

```

package rechner;

import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import javax.swing.event.*;

public class Calculator extends JFrame implements CaretListener, ActionListener {

    private double diameter, freq; //komponente folgen noch

    JTextField jNumberField1, jNumberField19; // Textfelder 2-18 folgen noch
    JButton jButton1; //btn2-7 folgen noch

    public Calculator()
    {
        setPreferredSize(new Dimension(1360, 700));

        setTitle("Calculator Figure of Merit");
        setLayout(new GridBagLayout());

        GridBagConstraints c = new GridBagConstraints();
        c.fill = GridBagConstraints.BOTH;
        c.insets = new Insets(10, 1, 10, 3);

        jNumberField1 = new JTextField();
        jNumberField1.addCaretListener(this);
        jNumberField1.addActionListener(this);
        c.gridy = 2;
        c.gridx = 1;
        add(jNumberField1, c);

        Font schrift1 = new Font("Arial", Font.BOLD, 18);
        //Textfelder folgen noch
    }
}

```

```
JLabel jLabel1 = new JLabel("Gain");
jLabel1.setFont(schrift1);
jLabel1.setHorizontalAlignment(SwingConstants.CENTER);
c.gridy = 1;
c.gridx = 0;
c.gridwidth = 3;
add(jLabel1, c);
//JLabels folgen noch
```

```
jButton6 = new JButton("Clear");
//jButton1.setMargin(new Insets(2, 2, 2, 2));
jButton6.setEnabled(false);
jButton6.addActionListener(this);
c.gridy = 8;
c.gridx = 8;
add(jButton6, c);
```

```
jButton7 = new JButton("Clear");
jButton7.setEnabled(true);
jButton7.addActionListener(this);
c.gridy = 12;
c.gridx = 9;
add(jButton7, c);
```

```
Diagramm diag = new Diagramm();
c.gridy = 11;
c.gridx = 1;
c.weighty = 0.5;
c.gridwidth = 9;
add(diag, c);
```

```
}
```

```
public void actionPerformed(ActionEvent e)
```

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{
    Object o = e.getSource();

    if(o==jButton6){
        jTextField19.setText("");
    }

    /*if(o==jButton7)    ##### soll das Diagramm leeren
    {
        Delete();
    }*/
if(o==jButton1 || o==jNumberField1 || o==jNumberField4)  {
    }
//Loss
    diameter = Double.parseDouble(jTextField1.getText());
    freq = Double.parseDouble(jTextField2.getText());
    surfacesub = -0.05;
    panel = -0.02;
    // einige Formeln folgen noch
    gain = Math.round(gain * 100)/100.0;

    jTextField14.setText("" + gain);
}
if(o==jButton2 || o==jNumberField7 || o==jNumberField10)
{
    // Noise
        pattern = Double.parseDouble(jTextField8.getText());
        templna = Math.round(templna*100)/100.0; //einige Formeln folgen

    jTextField13.setText("" + templna );
}
if(o==jButton3 || o==jNumberField15 || o==jNumberField16)
{

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        Inanoise = Double.parseDouble(jNumberField16.getText());
        gt = Math.round(gt*100)/100.0;
        jNumberField19.setText("" + gt);
    }
}
public static void main(String[] args)
{
    Calculator ac = new Calculator();
        ac.setVisible(true);
        ac.setDefaultCloseOperation(WindowConstants.EXIT_ON_CLOSE);
    ac.pack();
}
}
```