent e) {
                             FoodMenu food;
                             try {
                                     food = new FoodMenu();
                                     food.createAndShowGUI();
                                     food.setVisible(true);
                                     setVisible(false):
                                     frame.dispose();
                             } catch (IOException e1) {
                                     // TODO Auto-generated catch block
                                     e1.printStackTrace();
                             }
                    }
           });
   }
   public static void main(String args[]) throws IOException {
  System.out.print("Enter Customer or Owner:");
  Scanner in=new Scanner(System.in):
     String ch=in.next();
     if(ch.equals("owner")){
       System.out.println("Ruppees\tName\tNumber\t\tAddress\t\tDate");
File file = new File("D:\\food.txt");
BufferedReader br= new BufferedReader(new FileReader(file));
String st:
while ((st = br.readLine()) != null){
  System.out.println(i+")"+st);
```

```
i+=1;
    }
    }
          else if(ch.equals("Customer")){
                MainMenu main = new MainMenu();
                main.createAndShowGUI();
                frame = new JFrame();
                frame.setTitle("898 Food Ordering System");
                frame.getContentPane().add(main);
                frame.pack();
                frame.setLocationRelativeTo(null);
                frame.setVisible(true);
         }
         else{
            System.out.println("Wrong Choice");
        }
package mainmenu;
import java.awt.EventQueue;
import java.awt.Font;
import java.awt.lmage;
import java.awt.Insets;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.io.File;
import java.io.IOException;
import java.time.format.DateTimeFormatter:
import java.time.LocalDateTime;
import javax.swing.JFrame:
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import java.awt.BorderLayout;
import java.awt.Color;
import java.io.BufferedReader;
import java.io.BufferedWriter;
import java.io.FileReader;
import java.io.FileWriter;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.SwingConstants;
import javax.swing.border.Border;
import javax.swing.JTextField;
import javax.swing.JTextArea;
import javax.imageio.lmagelO:
import javax.swing.BorderFactory;
import javax.swing.lmagelcon;
```

```
import javax.swing.JButton;
public class OrderMenu {
        private JFrame frame;
        private JTextField textField;
        private JTextField textField 1:
        private JTextArea textArea;
        * Launch the application.
        public static void main(String[] args) {
                EventQueue.invokeLater(new Runnable() {
                         public void run() {
                                 try {
                                          OrderMenu window = new OrderMenu();
                                          window.frame.setVisible(true);
                                 } catch (Exception e) {
                                          e.printStackTrace();
                                 }
                         }
                });
        }
        * Create the application.
         * @throws IOException
        */
        public OrderMenu() throws IOException {
                createAndShowGUI();
        }
        * Initialize the contents of the frame.
         * @throws IOException
        */
        void createAndShowGUI() throws IOException {
          BufferedReader w1=new BufferedReader(new FileReader("D:\\food.txt")):
          BufferedWriter w=new BufferedWriter(new FileWriter("D:\\food.txt",true));
         String m;
         while((m=w1.readLine())!=null){
         }
                frame = new JFrame("Order Form");
                frame.setBounds(100, 100, 420, 300); // x,y,width,height
                frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
                frame.getContentPane().setLayout(null);
```

```
JLabel lblFillInDetails = new JLabel("Fill in Details");
                lblFillInDetails.setBounds(120, 11, 131, 26);
                lblFillInDetails.setFont(new Font("Serif", Font.PLAIN, 16));
                lblFillInDetails.setForeground(Color.BLUE);
                frame.getContentPane().add(lblFillInDetails);
                JLabel lblName = new JLabel("Name");
                IblName.setBounds(10, 46, 46, 14);
                frame.getContentPane().add(lblName);
                 textField = new JTextField();
                textField.setBounds(82, 43, 176, 20);
                frame.getContentPane().add(textField);
                textField.setColumns(10);
                JLabel lblAddress = new JLabel("Tel No");
                IbIAddress.setBounds(10, 92, 46, 14);
                frame.getContentPane().add(lblAddress);
                textField 1 = new JTextField();
                textField_1.setBounds(82, 89, 176, 20);
                frame.getContentPane().add(textField 1);
                textField_1.setColumns(10);
                JLabel lblAddress 1 = new JLabel("Address");
                lblAddress 1.setBounds(10, 137, 62, 14);
                frame.getContentPane().add(lblAddress 1);
                Border border = BorderFactory.createLineBorder(Color.BLACK);
                textArea = new JTextArea();
                textArea.setBounds(82, 132, 236, 85);
                textArea.setMargin(new Insets(10,10,10,10)); // top,left,bottom,right
                textArea.setBorder(BorderFactory.createCompoundBorder(border,
BorderFactory.createEmptyBorder(10, 10, 10, 10)));
                frame.getContentPane().add(textArea);
                JButton btnCancel = new JButton("Cancel ");
                btnCancel.setBounds(130, 228, 89, 23);
                frame.getContentPane().add(btnCancel);
                btnCancel.addActionListener(new ActionListener() {
                         public void actionPerformed(ActionEvent e) {
                                  FoodMenu food = new FoodMenu();
                                 try {
                                         food.createAndShowGUI():
                                         food.setVisible(true);
                                         setVisible(false);
```

frame.setLocationRelativeTo(null);

```
} catch (IOException e1) {
                         // TODO Auto-generated catch block
                         e1.printStackTrace();
                 }
                 frame.dispose();
        }
});
JButton btnConfirm = new JButton("Confirm");
btnConfirm.setBounds(229, 228, 89, 23);
frame.getContentPane().add(btnConfirm);
btnConfirm.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
                                  if (textField.getText().equals("") ||
                                    textField_1.getText().equals("")
                                   || textArea.getText().equals("")) {
                            JOptionPane.showMessageDialog(null,
                                          "Field cannot be empty");
                                                            } else {
                                                               try {
                                    w.write(textField.getText()+"\t");
                                 w.write(textField_1.getText()+"\t");
                                    w.write(textArea.getText()+"\t");
                                           DateTimeFormatter dtf =
                      DateTimeFormatter.ofPattern("yyyy/MM/dd");
                      LocalDateTime now = LocalDateTime.now();
                                      w.write(dtf.format(now)+"\n");
                                                         w.close();
                                           catch (IOException ex) {
        Logger.getLogger(OrderMenu.class.getName()).log(Level.S
                                                  EVERE, null, ex);
                            JOptionPane.showMessageDialog(null,
          "Your foods will be delivered soon, thanks for ordering. ");
                               MainMenu main = new MainMenu();
                                                               try {
                                                   main.main(null);
                                         } catch (IOException e1) {
                                    // TODO Auto-generated catch
                                                              block
                                              e1.printStackTrace();
                               FoodMenu food = new FoodMenu():
                                              main.setVisible(true);
```

```
// setVisible(false);
                                                                  frame.dispose();
                         }
                });
                Image image =
ImageIO.read(this.getClass().getResource("order.png"));
                Image imageScaled = image.getScaledInstance(80, 95,
Image.SCALE_SMOOTH);
                ImageIcon imageIcon = new ImageIcon(imageScaled);
                JLabel lblNewLabel = new JLabel(imagelcon);
                IblNewLabel.setBounds(268, 19, 126, 90);
                frame.getContentPane().add(lblNewLabel);
        }
        public void setVisible(boolean b) {
                // TODO Auto-generated method stub
        }
package mainmenu;
import java.awt.Dimension;
import java.awt.EventQueue;
import java.awt.GridBagConstraints;
import java.awt.GridBagLayout;
import java.awt.lmage;
import java.awt.Insets;
import java.awt.TextArea:
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener:
import java.io.BufferedReader;
import java.io.BufferedWriter;
import java.io.File;
import java.io.FileReader;
import java.io.FileWriter;
import java.io.IOException;
import javax.imageio.lmagelO;
import javax.swing.lmagelcon;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JOptionPane;
import javax.swing.JPanel;
import javax.swing.JScrollPane;
import javax.swing.JSpinner;
import javax.swing.JTabbedPane:
import javax.swing.JTable;
import javax.swing.JTextField;
```

