

JAVA NOTES

GRAPHICAL USER INTERFACES

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APPENDIX B TABBED PANES

A tabbed pane contains a collection of tabbed cards - the user selects a card by clicking on its tab. When a tabbed pane is selected, its component is displayed.

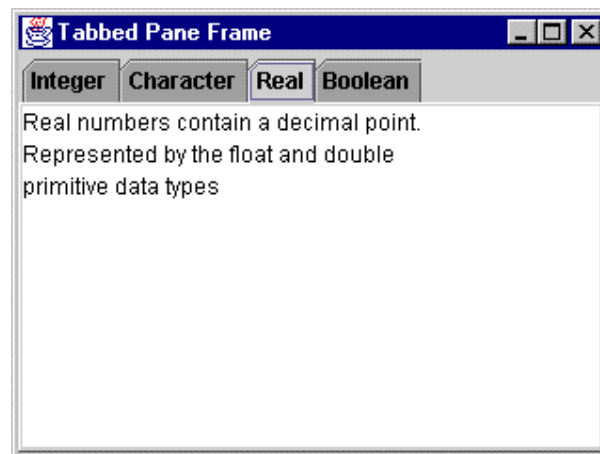


Figure B1 *A Tabbed Pane*

To create a tabbed pane you first construct a *JTabbedPane* object then add tabs to it.

```
JTabbedPane tabbedPane = new JTabbedPane();  
  
tabbedPane.addTab("Integer", integerDescription);  
tabbedPane.addTab("Character", characterDescription);  
tabbedPane.addTab("Real", realDescription);  
tabbedPane.addTab("Boolean", booleanDescription);
```

The last parameter to the constructor is a *Component*. If you want to add more than one component you first wrap them in a container such as a panel then add the panel to the tab.

```

/* TabbedPane.java  Terry Marris  13 July 2001 */

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

public class TabbedPaneFrame extends JFrame {
    private JTabbedPane tabbedPane;

    public TabbedPaneFrame()
    {
        setTitle("Tabbed Pane Frame");

        Toolkit tk = Toolkit.getDefaultToolkit();
        Dimension screen = tk.getScreenSize();
        setLocation(screen.width/4, screen.height/4);
        setSize(screen.width/2, screen.height/2);

        addWindowListener(new WindowAdapter()
            { public void windowClosing(WindowEvent e)
              { System.exit(0); } });

        JTextArea integerDescription = new JTextArea(
            "Whole numbers, represented by the byte\n" +
            "int and long primitive data types");
        JTextArea characterDescription = new JTextArea(
            "Single character, as might be found \n" +
            "on the keys of a typewriter keyboard. \n" +
            "Represented by the char primitive \n" +
            "data type");
        JTextArea realDescription = new JTextArea(
            "Real numbers contain a decimal point. \n" +
            "Represented by the float and double \n" +
            "primitive data types");
        JTextArea booleanDescription = new JTextArea(
            "true and false, represented by the " +
            "boolean \n" +
            "primitive data type");

        tabbedPane = new JTabbedPane();

        tabbedPane.addTab("Integer", integerDescription);
        tabbedPane.addTab("Character", characterDescription);
        tabbedPane.addTab("Real", realDescription);
        tabbedPane.addTab("Boolean", booleanDescription);

        getContentPane().add(tabbedPane);
    }
}

```

```

public static void main(String[] s)
{
    new TabbedPaneFrame().show();
}
}

```

javax.swing.JTabbedPane

Constructors	
JTabbedPane()	initialises a new, empty tabbed pane with tabs placed at the top of the frame.
JTabbedPane(int tabPlacement)	initialises a new, empty tabbed pane with tabs placed at SwingConstants.TOP, BOTTOM, LEFT or RIGHT of the frame.

Methods		
void	addChangeListener(ChangeListener l)	adds the given change listener to this tabbed pane.
void	addTab(String title, Component c)	adds the given component and labels the tab with the given title. The component is displayed when the tab is selected.
Component	getComponentAt(int index)	returns the component at the given tab number; raises an exception if there is no tab with the given index.
int	indexOfComponent(Component c)	returns the tab number of the given component.
Component	getSelectedComponent()	returns the component currently selected or null if there is no currently selected component.
int	getSelectedIndex()	returns the selected tab number or -1 if there is no selected tab.
int	getTabCount()	returns the number of tabs in this tabbed pane.
String	getTitleAt(int index)	returns the tab title at the given index position.
int	indexOfTab(String title)	returns the first tab number for the given title, or -1 if no tab with the given title exists.

Further reading: HORSTMANN & CORNELL Core Java 2 Volume 2 pp 436