In order to produce this GUI I needed to first get a plugin that allowed for JFrame to be used in the eclipse IDE. Once I did that I started by creating the display for the GUI by creating a empty JFrame to start with. Then in eclipse I went to the design tab were there is a palette. I Started by adding a title for the JFrame calling it simple calculator. Once I did that I did an absolute layout to allow be to move components that are gonna be added inside to the correct positions. The components that I added were three Jlabels which were for first value, second value and the sum. Then I added three text fields were the user would enter his values for the numbers the person would want to add. The last component I used was the button and I named it calculate. This button was then set to perform an action in the code were I produced a code in order to calculate the sum of the two values. The code is under the method actionPerformed takes the values as a float to allow decimal inputs in order to calculate any set of values provided. Once it takes the two values and click the calculate button it will put that value in the Jtextfield to the right of Sum is through the method setText(). So most of this design was done through the JFrame and just adding a code to perform the action when the button is pressed to allow it to produce the sum for the two inputted values.

```java
import java.awt.EventQueue;

import javax.swing.JFrame;
import javax.swing.JPanel;
import javax.swing.border.EmptyBorder;
import javax.swing.JTextField;
import javax.swing.JLabel;
import javax.swing.GroupLayout;
import javax.swing.GroupLayout.Alignment;
import javax.swing.LayoutStyle.ComponentPlacement;
import java.awt.Font;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;

public class Calc extends JFrame {

    private JPanel contentPane;
    private JTextField textField_1;
    private JTextField textField_2;
    private JTextField textField;

    /**
     * Launch the application.
     */
    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    Calc frame = new Calc();
                    frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }

    /**
     * Create the frame.
     */
    public Calc() {
        setTitle("Simple Calculator");
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setBounds(100, 100, 306, 188);
```

```java
        contentPane = new JPanel();
        contentPane.setToolTipText("");
        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
        setContentPane(contentPane);

        JLabel lblFirstValue = new JLabel("First Value");
        lblFirstValue.setFont(new Font("Tahoma", Font.BOLD, 15));

        JLabel lblSecondValue = new JLabel("Second Value");
        lblSecondValue.setFont(new Font("Tahoma", Font.BOLD, 15));

        JLabel lblSumIs = new JLabel("Sum is:");
        lblSumIs.setFont(new Font("Tahoma", Font.BOLD, 15));

        textField_1 = new JTextField();
        textField_1.setColumns(10);

        textField_2 = new JTextField();
        textField_2.setColumns(10);

        JButton btnNewButton = new JButton("Calculate");
        btnNewButton.addActionListener(new ActionListener() {
            /**
             * Calculates the button action by taking the value in
             * text Field 1 and 2.
             */
        public void actionPerformed(ActionEvent arg0)
            {
                float total = ((Float.parseFloat(textField_2.getText())) +
(Float.parseFloat(textField_1.getText()))));
                textField.setText(""+total);
            }
        });

        textField = new JTextField();
        textField.setColumns(10);
        GroupLayout gl_contentPane = new GroupLayout(contentPane);
        gl_contentPane.setHorizontalGroup(
            gl_contentPane.createParallelGroup(Alignment.LEADING)
                .addGroup(gl_contentPane.createSequentialGroup()
                    .addContainerGap()
                    .addGroup(gl_contentPane.createParallelGroup(Alignment.LEADING)
                        .addGroup(gl_contentPane.createSequentialGroup()
                            .addComponent(lblSumIs)
                            .addPreferredGap(ComponentPlacement.RELATED)
                            .addComponent(textField, GroupLayout.PREFERRED_SIZE,
GroupLayout.DEFAULT_SIZE, GroupLayout.PREFERRED_SIZE))
                        .addGroup(gl_contentPane.createSequentialGroup()
                            .addComponent(lblFirstValue)
                            .addPreferredGap(ComponentPlacement.RELATED)
                            .addComponent(textField_2, GroupLayout.PREFERRED_SIZE,
GroupLayout.DEFAULT_SIZE, GroupLayout.PREFERRED_SIZE))
                        .addGroup(gl_contentPane.createParallelGroup(Alignment.TRAILING)
                            .addComponent(btnNewButton)
                            .addGroup(gl_contentPane.createSequentialGroup()
                                .addComponent(lblSecondValue)
                                .addPreferredGap(ComponentPlacement.RELATED)
                                .addComponent(textField_1, GroupLayout.PREFERRED_SIZE,
GroupLayout.DEFAULT_SIZE, GroupLayout.PREFERRED_SIZE))))
                    .addContainerGap(80, Short.MAX_VALUE))
        );
```

```java
        gl_contentPane.setVerticalGroup(
            gl_contentPane.createParallelGroup(Alignment.LEADING)
                .addGroup(gl_contentPane.createSequentialGroup()
                    .addGap(35)
                    .addGroup(gl_contentPane.createParallelGroup(Alignment.BASELINE)
                        .addComponent(lblFirstValue)
                        .addComponent(textField_2, GroupLayout.PREFERRED_SIZE, GroupLayout.DEFAULT_SIZE,
GroupLayout.PREFERRED_SIZE))
                    .addPreferredGap(ComponentPlacement.RELATED)
                    .addGroup(gl_contentPane.createParallelGroup(Alignment.BASELINE)
                        .addComponent(lblSecondValue)
                        .addComponent(textField_1, GroupLayout.PREFERRED_SIZE, GroupLayout.DEFAULT_SIZE,
GroupLayout.PREFERRED_SIZE))
                    .addPreferredGap(ComponentPlacement.RELATED)
                    .addGroup(gl_contentPane.createParallelGroup(Alignment.BASELINE)
                        .addComponent(lblSumIs)
                        .addComponent(textField, GroupLayout.PREFERRED_SIZE, GroupLayout.DEFAULT_SIZE,
GroupLayout.PREFERRED_SIZE))
                    .addPreferredGap(ComponentPlacement.RELATED, 8, Short.MAX_VALUE)
                    .addComponent(btnNewButton))
        );
        contentPane.setLayout(gl_contentPane);
    }
}
```

