editorPane

num1

num2

actionRecived

BORDER TYPE :NO BORDER

Components
- JLabel
- JTextField
- JComboBox
- JButton
- JCheckBox
- JRadioButton
- JToggleButton
- JTextArea
- JFormattedTextField
- JPasswordField
- JTextPane
- JEditorPane
- JSpinner
- JList
- JTable
- JTree
- JProgressBar
- JScrollBar
- JSeparator
- JSlider

Swing Actions

Menu

AWT Components

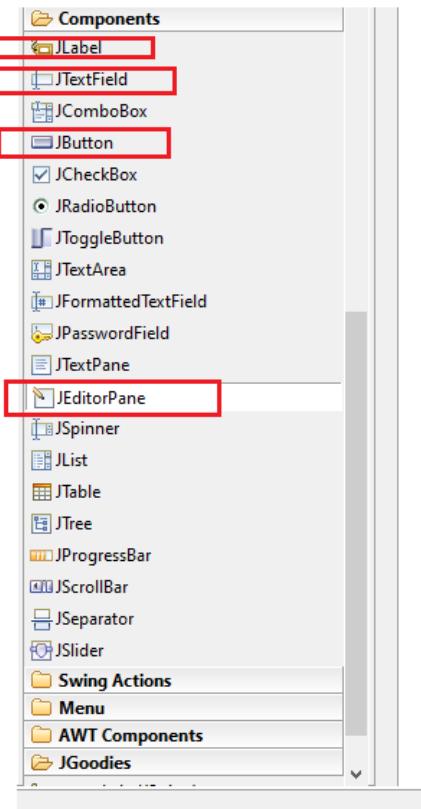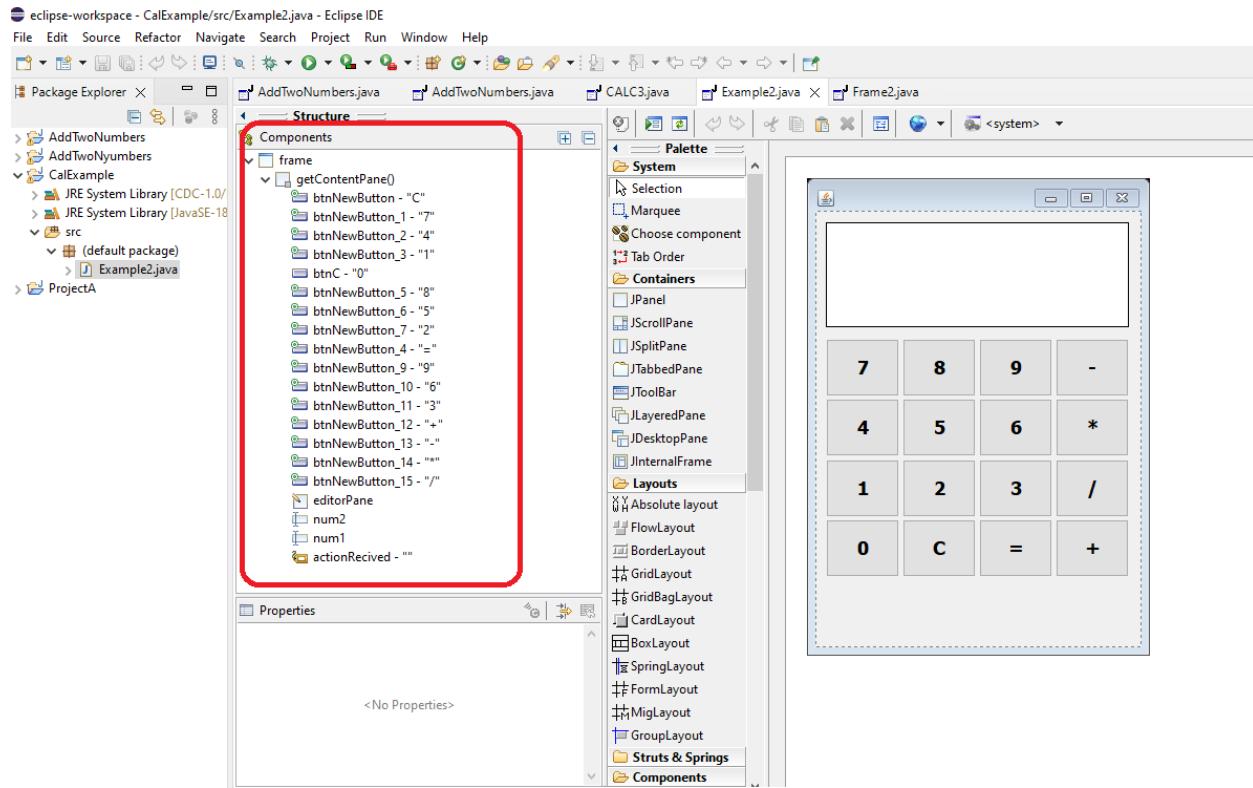JGoodies

