**JTappedPane**

**A tabbed pane is a container that can store and organize multiple components into distinct tabs. It contains a collection of tabs. When you click on a tab, only data related to that tab will be displayed. JTabbedPane comes under the Java Swing package**

//------------------------EXAMPLE 1

import javax.swing.\*;

public class TabbedPaneExample1 {

public static void main(String[] args) {

JFrame frame = new JFrame("TabbedPane Example");

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

JTabbedPane tabbedPane = new JTabbedPane(); // Default constructor, tabs at the top

tabbedPane.addTab("Tab 1", new JLabel("Content for Tab 1"), "This is Tab 1");

tabbedPane.addTab("Tab 2",new JLabel("Content for Tab 2"), "This is Tab 2");

frame.add(tabbedPane);

frame.setSize(400, 300);

frame.setVisible(true);

}

}

//------------------EXAMPLE 2

import javax.swing.\*;

public class TabbedPaneExample2 {

public static void main(String[] args) {

JFrame frame = new JFrame("TabbedPane Example");

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

JTabbedPane tabbedPane = new JTabbedPane(JTabbedPane.LEFT); // Tabs at the bottom

// Adding tabs

tabbedPane.addTab("Tab 1", new JLabel("Content for Tab 1"), "This is Tab 1");

tabbedPane.addTab("Tab 2", new JLabel("Content for Tab 2"), "This is Tab 2");

frame.add(tabbedPane);

frame.setSize(400, 300);

frame.setVisible(true);

}

}

//------------------EXAMPLE 3

import javax.swing.\*;

public class TabbedPaneExample3 {

public static void main(String[] args) {

JFrame frame = new JFrame("TabbedPane Example");

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

// Tabs on the TOP side, scrollable if there are too many

JTabbedPane tabbedPane = new JTabbedPane(JTabbedPane.TOP, JTabbedPane.SCROLL\_TAB\_LAYOUT); //JTabbedPane.WRAP\_TAB\_LAYOUT

for (int i = 1; i <= 30; i++) {

tabbedPane.addTab("Tab " + i, new JLabel("Content for Tab " + i));

}

frame.add(tabbedPane);

frame.setSize(400, 300);

frame.setVisible(true);

}

}

**METHODS**

//---------------------method 1

import javax.swing.\*;

public class m1 {

public static void main(String[] args) {

JFrame frame = new JFrame("JTabbedPane Example");

JTabbedPane tabbedPane = new JTabbedPane();

// Adding first tab

JPanel panel1 = new JPanel();

panel1.add(new JLabel("This is Panel 1"));

tabbedPane.addTab("Tab 1", panel1);

// Adding second tab

JPanel panel2 = new JPanel();

panel2.add(new JLabel("This is Panel 2"));

tabbedPane.addTab("Tab 2", panel2);

frame.add(tabbedPane);

frame.setSize(400, 300);

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frame.setVisible(true);

}

}

//-----------------method 2

import javax.swing.\*;

import java.awt.Image;

public class m2 {

public static void main(String[] args) {

JFrame frame = new JFrame("JTabbedPane Icon Example");

JTabbedPane tabbedPane = new JTabbedPane();

// Load the original image

String imagePath = "C:/Users/dines/Downloads/smiley.png";

ImageIcon originalIcon = new ImageIcon(imagePath);

// Resize the image to a smaller size (e.g., 30x30 pixels)

Image scaledImage = originalIcon.getImage().getScaledInstance(30, 30, Image.SCALE\_SMOOTH);

ImageIcon smallIcon = new ImageIcon(scaledImage);

// Create panel and add to tabbed pane with small icon

JPanel panel1 = new JPanel();

panel1.add(new JLabel("This is Panel 1"));

tabbedPane.addTab("Tab 1", smallIcon, panel1);

frame.add(tabbedPane);

frame.setSize(400, 300);

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frame.setVisible(true);

}

}

//-----------------various methods

import javax.swing.\*;

import java.awt.\*;

public class JTab {

public static void main(String[] args) {

// Create the JFrame

JFrame frame = new JFrame("JTabbedPane Example");

frame.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

frame.setSize(500, 300);

// Create JTabbedPane

JTabbedPane tabbedPane = new JTabbedPane();

// Create panels for tabs

JPanel panel1 = new JPanel();

panel1.add(new JLabel("This is Tab 1"));

JPanel panel2 = new JPanel();

panel2.add(new JLabel("This is Tab 2"));

JPanel panel3 = new JPanel();

panel3.add(new JLabel("This is Tab 3"));

// Add tabs to JTabbedPane

tabbedPane.addTab("Tab 1", panel1); // Basic addTab method

tabbedPane.addTab("Tab 2", null, panel2, "This is Tab 2"); // Tooltip

tabbedPane.addTab("Tab 3", new ImageIcon("path\_to\_icon.png"), panel3); // Tab with icon

// Set the tool tip text for tabs

tabbedPane.setToolTipTextAt(0, "This is Tab 1"); // Set tooltip for first tab

tabbedPane.setToolTipTextAt(1, "This is Tab 2 (changed)");

// Use setBackgroundAt to set background color

tabbedPane.setBackgroundAt(0, Color.PINK);

// Use setForegroundAt to set foreground color (text)

tabbedPane.setForegroundAt(1, Color.BLUE);

// Disable a tab

tabbedPane.setEnabledAt(2, false); // Disabling tab 3

// Add a new tab dynamically through a button

JButton addTabButton = new JButton("Add Tab 4");

addTabButton.addActionListener(e -> {

JPanel panel4 = new JPanel();

panel4.add(new JLabel("This is a dynamically added Tab 4"));

tabbedPane.addTab("Tab 4", panel4);

});

// Add button to Tab 1

panel1.add(addTabButton);

// Select a specific tab

tabbedPane.setSelectedIndex(1); // Focus on Tab 2 initially

// Remove a tab dynamically

JButton removeTabButton = new JButton("Remove Tab 4");

removeTabButton.addActionListener(e -> {

int index = tabbedPane.indexOfTab("Tab 4");

if (index >= 0) {

tabbedPane.remove(index); // Remove tab by index if it exists

JOptionPane.showMessageDialog(frame, index , "Removed", JOptionPane.WARNING\_MESSAGE);

} else {

JOptionPane.showMessageDialog(frame, "Tab 4 doesn't exist!", "Error", JOptionPane.WARNING\_MESSAGE);

}

});

// Add remove button to Tab 1

panel1.add(removeTabButton);

// Add JTabbedPane to the frame

frame.add(tabbedPane, BorderLayout.CENTER);

frame.setVisible(true);

}

}