File Edit Source Refactor Navigate Search Project Run Window Help

Quick Access

Package...   Type ...   Console   Calc.java

Simple Calculator

First Value   254325.414

Second Value   324365.154

Sum is: 578690.56

Calculate

```
 32                } catch (Exception e) {
 33                    e.printStackTrace();
 34                }
 35            }
 36        });
 37    }
 38
 39    /**
 40     * Create the frame.
 41     */
 42    public Calc() {
 43        setTitle("Simple Calculator");
 44        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
 45        setBounds(100, 100, 306, 188);
 46        contentPane = new JPanel();
 47        contentPane.setToolTipText("");
 48        contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
 49        setContentPane(contentPane);
 50
 51        JLabel lblFirstValue = new JLabel("First Value");
 52        lblFirstValue.setFont(new Font("Tahoma", Font.BOLD, 15));
 53
 54        JLabel lblSecondValue = new JLabel("Second Value");
 55        lblSecondValue.setFont(new Font("Tahoma", Font.BOLD, 15));
 56
 57        JLabel lblSumIs = new JLabel("Sum is:");
 58        lblSumIs.setFont(new Font("Tahoma", Font.BOLD, 15));
 59
 60        textField_1 = new JTextField();
 61        textField_1.setColumns(10);
 62
 63        textField_2 = new JTextField();
 64        textField_2.setColumns(10);
 65
 66        JButton btnNewButton = new JButton("Calculate");
 67        btnNewButton.addActionListener(new ActionListener() {
 68            public void actionPerformed(ActionEvent arg0)
 69            {
 70                float total = ((Float.parseFloat(textField_2.getText())) + (Float.parseFloat(textField_1.getText())));
 71                textField.setText(""+total);
 72            }
 73        });
 74
 75        textField = new JTextField();
 76        textField.setColumns(10);
 77        GroupLayout gl_contentPane = new GroupLayout(contentPane);
```

Source   Design

Writable   Smart Insert   46 : 21 : 1223