

CSC 2310: PRINCIPLES OF COMPUTER PROGRAMMING

Lab 12

How to Submit

Please submit your answers to the lab instructor once you have completed.

Failure to submit will result in a **ZERO FOR THIS LAB. NO EXCEPTIONS.**

Execute the following PushCounter class and PushCounterPanel class.

```
import javax.swing.JFrame;
```

```
public class PushCounter
```

```
{
```

```
    //-----
```

```
    //  Creates and displays the main program frame.
```

```
    //-----
```

```
    public static void main(String[] args)
```

```
    {
```

```
        JFrame frame = new JFrame("Push Counter");
```

```
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
```

```
        PushCounterPanel panel = new PushCounterPanel();
```

```
        frame.getContentPane().add(panel);
```

```
        frame.pack();
```

```
        frame.setVisible(true);
```

```
    }
```

```
}
```

```
import java.awt.*;
```

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

```
import javax.swing.*;
```

```
public class PushCounterPanel extends JPanel
```

```
{
```

```
    private int count;
```

```
    private JButton push;
```

```
    private JLabel label;
```

```
    //-----
```

```
    //  Constructor: Sets up the GUI.
```

```
    //-----
```

```
    public PushCounterPanel()
```

```
    {
```

```

        count = 0;

        push = new JButton("Push Me!");
        label = new JLabel();
        push.addActionListener(new ButtonListener());
        add(push);
        add(label);

        setBackground(Color.cyan);
        setPreferredSize(new Dimension(300, 40));
    }

    /*******
    // Represents a listener for button push (action) events.
    /*******
    private class ButtonListener implements ActionListener
    {
        public void actionPerformed(ActionEvent event)
        {
            count++;
            label.setText("Pushes: " + count);
        }
    }
}

```