```
import javax.swing.SpinnerNumberModel;
import javax.swing.event.ChangeEvent;
import javax.swing.event.ChangeListener;
import javax.swing.table.DefaultTableModel;
public class FoodMenu {
        static private JFrame frame;
        static private JButton backButton, orderButton;
        static private JTextField textField;
        static private GridBagConstraints gbc;
        private JTable table;
        DefaultTableModel dtm;
        Double[] price;
        Double[] priceDrinks;
        Double[] priceDesserts;
        double totalPrice = 0;
        double p1, p2, p3, p4, p5, p6, p7, p8, p9;
        double d1, d2, d3, d4, d5;
        double de1, de2;
        private JSpinner[] numSpinner;
        static private JLabel[] foodLabel;
        static private JLabel[] foodImage;
        private String[] file;
        private JSpinner[] numSpinnerDrinks;
        static private JLabel[] drinkLabel;
        static private JLabel[] drinklmage:
        private String[] fileDrinks;
        private JSpinner[] numSpinnerDesserts;
        static private JLabel[] dessertLabel;
        static private JLabel[] dessertImage;
        private String[] fileDesserts;
        private static final int ELEMENTS = 9;
        private static final int DRINK_ELEMENTS = 5;
        private static final int DESSERT_ELEMENTS = 2;
        double total = 0:
        double food1, food2, food3, food4, food5, food6, food7, food8, food9;
        double drink1, drink2, drink3, drink4, drink5;
        double pr, pr1;
        double totalForFoods:
        double totalForDrinks;
        double totalForDesserts:
        void createAndShowGUI() throws IOException {
```

```
frame = new JFrame("Main Menu ");
                frame.setBounds(100, 100, 750, 550);
                frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
                frame.getContentPane().setLayout(null);
                frame.setLocationRelativeTo(null);
                JLabel lblFoodOrdered = new JLabel("Food Ordered");
                lblFoodOrdered.setBounds(529, 11, 81, 14);
                frame.getContentPane().add(lblFoodOrdered);
                table = new JTable();
                backButton = new JButton();
                orderButton = new JButton();
                dtm = new DefaultTableModel(0, 0);
                final String header[] = new String[] { "Item", "Qty", "Price", "Spinner"
};
                dtm.setColumnIdentifiers(header);
                dtm.addRow(header):
                table = new JTable();
                table.setModel(dtm);
                table.setBounds(475, 31, 1, 1); // int x, int y, int width, int height
                table.setSize(245, 300); // width,height
                table.getColumnModel().getColumn(0).setPreferredWidth(80);
                table.getColumnModel().getColumn(1).setPreferredWidth(30);
                table.getColumnModel().getColumn(2).setPreferredWidth(30);
                table.getColumnModel().getColumn(3).setMinWidth(0); // hide
spinner
                                          // column
                table.getColumnModel().getColumn(3).setMaxWidth(0); // hide
spinner
                                          // column
                table.setShowGrid(false); // remove cell boarder
                frame.getContentPane().add(table);
                JLabel lblTotal = new JLabel("Total : ");
                IblTotal.setBounds(519, 340, 46, 14);
                frame.getContentPane().add(lblTotal);
                textField = new JTextField();
                textField.setBounds(585, 340, 86, 20);
                frame.getContentPane().add(textField);
                textField.setColumns(10);
                orderButton = new JButton("Order");
                orderButton.setBounds(500, 385, 89, 23);
                frame.getContentPane().add(orderButton);
                backButton = new JButton("Back");
                backButton.setBounds(610, 385, 89, 23);
                frame.getContentPane().add(backButton);
```

```
JTabbedPane tabbedPane = new
JTabbedPane(JTabbedPane.TOP);
                addlt(tabbedPane, "Foods");
                addlt1(tabbedPane, "Drinks");
                addlt2(tabbedPane, "Desserts");
                tabbedPane.setBounds(18, 11, 450, 450);
                frame.getContentPane().add(tabbedPane);
                frame.setVisible(true);
                backButton.addActionListener(new ActionListener() {
                         public void actionPerformed(ActionEvent e) {
                                 try {
                                         MainMenu menu = new MainMenu();
                                         menu.main(header);
                                         // menu.createAndShowGUI();
                                         menu.setVisible(true);
                                         // setVisible(false);
                                         frame.dispose();
                                 } catch (IOException e1) {
                                         // TODO Auto-generated catch block
                                         e1.printStackTrace();
                                 }
                         }
                });
                orderButton.addActionListener(new ActionListener() {
                         public void actionPerformed(ActionEvent e) {
                                 if (textField.getText().equals("")) {
                                         JOptionPane.showMessageDialog(null,
"You not ordered anything yet");
                                 } else {
                                         try {
                                                  OrderMenu order = new
OrderMenu();
                                                  order.main(header);
                             BufferedReader w1=new BufferedReader(new
FileReader("D:\\food.txt"));
                        BufferedWriter w=new BufferedWriter(new
FileWriter("D:\\food.txt",true));
                        String m;
                        while((m=w1.readLine())!=null){
                        w.write(textField.getText()+"\t");
                        w.close();
                                                  order.setVisible(true);
                                                  setVisible(false);
                                                  frame.dispose():
                                         } catch (IOException e1) {
```

```
// TODO Auto-generated catch
block
                                                   e1.printStackTrace();
                                          }
                                 }
                         }
                });
        }
        void addlt(JTabbedPane tabbedPane, String text) throws IOException {
                JPanel panel = new JPanel(new GridBagLayout());
                gbc = new GridBagConstraints(); // getting constraints for the
specified
 // component
                gbc.insets = new Insets(10, 0, 0, 0);
                foodImage = new JLabel[ELEMENTS];
                foodLabel = new JLabel[ELEMENTS]:
                numSpinner = new JSpinner[ELEMENTS];
                file = new String[ELEMENTS];
                price = new Double[ELEMENTS];
                file[0] = new String("MedSalad.png");
                file[1] = new String("JapanesePanNoodles.png");
                file[2] = new String("spaghetti.jpg");
                file[3] = new String("PadThai.png");
                file[4] = new String("RamenNoodles.png");
                file[5] = new String("kids_spaghetti.png");
                file[6] = new String("chickenRice.jpg");
                file[7] = new String("thaiFood.jpg");
                file[8] = new String("vietnamFood.jpg");
                foodLabel[0] = new JLabel("Salad");
                foodLabel[1] = new JLabel("Japanese Noodles");
                foodLabel[2] = new JLabel("Spaghetti");
                foodLabel[3] = new JLabel("Spaghetti Meat Balls");
                foodLabel[4] = new JLabel("Noodles");
                foodLabel[5] = new JLabel("Kids Spaghetti");
                foodLabel[6] = new JLabel("Chicken Rice");
                foodLabel[7] = new JLabel("Thai Food");
                foodLabel[8] = new JLabel("Vietnam Food");
                price[0] = 350.00;
                price[1] = 450.00;
                price[2] = 370.0;
                price[3] = 450.0;
                price[4] = 550.0;
                price[5] = 400.0;
                price[6] = 350.0;
                price[7] = 650.0;
                price[8] = 650.00;
```

```
for (int i = 0; i < ELEMENTS; i++) {
                        System.out.print(file[i]);
                        try {
                        Image image =
ImageIO.read(this.getClass().getResource(file[i]));
                        Image imageScaled = image.getScaledInstance(80, 95,
Image.SCALE_SMOOTH);
                       Image image = ImageIO.read(file[i]);
//
//
                        Image imageScaled = image.getScaledInstance(80, 95,
Image.SCALE_SMOOTH);
                        Imagelcon imagelcon = new Imagelcon(imageScaled);
                        SpinnerNumberModel spnummodel = new
SpinnerNumberModel(0, 0, 10, 1); // value,minimum,maximum,stepSize
                        numSpinner[i] = new JSpinner(spnummodel);
                        numSpinner[i].addChangeListener(listener);
                        foodImage[i] = new JLabel(imageIcon);
                        }catch(Exception e) {
                                 System.out.print(e);
                        }
                }
                gbc.gridx = 0; // gridx 0 represent the most left
                for (int i = 0; i < ELEMENTS; i++) {
                        if (i \% 3 == 0) {
                                gbc.gridy += 2;
                                gbc.gridx = 0;
                        panel.add(foodlmage[i], gbc);
                        gbc.gridy++; // gridy---> add one row,for foodLabel
                        panel.add(foodLabel[i], gbc);
                        gbc.gridy--; // remove the row
                        gbc.gridx++; // move to next column
                        panel.add(numSpinner[i], gbc);
                        gbc.gridx++; // move to next column
                        tabbedPane.addTab(text, panel);
                }
        }
        void addlt2(JTabbedPane tabbedPane, String text) throws IOException {
                JPanel panel = new JPanel(new GridBagLayout());
                GridBagConstraints gbc = new GridBagConstraints();
                dessertImage = new JLabel[DESSERT_ELEMENTS];
                dessertLabel = new JLabel[DESSERT_ELEMENTS];
                numSpinnerDesserts = new JSpinner[DESSERT_ELEMENTS];
                priceDesserts = new Double[DESSERT_ELEMENTS];
                fileDesserts = new String[DESSERT_ELEMENTS];
                fileDesserts[0] = new String("strawberry cake.jpg");
                fileDesserts[1] = new String("chocolate cake.jpg");
```

```
dessertLabel[0] = new JLabel("Strawberry Cake");
                dessertLabel[1] = new JLabel("Chocolate Cake");
                priceDesserts[0] = 250.00;
                priceDesserts[1] = 300.00;
                for (int i = 0; i < DESSERT_ELEMENTS; i++) {
                        Image image =
ImageIO.read(this.getClass().getResource(fileDesserts[i]));
                        Image imageScaled = image.getScaledInstance(80, 95,
Image.SCALE_SMOOTH);
                        Imagelcon imagelcon = new Imagelcon(imageScaled);
                        SpinnerNumberModel spnummodel = new
SpinnerNumberModel(0, 0, 10, 1); // value,minimum,maximum,stepSize
                        numSpinnerDesserts[i] = new JSpinner(spnummodel);
                        numSpinnerDesserts[i].addChangeListener(listenerForDes
serts);
                        dessertImage[i] = new JLabel(imagelcon);
                gbc.gridx = 0; // gridx 0 represent the most left
                gbc.insets = new Insets(10, 5, 0, 0); // top,left,bottom,right
                for (int i = 0; i < DESSERT\_ELEMENTS; i++) {
                        if (i \% 3 == 0) {
                                qbc.qridx = 0;
                                gbc.gridy += 2;
                        panel.add(dessertImage[i], gbc);
                        abc.gridy++; // gridy---> add one row,for foodLabel
                        panel.add(dessertLabel[i], qbc);
                        gbc.gridy--; // remove the row
                        gbc.gridx++; // move to next column
                        panel.add(numSpinnerDesserts[i], gbc);
                        gbc.gridx++; // move to next column
                        tabbedPane.addTab(text, panel);
                }
        }
        void addlt1(JTabbedPane tabbedPane, String text) throws IOException {
                JPanel panel = new JPanel(new GridBagLayout());
                GridBagConstraints gbc = new GridBagConstraints();
                drinkImage = new JLabel[DRINK_ELEMENTS];
                drinkLabel = new JLabel[DRINK ELEMENTS];
                numSpinnerDrinks = new JSpinner[DRINK_ELEMENTS];
                priceDrinks = new Double[DRINK_ELEMENTS];
                fileDrinks = new String[DRINK_ELEMENTS];
                fileDrinks[0] = new String("raspberry.jpg");
```

```
fileDrinks[1] = new String("chocalate_pudding.jpg");
                fileDrinks[2] = new String("blue hawailan.jpg");
                fileDrinks[3] = new String("Pina.jpg");
                fileDrinks[4] = new String("lemon ice.jpg");
                drinkLabel[0] = new JLabel("Raspberry");
                drinkLabel[1] = new JLabel("Chocolate Pudding");
                drinkLabel[2] = new JLabel("Blue Hawailan");
                drinkLabel[3] = new JLabel("Pina");
                drinkLabel[4] = new JLabel("Lemon Ice");
                priceDrinks[0] = 35.0;
                priceDrinks[1] = 45.0;
                priceDrinks[2] = 30.0;
                priceDrinks[3] = 50.0;
                priceDrinks[4] = 30.0;
                for (int i = 0; i < DRINK ELEMENTS; i++) {
                         Image image =
ImageIO.read(this.getClass().getResource(fileDrinks[i]));
                         Image imageScaled = image.getScaledInstance(80, 95,
Image.SCALE_SMOOTH);
                         Imagelcon imagelcon = new Imagelcon(imageScaled);
                         SpinnerNumberModel spnummodel = new
SpinnerNumberModel(0, 0, 10, 1); // value,minimum,maximum,stepSize
                         numSpinnerDrinks[i] = new JSpinner(spnummodel);
                         numSpinnerDrinks[i].addChangeListener(listenerForDrinks
);
                         drinkImage[i] = new JLabel(imageIcon);
                }
                gbc.gridx = 0; // gridx 0 represent the most left
                gbc.insets = new Insets(10, 5, 0, 0); // top,left,bottom,right
                for (int i = 0; i < DRINK ELEMENTS; i++) {
                         if (i \% 3 == 0) {
                                  gbc.gridx = 0;
                                  gbc.gridy += 2;
                         panel.add(drinklmage[i], gbc);
                         gbc.gridy++; // gridy---> add one row,for foodLabel
                         panel.add(drinkLabel[i], gbc);
                         gbc.gridy--; // remove the row
                         gbc.gridx++; // move to next column
                         panel.add(numSpinnerDrinks[i], gbc);
                         gbc.gridx++; // move to next column
                         tabbedPane.addTab(text, panel);
                }
        }
```

```
public void stateChanged(ChangeEvent e) {
           final int quantity = (int) ((JSpinner)
                   e.getSource()).getValue();
         final int rows = table.getRowCount();
         for (int row = 0; row < rows; row++) {
if (dtm.getValueAt(row, 3) == e.getSource()) {
                      if (dtm.getValueAt(row,
                         0).equals("Salad")) {
            dtm.setValueAt(quantity, row, 1);
                           // obj, row, column
                dtm.setValueAt(p1 * quantity,
                                       row, 2);
                        food1 = p1 * quantity;
                } else if (dtm.getValueAt(row,
            0).equals("Japanese Noodles")) {
            dtm.setValueAt(quantity, row, 1);
                dtm.setValueAt(p2 * quantity,
                                       row, 2);
                        food2 = p2 * quantity;
                } else if (dtm.getValueAt(row,
                      0).equals("Spaghetti")) {
            dtm.setValueAt(quantity, row, 1);
                dtm.setValueAt(p3 * quantity,
                                       row, 2);
                        food3 = p3 * quantity;
                } else if (dtm.getValueAt(row,
          0).equals("Spaghetti Meat Balls")) {
            dtm.setValueAt(quantity, row, 1);
                dtm.setValueAt(p4 * quantity,
                                       row, 2);
                        food4 = p4 * quantity;
                } else if (dtm.getValueAt(row,
                       0).equals("Noodles")) {
            dtm.setValueAt(quantity, row, 1);
                dtm.setValueAt(p5 * quantity,
                                       row, 2);
                        food5 = p5 * quantity;
                } else if (dtm.getValueAt(row,
                0).equals("Kids Spaghetti")) {
            dtm.setValueAt(quantity, row, 1);
                dtm.setValueAt(p6 * quantity,
                                       row, 2);
                        food6 = p6 * quantity;
```

```
0).equals("Chicken Rice")) {
                           dtm.setValueAt(quantity, row, 1);
                                                  // obj, row,
                                                   // column
                               dtm.setValueAt(p7 * quantity,
                                                     row, 2);
                                       food7 = p7 * quantity;
                               } else if (dtm.getValueAt(row,
                                   0).equals("Thai Food")) {
                           dtm.setValueAt(quantity, row, 1);
                                                  // obj, row,
                                                   // column
                               dtm.setValueAt(p8 * quantity,
                                                     row, 2);
                                       food8 = p8 * quantity;
                               } else if (dtm.getValueAt(row,
                               0).equals("Vietnam Food")) {
                           dtm.setValueAt(quantity, row, 1);
                                                  // obj, row,
                                                   // column
                              dtm.setValueAt(p9 * quantity,
                                                     row, 2);
                                       food9 = p9 * quantity;
                                           if (quantity == 0) {
                                      dtm.removeRow(row);
                   totalForFoods = food1 + food2 + food3 +
            food4 + food5 + food6 + food7 + food8 + food9:
                    total = totalForFoods + totalForDrinks +
                                           totalForDesserts;
                                 textField.setText(total + "");
                                                      return:
                                                            }
// there was no row with this JSpinner, so we have to add it
for (int i = 0; i < ELEMENTS; i++) {
         // looking for the "clicked" JSpinner
         if (numSpinner[i] == e.getSource()) {
                 totalPrice = price[i];
                 switch (foodLabel[i].getText()) {
```

} else if (dtm.getValueAt(row,

```
case "Salad":
        p1 = 350.0;
        food1 = p1;
        break;
case "Japanese Noodles":
        p2 = 450.0;
        food2 = p2;
        break;
case "Spaghetti":
        p3 = 370.0;
        food3 = p3;
        break;
case "Spaghetti Meat Balls":
        p4 = 450.0;
        food4 = p4;
        break;
case "Noodles":
        p5 = 55.0;
        food5 = p5;
        break;
case "Kids Spaghetti":
        p6 = 400.0;
        food6 = p6;
        break;
case "Chicken Rice":
        p7 = 350.0;
        food7 = p7;
```

&nb

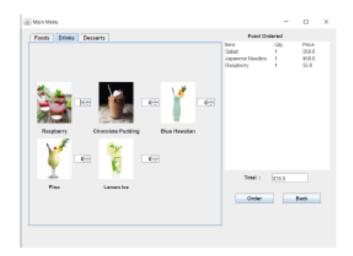
OUTPUT:

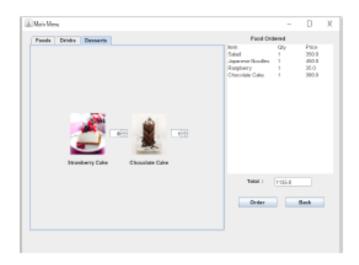
OUTPUT:

run: Exter Customer or Owner: Customer

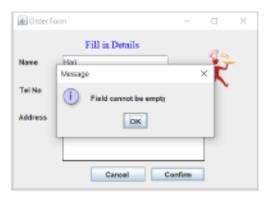


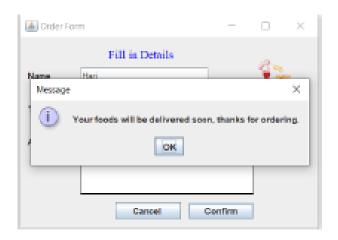












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