

## 4. Vorlesungsübung

```
import java.awt.*;

import javax.swing.*;

import java.awt.event.*;

import java.util.*;

import java.io.*;

import javax.swing.filechooser.*;

public class Vorl04 extends JFrame implements ActionListener {

    public static final long serialVersionUID=1;

    // global fuer addActionListener

    JMenuItem mnOpen = new JMenuItem("Öffnen");

    JMenuItem mnKopy = new JMenuItem("Kopieren");

    JMenuItem mnClose = new JMenuItem("Schließen");

    JTextArea editor1 = new JTextArea();

    JTextArea editor2 = new JTextArea();

    public Vorl04() {

        setDefaultCloseOperation( JFrame.EXIT_ON_CLOSE );

        setGUI();

        setMenus();

    }
}
```

```

private void setGUI() {

    setSize(700, 450);

    setTitle("04. Tutorial");

    this.getContentPane().setLayout( new BorderLayout() );

    // true = neu zeichnen am "splitten"

    JSplitPane split = new JSplitPane(JSplitPane.HORIZONTAL_SPLIT, true,

        new JScrollPane(editor1),

        new JScrollPane(editor2)

    );

    split.setDividerLocation(280);

    this.getContentPane().add(split, BorderLayout.CENTER);

    editor1.setFont( new Font("Arial", Font.BOLD,18) );

    editor2.setFont( new Font("Arial", Font.BOLD,18) );

} // setGUI

// setzt die Menüs

private void setMenus() {

    JMenuBar menuBar1 = new JMenuBar();

    JMenu mainFile = new JMenu("Datei");

    mnOpen.setAccelerator( KeyStroke.getKeyStroke(KeyEvent.VK_O, ActionEvent.CTRL_MASK));

    mnKopy.setAccelerator( KeyStroke.getKeyStroke(KeyEvent.VK_K, ActionEvent.CTRL_MASK));

    mainFile.add(mnOpen);

    mainFile.add(mnKopy);

    mainFile.addSeparator();

    mainFile.add(mnClose);

    menuBar1.add(mainFile);

    this.setJMenuBar(menuBar1);

```

```

// Aktionlistener

mnOpen.addActionListener(this);

mnKopy.addActionListener(this);

mnClose.addActionListener(this);

} // setMenus

public void actionPerformed(ActionEvent e) {

    if (e.getSource() == mnOpen ) {

        mnOpen_click();

    }

    if (e.getSource() == mnKopy ) {

        mnCopy_click();

    }

    if (e.getSource() == mnClose ) {

        System.exit(0);

    }

}

private void mnOpen_click() {

    JFileChooser jFileChooser1 = new JFileChooser();

        // Ok-Schalter gedrückt ?

    if (jFileChooser1.showOpenDialog(this) == JFileChooser.APPROVE_OPTION) {

        String sFilename = jFileChooser1.getSelectedFile().getPath();

        loadFile(sFilename);

    }

}

private void loadFile(String sFilename) {

```

```
editor1.setText ( sFilename );  
}  
  
private void mnCopy_click() {  
    editor2.setText ( editor1.getText() );  
}  
  
public static void main(String[] args) {  
    Vorl04 frame = new Vorl04();  
    frame.setVisible(true);  
}  
  
} // Vorl04
```

## Aufgabe04\_JList

```
import java.util.Vector;
```

```
public class Aufgabe04_JList extends JFrame implements ActionListener {
```

```
    JMenuItem mnAktion = new JMenuItem("Aktion");
```

```
// notwendige globale GUI-Elemente
```

```
    JButton bn1 = new JButton("JList Aktion1");
```

```
    JTextField input = new JTextField();
```

```
    Vector<String> liste = new Vector<String>();
```

```
    JList<String> jlist1;
```

```
public Aufgabe04_JList() {
```

```
    setDefaultCloseOperation( JFrame.EXIT_ON_CLOSE );
```

```
    setGUI();
```

```
    setMenus();
```

```
}
```

```
private void setGUI() {
```

```
    setSize(700, 270);
```

```
    setTitle("Beispiel JList");
```

```
this.getContentPane().setLayout( new GridBagLayout() );
```

```
    jlist1= new JList<String>(liste); // Verknuepfung JList mit Vector
```

```
} // setGUI
```

```
// setzt die Menues

private void setMenus() {

    JMenuBar menuBar1 = new JMenuBar();

    JMenu mainEdit = new JMenu("Bearbeiten");

    mnAktion.setAccelerator( KeyStroke.getKeyStroke(KeyEvent.VK_I, ActionEvent.CTRL_MASK));

    mainEdit.add(mnAktion);

    menuBar1.add(mainEdit);

    this.setJMenuBar(menuBar1);

    mnAktion.addActionListener(this);

} // setMenus
```

```
public void actionPerformed(ActionEvent e) {

    if (e.getSource() == mnAktion ) {

        mnAktion_Click();

    }

}
```

```
private void mnAktion_Click() {

    String sValue = input.getText();

    liste.add(sValue);

    java.util.Collections.sort(liste);

    jlist1.setListData(liste);

    input.setText("");

}
```