

FALL SEM – (2020-21)

CSE2005

SUBMITTED BY : SRIHARSHITHA DEEPALA

REG NO : 19BCD7246

LAB NO : 11

SLOT : L5

Write a Java program to create a GUI as given below. Assume that the price of a small pizza is ₹100, the price of a medium pizza is ₹130, and the price of a large pizza is ₹160. The price of each topping (not including plain) is ₹20. Add a button on this window given below to generate the total price and display it in the same window.



CODE:

```
import java.awt.*;  
import java.awt.event.ActionEvent;
```

```
import java.awt.event.ActionListener;
import javax.swing.*.*;
import javax.swing.border.EtchedBorder;
import javax.swing.border.TitledBorder;
class PizzaPriceFrame extends JFrame {
    private JPanel pizzaPanel;
    private static final int FRAME_WIDTH = 600;
    private static final int FRAME_HEIGHT = 300;
    JRadioButton smallButton = new JRadioButton("Small");
    JRadioButton mediumButton = new JRadioButton("Medium");
    JRadioButton largeButton = new JRadioButton("Large");
    JCheckBox plainCheckBox = new JCheckBox("Plain");
    JCheckBox sausCheckBox = new JCheckBox("Sausage");
    JCheckBox mushCheckBox = new JCheckBox("Mushrooms");
    JCheckBox peppCheckBox = new JCheckBox("Pepperoni");
    JTextField priceTextField = new JTextField(7);
    JPanel centerPanel = new JPanel();
    JPanel pricePanel = new JPanel();
    JPanel checkBoxPanel = new JPanel();
    JPanel radioButtonPanel = new JPanel();
    JButton JB = new JButton("Total Amount");
    private double price = 0;
    private double topPrice;
    private double showPrice;
    ActionListener listener = new PriceListener();
    public PizzaPriceFrame() {
```

```

        setSize(FRAME_WIDTH, FRAME_HEIGHT);
        pizzaPanel = new JPanel();
        add(pizzaPanel, BorderLayout.CENTER);
        createRadioButtonPanel();
        createCheckBoxPanel();
        createCenterPanel();
        createPricePanel();
    }

    public void createRadioButtonPanel() {
        radioButtonPanel.setLayout(new GridLayout(1, 3));
        radioButtonPanel
            .setBorder(new TitledBorder(new EtchedBorder(),
"Pizza Size"));

        radioButtonPanel.add(smallButton);
        radioButtonPanel.add(mediumButton);
        radioButtonPanel.add(largeButton);
        ButtonGroup group = new ButtonGroup();
        group.add(smallButton);
        group.add(mediumButton);
        group.add(largeButton);
        smallButton.addActionListener(listener);
        mediumButton.addActionListener(listener);
        largeButton.addActionListener(listener);
    }

    public void createCheckBoxPanel() {
        checkBoxPanel.setLayout(new GridLayout(1, 4));
        checkBoxPanel

```

```

        .setBorder(new TitledBorder(new EtchedBorder(),
"Toppings"));

        checkBoxPanel.add(plainCheckBox);
checkBoxPanel.add(sausCheckBox);
        checkBoxPanel.add(mushCheckBox);
checkBoxPanel.add(peppCheckBox);
plainCheckBox.addActionListener(listener);
        sausCheckBox.addActionListener(listener);
        mushCheckBox.addActionListener(listener);
peppCheckBox.addActionListener(listener);

    }

    public void createPricePanel() {
        pricePanel.add(new JLabel("Your Price:"));
        pricePanel.add(priceTextField);
pricePanel.add(JB);
        JB.addActionListener(new ActionListener(){
        public void actionPerformed(ActionEvent e){
            priceTextField.setText("Rs. "+showPrice);
        }
    });
    }

    public void createCenterPanel() {
        centerPanel.add(radioButtonPanel);
        centerPanel.add(checkBoxPanel);
        add(centerPanel, BorderLayout.CENTER);
        add(pricePanel, BorderLayout.SOUTH);
    }