ΣΤΟΙΧΕΙΑ ΠΟΥ ΘΑ ΧΡΗΣΙΜΟΠΟΙΗΣΟΥΜΕ

1. **Absolut layout**
2. **JtextField / η μεταβλητές μας είναι num1 και num2**
3. **Jbutton**
4. **JEditorPane / η μεταβλητή μας είναι:editorPane**
5. **JLabel / actionRecived**

```java
import java.awt.EventQueue;
import javax.swing.JFrame;
import javax.swing.JTextField;
import java.awt.Font;
import javax.swing.JButton;
import java.awt.event.ActionListener;
import java.awt.event.ActionEvent;
import javax.swing.JEditorPane;
import javax.swing.border.LineBorder;
import java.awt.Color;
import javax.swing.SwingConstants;
import javax.swing.JLabel;

public class Example2 {

    private JFrame frame;
    private JTextField num2;
    private JTextField num1;
    private JEditorPane editorPane;
    private JButton btnNewButton;

    /**
     * Launch the application.
     */
    public static void main(String[] args) {
        EventQueue.invokeLater(new Runnable() {
            public void run() {
                try {
                    Example2 window = new Example2();
                    window.frame.setVisible(true);
                } catch (Exception e) {
                    e.printStackTrace();
                }
            }
        });
    }

    /**
     * Create the application.
     */
    public Example2() {
        initialize();
    }

    /**
     * Initialize the contents of the frame.
     */
    private void initialize() {
        frame = new JFrame();
        frame.setBounds(100, 100, 327, 455);
        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.getContentPane().setLayout(null);

        btnNewButton = new JButton("C");
        btnNewButton.addActionListener(new ActionListener() {
```

```java
        public void actionPerformed(ActionEvent e) {
        num2.setText(null);
        num1.setText(null);
        actionRecived.setText(null);
        }
});
btnNewButton.setFont(new Font("Tahoma", Font.BOLD, 18));
btnNewButton.setBounds(83, 294, 70, 55);
frame.getContentPane().add(btnNewButton);

JButton btnNewButton_1 = new JButton("7");
btnNewButton_1.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            num1.setText(num1.getText()+7);
        }
});
btnNewButton_1.setFont(new Font("Tahoma", Font.BOLD, 18));
btnNewButton_1.setBounds(10, 122, 70, 55);
frame.getContentPane().add(btnNewButton_1);

JButton btnNewButton_2 = new JButton("4");
btnNewButton_2.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            num1.setText(num1.getText()+4);
        }
});
btnNewButton_2.setFont(new Font("Tahoma", Font.BOLD, 18));
btnNewButton_2.setBounds(10, 179, 70, 55);
frame.getContentPane().add(btnNewButton_2);

JButton btnNewButton_3 = new JButton("1");
btnNewButton_3.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            num1.setText(num1.getText()+1);
        }
});
btnNewButton_3.setFont(new Font("Tahoma", Font.BOLD, 18));
btnNewButton_3.setBounds(10, 237, 70, 55);
frame.getContentPane().add(btnNewButton_3);

JButton btnC = new JButton("0");
btnC.setFont(new Font("Tahoma", Font.BOLD, 18));
btnC.setBounds(10, 294, 70, 55);
frame.getContentPane().add(btnC);

JButton btnNewButton_5 = new JButton("8");
btnNewButton_5.addActionListener(new ActionListener() {
        public void actionPerformed(ActionEvent e) {
            num1.setText(num1.getText()+8);
        }
```

```java
	});
	btnNewButton_5.setFont(new Font("Tahoma", Font.BOLD, 18));
	btnNewButton_5.setBounds(83, 122, 70, 55);
	frame.getContentPane().add(btnNewButton_5);

	JButton btnNewButton_6 = new JButton("5");
	btnNewButton_6.addActionListener(new ActionListener() {
		public void actionPerformed(ActionEvent e) {
			num1.setText(num1.getText()+5);
		}
	});
	btnNewButton_6.setFont(new Font("Tahoma", Font.BOLD, 18));
	btnNewButton_6.setBounds(83, 179, 70, 55);
	frame.getContentPane().add(btnNewButton_6);

	JButton btnNewButton_7 = new JButton("2");
	btnNewButton_7.addActionListener(new ActionListener() {
		public void actionPerformed(ActionEvent e) {
			num1.setText(num1.getText()+2);
		}
	});
	btnNewButton_7.setFont(new Font("Tahoma", Font.BOLD, 18));
	btnNewButton_7.setBounds(83, 237, 70, 55);
	frame.getContentPane().add(btnNewButton_7);

	JButton btnNewButton_4 = new JButton("=");
	btnNewButton_4.addActionListener(new ActionListener() {
		public void actionPerformed(ActionEvent e) {
		 double one=Double.parseDouble(num1.getText());
		 double two=Double.parseDouble(num2.getText());
		 if (actionRecived.getText().equals("add"))
		 {
			num2.setText(String.valueOf(one+two));
		}
		 if (actionRecived.getText().equals("sub"))
		{

			num2.setText(String.valueOf(one-two));
		}
		 if (actionRecived.getText().equals("multi"))
		{

			num2.setText(String.valueOf(one*two));
		}

		 if (actionRecived.getText().equals("div"))
		{

			num2.setText(String.valueOf(one/two));
```

```java
		}

		}
			});
	btnNewButton_4.setFont(new Font("Tahoma", Font.BOLD, 18));
	btnNewButton_4.setBounds(156, 294, 70, 55);
	frame.getContentPane().add(btnNewButton_4);

	JButton btnNewButton_9 = new JButton("9");
	btnNewButton_9.addActionListener(new ActionListener() {
		public void actionPerformed(ActionEvent e) {
			num1.setText(num1.getText()+9);

		}
	});
	btnNewButton_9.setFont(new Font("Tahoma", Font.BOLD, 18));
	btnNewButton_9.setBounds(156, 122, 70, 55);
	frame.getContentPane().add(btnNewButton_9);

	JButton btnNewButton_10 = new JButton("6");
	btnNewButton_10.addActionListener(new ActionListener() {
		public void actionPerformed(ActionEvent e) {
			num1.setText(num1.getText()+6);
		}
	});
	btnNewButton_10.setFont(new Font("Tahoma", Font.BOLD, 18));
	btnNewButton_10.setBounds(156, 179, 70, 55);
	frame.getContentPane().add(btnNewButton_10);

	JButton btnNewButton_11 = new JButton("3");
	btnNewButton_11.addActionListener(new ActionListener() {
		public void actionPerformed(ActionEvent e) {
			num1.setText(num1.getText()+3);
		}
	});
	btnNewButton_11.setFont(new Font("Tahoma", Font.BOLD, 18));
	btnNewButton_11.setBounds(156, 237, 70, 55);
	frame.getContentPane().add(btnNewButton_11);

	JButton btnNewButton_12 = new JButton("+");
	btnNewButton_12.addActionListener(new ActionListener() {
		public void actionPerformed(ActionEvent e) {
			num2.setText(num1.getText());
			num1.setText(null);
			actionRecived.setText("add");
		}
	});
	btnNewButton_12.setFont(new Font("Tahoma", Font.BOLD, 18));
	btnNewButton_12.setBounds(229, 294, 70, 55);
	frame.getContentPane().add(btnNewButton_12);
```

```java
JButton btnNewButton_13 = new JButton("-");
btnNewButton_13.addActionListener(new ActionListener() {
      public void actionPerformed(ActionEvent e) {
            num2.setText(num1.getText());
            num1.setText(null);
            actionRecived.setText("sub");

      }
});
btnNewButton_13.setFont(new Font("Tahoma", Font.BOLD, 18));
btnNewButton_13.setBounds(229, 122, 70, 55);
frame.getContentPane().add(btnNewButton_13);

JButton btnNewButton_14 = new JButton("*");
btnNewButton_14.addActionListener(new ActionListener() {
      public void actionPerformed(ActionEvent e) {
            num2.setText(num1.getText());
            num1.setText(null);
            actionRecived.setText("multi");
      }
});
btnNewButton_14.setFont(new Font("Tahoma", Font.BOLD, 18));
btnNewButton_14.setBounds(229, 179, 70, 55);
frame.getContentPane().add(btnNewButton_14);

JButton btnNewButton_15 = new JButton("/");
btnNewButton_15.addActionListener(new ActionListener() {
      public void actionPerformed(ActionEvent e) {
            num2.setText(num1.getText());
            num1.setText(null);
            actionRecived.setText("div");
      }
});
btnNewButton_15.setFont(new Font("Tahoma", Font.BOLD, 18));
btnNewButton_15.setBounds(229, 237, 70, 55);
frame.getContentPane().add(btnNewButton_15);

editorPane = new JEditorPane();
editorPane.setFont(new Font("Tahoma", Font.BOLD, 18));
editorPane.setBorder(new LineBorder(new Color(0, 0, 0)));
editorPane.setEditable(false);
editorPane.setBounds(10, 11, 289, 100);
frame.getContentPane().add(editorPane);

num2 = new JTextField();
num2.setHorizontalAlignment(SwingConstants.RIGHT);
num2.setFont(new Font("Tahoma", Font.BOLD, 18));
num2.setBorder(null);
```

```java
            num2.setBounds(23, 66, 264, 36);
            frame.getContentPane().add(num2);
            num2.setColumns(10);

            num1 = new JTextField();
            num1.setHorizontalAlignment(SwingConstants.RIGHT);
            num1.setFont(new Font("Tahoma", Font.BOLD, 15));
            num1.setBorder(null);
            num1.setBounds(47, 23, 240, 36);
            frame.getContentPane().add(num1);
            num1.setColumns(10);
```

«ΕΔΩ ΣΒΗΝΟΥΜΕ ΤΟ JLabel και αφήνουμε μόνο το actionRecived»

```java
            actionRecived = new JLabel("");
            actionRecived.setFont(new Font("Tahoma", Font.BOLD, 18));
            actionRecived.setBounds(10, 360, 158, 43);
            frame.getContentPane().add(actionRecived);
        }
    private JLabel actionRecived;
}
```