

```

1 package oop5_dat5_u;
2
3 import java.awt.event.*;
4 import javax.swing.*; // Package für Swing
5
6 /**
7  * Aufgabe 1
8  *
9  * @author Felix Rohrer <felix.rohrer@stud.hslu.ch>
10 */
11 public class SwingApplication extends JFrame
12 {
13
14     public SwingApplication()
15     {
16         super("Aufgabe 1");
17         setDefaultCloseOperation(EXIT_ON_CLOSE);
18     }
19
20     public static void main(String[] args)
21     {
22         final JFrame frame = new SwingApplication();
23
24         // MenuBar
25         JMenuBar menuBar = new JMenuBar();
26         // Menu File
27         JMenu menuFile = new JMenu("File");
28         JMenuItem miFileNew = new JMenuItem("New");
29         JMenuItem miFileOpen = new JMenuItem("Open");
30         JMenuItem miFileExit = new JMenuItem("Exit");
31         miFileExit.addActionListener(
32             new ActionListener()
33             {
34                 public void actionPerformed(ActionEvent e)
35                 {
36                     System.exit(0);
37                 }
38             });
39         menuFile.add(miFileNew);
40         menuFile.add(miFileOpen);
41         menuFile.addSeparator(); // Trennlinie
42         menuFile.add(miFileExit);
43         menuBar.add(menuFile);
44
45         // Menu Help
46         JMenu menuHelp = new JMenu("Help");
47         JMenuItem miHelpAbout = new JMenuItem("About");
48         miHelpAbout.addActionListener(
49             new ActionListener()
50             {
51                 public void actionPerformed(ActionEvent e)
52                 {
53                     JOptionPane.showMessageDialog(frame, "Copyright 2012 Hochschule Luzern,
54 Technik & Architektur");
55                 }
56             });
57         menuHelp.add(miHelpAbout);
58         menuBar.add(menuHelp);
59
60         frame.setJMenuBar(menuBar); // dem JFrame hinzufügen
61
62         // anzeigen
63         frame.setVisible(true);
64 }

```

```

1 package oop5_dat5_u;
2
3 import javax.swing.*; // Package für Swing
4 import java.awt.*; // AWT wird häufig für
5 import java.awt.event.*; // Ereignisverarbeitung benötigt
6
7 /**
8  * Aufgabe 2
9  *
10 * @author Felix Rohrer <felix.rohrer@stud.hslu.ch>
11 */
12 public class AppButton extends JFrame
13 {
14
15     private int numClicks = 0;
16     private JLabel label;
17
18     public static void main(String[] args)
19     {
20         JFrame frame = new AppButton();
21         frame.setSize(300, 150);
22         frame.setResizable(false);
23         //center on screen
24         frame.setLocationRelativeTo(null);
25     }
26
27     public AppButton()
28     {
29         super("Aufgabe 2");
30         setDefaultCloseOperation(EXIT_ON_CLOSE);
31
32         JButton button = new JButton("Count button clicks");
33         button.addActionListener(
34             new ActionListener()
35             {
36
37                 public void actionPerformed(ActionEvent e)
38                 {
39                     onButtonPressed();
40                 }
41             });
42         label = new JLabel("    Number of clicks: " + numClicks + "    ");
43
44         // ... hinzufügen
45         JPanel paneButton = new JPanel();
46         paneButton.setBorder(BorderFactory.createLineBorder(Color.black));
47         paneButton.add(button);
48
49         JPanel paneLabel = new JPanel();
50         paneLabel.setBorder(BorderFactory.createLineBorder(Color.black));
51         paneLabel.add(label);
52
53         setLayout(new FlowLayout(FlowLayout.CENTER, 5, 20));
54         add(paneButton);
55         add(paneLabel);
56         // Platzbedarf ermitteln und anzeigen
57         pack();
58         setVisible(true);
59     }
60
61     private void onButtonPressed()
62     {
63         numClicks++;
64         label.setText("    Number of clicks: " + numClicks + "    ");
65     }
66 }

```