```

```

    }

    class PriceListener implements ActionListener {

        public void actionPerformed(ActionEvent event) {

            if (smallButton.isSelected()) {

                price = 100;

topPrice = 0;

                showPrice = price + topPrice;
            } else if (mediumButton.isSelected()) {

                price = 130;

topPrice = 0;

                showPrice = price + topPrice;
            } else if (largeButton.isSelected()) {

                price = 160;

topPrice = 0;

                showPrice = price + topPrice;
            }

            if (plainCheckBox.isSelected()) {

                topPrice = 0;

                showPrice = price + topPrice;
            } if (sausCheckBox.isSelected()) {

                topPrice = 20;

                showPrice = price + topPrice;
            } if (mushCheckBox.isSelected()) {

                topPrice = 20;

                showPrice = price + topPrice;
            } if (peppCheckBox.isSelected()){

```

```

        topPrice = 20;

        showPrice = price + topPrice;

        }if((sausCheckBox.isSelected() &&
mushCheckBox.isSelected()) || (mushCheckBox.isSelected() &&
(peppCheckBox.isSelected()))) || (sausCheckBox.isSelected() &&
peppCheckBox.isSelected())){

            topPrice = 40;

            showPrice = price + topPrice;

            }if(sausCheckBox.isSelected() && mushCheckBox.isSelected() &&
peppCheckBox.isSelected()){

                topPrice = 60;

                showPrice = price + topPrice;

            }

        }

    }

}

public class Pizza {

    public static void main(String[] args)

    {

        JFrame frame = new PizzaPriceFrame();

        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

        frame.setTitle("Radio Button Programming Exercise");

        frame.setVisible(true);

    }

}

```

OUTPUT:

Radio Button Programming Exercise

Pizza Size

☒ Small ☐ Medium ☐ Large

Toppings

☐ Plain ☐ Sausage ☐ Mushrooms ☐ Pepperoni

Your Price:

Radio Button Programming Exercise

Pizza Size

☐ Small ☒ Medium ☐ Large

Toppings

☐ Plain ☐ Sausage ☐ Mushrooms ☐ Pepperoni

Your Price:

Radio Button Programming Exercise

Pizza Size

☐ Small ☐ Medium ☒ Large

Toppings

☐ Plain ☐ Sausage ☐ Mushrooms ☐ Pepperoni

Your Price:

Radio Button Programming Exercise

Pizza Size

☒ Small ☐ Medium ☐ Large

Toppings

☒ Plain ☐ Sausage ☐ Mushrooms ☐ Pepperoni

Your Price:

Radio Button Programming Exercise

Pizza Size

☒ Small ☐ Medium ☐ Large

Toppings

☐ Plain ☒ Sausage ☐ Mushrooms ☐ Pepperoni

Your Price:

Radio Button Programming Exercise

Pizza Size

☒ Small ☐ Medium ☐ Large

Toppings

☐ Plain ☐ Sausage ☒ Mushrooms ☐ Pepperoni

Your Price:

Radio Button Programming Exercise

Pizza Size

☒ Small ☐ Medium ☐ Large

Toppings

☐ Plain ☐ Sausage ☐ Mushrooms ☒ Pepperoni

Your Price:

Radio Button Programming Exercise

Pizza Size

☐ Small ☒ Medium ☐ Large

Toppings

☐ Plain ☒ Sausage ☐ Mushrooms ☒ Pepperoni

Your Price:

Radio Button Programming Exercise

Pizza Size

☐ Small ☐ Medium ☒ Large

Toppings

☐ Plain ☐ Sausage ☐ Mushrooms ☐ Pepperoni

Your Price:

Radio Button Programming Exercise

Pizza Size

☐ Small ☐ Medium ☒ Large

Toppings

☐ Plain ☒ Sausage ☒ Mushrooms ☒ Pepperoni

Your Price: