SWING - JPanel Class

Introduction

The class **JPanel** is a generic lightweight container.

Class Declaration

Following is the declaration for **javax.swing.JPanel** class −

```
public class JPanel
   extends JComponent
      implements Accessible
```

Class Constructors

Sr.No.	Constructor & Description
1	**JPanel** Creates a new JPanel with a double buffer and a flow layout.
2	**JPanelbooleanisDoubleBufferedbooleanisDoubleBuffered** Creates a new JPanel with FlowLayout and the specified buffering strategy.
3	**JPanelLayoutManagerlayoutLayoutManagerlayout** Creates a new buffered JPanel with the specified layout manager.
4	**JPanelLayoutManagerlayout,booleanisDoubleBufferedLayoutManagerlayout,booleanisDoubleBuffered** Creates a new JPanel with the specified layout manager and buffering strategy.

Class Methods

Sr.No.	Method & Description
1	**AccessibleContext getAccessibleContext** Gets the AccessibleContext associated with this JPanel.
2	**PanelUI getUI** Returns the look and feel L&FL&F object that renders this component.

3	**String getUIClassID** Returns a string that specifies the name of the L&F class which renders this component.
4	**protected String paramString** Returns a string representation of this JPanel.
5	**void setUIPanelUIuiPanelUIui** Sets the look and feel L&FL&F object that renders this component.
6	**void updateUI** Resets the UI property with a value from the current look and feel.

Methods Inherited

This class inherits methods from the following classes −

- javax.swing.JComponent
- java.awt.Container
- java.awt.Component
- java.lang.Object

JPanel Example

Create the following Java program using any editor of your choice in say **D:/ > SWING > com > tutorialspoint > gui >**

SwingContainerDemo.java

```
package com.tutorialspoint.gui;

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

public class SwingContainerDemo {
   private JFrame mainFrame;
   private JLabel headerLabel;
   private JLabel statusLabel;
   private JPanel controlPanel;
   private JLabel msglabel;

   public SwingContainerDemo(){
      prepareGUI();
   }
   public static void main(String[] args){
      SwingContainerDemo  swingContainerDemo = new SwingContainerDemo();
      swingContainerDemo.showJPanelDemo();
   }
   private void prepareGUI(){
      mainFrame = new JFrame("Java Swing Examples");
      mainFrame.setSize(400,400);
      mainFrame.setLayout(new GridLayout(3, 1));

      mainFrame.addWindowListener(new WindowAdapter() {
         public void windowClosing(WindowEvent windowEvent){
            System.exit(0);
         }
      });
      headerLabel = new JLabel("", JLabel.CENTER);
      statusLabel = new JLabel("",JLabel.CENTER);
      statusLabel.setSize(350,100);
      msglabel = new JLabel("Welcome to TutorialsPoint SWING Tutorial.", JLabel.CENTER);
      controlPanel = new JPanel();
      controlPanel.setLayout(new FlowLayout());

      mainFrame.add(headerLabel);
      mainFrame.add(controlPanel);
      mainFrame.add(statusLabel);
      mainFrame.setVisible(true);
   }
   private void showJPanelDemo(){
      headerLabel.setText("Container in action: JPanel");
      JPanel panel = new JPanel();
      panel.setBackground(Color.magenta);
      panel.setLayout(new FlowLayout());
      panel.add(msglabel);
      controlPanel.add(panel);
      mainFrame.setVisible(true);
   }
}
```

Compile the program using the command prompt. Go to **D:/ > SWING** and type the following command.

```
D:\SWING>javac com\tutorialspoint\gui\SwingContainerDemo.java
```

If no error occurs, it means the compilation is successful. Run the program using the following command.

```
D:\SWING>java com.tutorialspoint.gui.SwingContainerDemo
```

Verify the following output.