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1 import java.awt.*;
2 import java.lang.reflect.InvocationTargetException;
3 import java.util.Scanner;
4 import java.awt.event.ActionEvent;
5 import java.awt.event.ActionListener;
6 import javax.swing.*;
7
8 public class Calculator {
9     private JFrame frame;
10    private static JTextField textField1;
11    private static JTextField textField2;
12    private static JTextField textFieldResult;
13    private JButton buttonAdd, buttonSubtract, buttonMultiply, buttonDivide;
14    private JPanel panel;
15    private Scanner scanner;
16
17    public Calculator() {
18        frame = new JFrame("Calculator");
19
20        textField1 = new JTextField(0);
21        textField1.setBackground(Color.DARK_GRAY);
22        textField1.setFont(new Font("Arial", Font.BOLD, 20));
23        textField1.setForeground(Color.WHITE);
24
25        textField2 = new JTextField(0);
26        textField2.setBackground(Color.DARK_GRAY);
27        textField2.setFont(new Font("Arial", Font.BOLD, 20));
28        textField2.setForeground(Color.WHITE);
29
30        buttonAdd = new JButton("+");
31        buttonAdd.setBackground(Color.DARK_GRAY);
32        buttonAdd.setFont(new Font("Arial", Font.BOLD, 20));
33        buttonAdd.setForeground(Color.WHITE);
34
35        buttonSubtract = new JButton("-");
36        buttonSubtract.setBackground(Color.DARK_GRAY);
37        buttonSubtract.setFont(new Font("Arial", Font.BOLD, 20));
38        buttonSubtract.setForeground(Color.WHITE);
39
40        buttonMultiply = new JButton("*");
41        buttonMultiply.setBackground(Color.DARK_GRAY);
42        buttonMultiply.setFont(new Font("Arial", Font.BOLD, 20));
43        buttonMultiply.setForeground(Color.WHITE);
44
45        buttonDivide = new JButton("/");
46        buttonDivide.setBackground(Color.DARK_GRAY);
47        buttonDivide.setFont(new Font("Arial", Font.BOLD, 20));
48        buttonDivide.setForeground(Color.WHITE);
49
50        textFieldResult = new JTextField(0);
51        textFieldResult.setBackground(Color.DARK_GRAY);
52        textFieldResult.setFont(new Font("Arial", Font.BOLD, 20));
53        textFieldResult.setForeground(Color.WHITE);
54
55
56        panel = new JPanel();
57        panel.setLayout(new GridLayout(5, 4));
58        panel.add(textField1);
59        panel.add(textField2);
60        panel.add(buttonAdd);
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61     panel.add(buttonSubtract);
62     panel.add(buttonMultiply);
63     panel.add(buttonDivide);
64     panel.add(textFieldResult);
65     frame.add(panel, BorderLayout.CENTER);
66
67     frame.setSize(640, 480);
68     frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
69
70     scanner = new Scanner(System.in);
71
72     buttonAdd.addActionListener(new ActionListener() {
73         @Override
74         public void actionPerformed(ActionEvent e) {
75             double number1 = Double.parseDouble(textField1.getText());
76             double number2 = Double.parseDouble(textField2.getText());
77             double result = calculate(number1, number2, "+");
78             textFieldResult.setText("REZULTAT: " + String.valueOf(result));
79         }
80     });
81
82     buttonSubtract.addActionListener(new ActionListener() {
83         @Override
84         public void actionPerformed(ActionEvent e) {
85             double number1 = Double.parseDouble(textField1.getText());
86             double number2 = Double.parseDouble(textField2.getText());
87             double result = calculate(number1, number2, "-");
88             textFieldResult.setText("REZULTAT: " + String.valueOf(result));
89         }
90     });
91
92     buttonMultiply.addActionListener(new ActionListener() {
93         @Override
94         public void actionPerformed(ActionEvent e) {
95             double number1 = Double.parseDouble(textField1.getText());
96             double number2 = Double.parseDouble(textField2.getText());
97             double result = calculate(number1, number2, "*");
98             textFieldResult.setText("REZULTAT: " + String.valueOf(result));
99         }
100    });
101
102    buttonDivide.addActionListener(new ActionListener() {
103        @Override
104        public void actionPerformed(ActionEvent e) {
105            double number1 = Double.parseDouble(textField1.getText());
106            double number2 = Double.parseDouble(textField2.getText());
107            double result = calculate(number1, number2, "/");
108            textFieldResult.setText("REZULTAT: " + String.valueOf(result));
109        }
110    });
111 }
112
113 public double calculate(double num1, double num2, String operation) {
114     // Check the value of the "operation" argument and perform the corresponding
calculation
115     if (operation.equals("+")) {
116         return num1 + num2;
117     } else if (operation.equals("-")) {
118         return num1 - num2;
119     } else if (operation.equals("*")) {

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120         return num1 * num2;
121     } else if (operation.equals("/")) {
122         return num1 / num2;
123     } else {
124         // If the operation is invalid, return 0
125         return 0;
126     }
127 }
128
129 public static void main(String[] args) {
130     try {
131         // Create a new Calculator object
132         Calculator calculator = new Calculator();
133         // Set the frame to be visible
134         calculator.frame.setVisible(true);
135         SwingUtilities.invokeLater(new Runnable() {
136             @Override
137             public void run() {
138                 calculator.frame.setVisible(true);
139                 textField1.setText("");
140                 textField2.setText("");
141             }
142         });
143     } catch (InterruptedException e) {
144         e.printStackTrace();
145     } catch (InvocationTargetException e) {
146         e.printStackTrace();
147     }
148 }
149 }
150
151
```