SWING - MOUSEADAPTER CLASS

Introduction

The class **MouseAdapter** is an abstract *adapter* class for receiving mouse events. All methods of this class are empty. This class is convenience class for creating listener objects.

Class declaration

Following is the declaration for **java.awt.event.MouseAdapter** class:

```
public abstract class MouseAdapter
   extends Object
      implements MouseListener, MouseWheelListener, MouseMotionListener
```

Class constructors

S.N.	Constructor & Description
1	**MouseAdapter**

Class methods

S.N.	Method & Description
1	**void mouseClicked***MouseEvente* Invoked when the mouse button has been clicked *pressedandreleased* on a component.
2	**void mouseDragged***MouseEvente* Invoked when a mouse button is pressed on a component and then dragged.
3	**void mouseEntered***MouseEvente* Invoked when the mouse enters a component.
4	**void mouseExited***MouseEvente* Invoked when the mouse exits a component.
5	**void mouseMoved***MouseEvente* Invoked when the mouse cursor has been moved onto a component but no buttons have been pushed.
6	**void mousePressed***MouseEvente* Invoked when a mouse button has been pressed on a component.
7	**void mouseReleased***MouseEvente* Invoked when a mouse button has been released on a component.

8	**void mouseWheelMoved***MouseWheelEvente* Invoked when the mouse wheel is rotated.

Methods inherited

This class inherits methods from the following classes:

- java.lang.Object

MouseAdapter Example

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

SwingAdapterDemo.java

```
package com.tutorialspoint.gui;

import java.awt.*;
import java.awt.event.*;

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

   public SwingAdapterDemo(){
      prepareGUI();
   }

   public static void main(String[] args){
      AwtAdapterDemo  awtAdapterDemo = new AwtAdapterDemo();
      swingAdapterDemo.showMouseAdapterDemo();
   }

   private void prepareGUI(){
      mainFrame = new JFrame("Java SWING Examples");
      mainFrame.setSize(400,400);
      mainFrame.setLayout(new GridLayout(3, 1));

      headerLabel = new JLabel("",JLabel.CENTER );
      statusLabel = new JLabel("",JLabel.CENTER);

      statusLabel.setSize(350,100);
      mainFrame.addWindowListener(new WindowAdapter() {
         public void windowClosing(WindowEvent windowEvent){
         System.exit(0);
         }
      });
      controlPanel = new JPanel();
      controlPanel.setLayout(new FlowLayout());

      mainFrame.add(headerLabel);
      mainFrame.add(controlPanel);
      mainFrame.add(statusLabel);
      mainFrame.setVisible(true);
   }

   private void showMouseAdapterDemo(){
      headerLabel.setText("Listener in action: MouseAdapter");

      JPanel panel = new JPanel();
      panel.setBackground(Color.magenta);
      panel.setLayout(new FlowLayout());
```

```
      panel.addMouseListener(new MouseAdapter(){
         public void mouseClicked(MouseEvent e) {
            statusLabel.setText("Mouse Clicked: ("
            +e.getX()+", "+e.getY() +")");
         }
      });

      JLabel msglabel
      = new JLabel("Welcome to TutorialsPoint SWING Tutorial."
      ,JLabel.CENTER);

      msglabel.addMouseListener(new MouseAdapter(){
         public void mouseClicked(MouseEvent e) {
            statusLabel.setText("Mouse Clicked: ("
            +e.getX()+", "+e.getY() +")");
         }
      });
      panel.add(msglabel);
      controlPanel.add(panel);
      mainFrame.setVisible(true);
   }
}
```

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

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

If no error comes that means compilation is successful. Run the program using following command.

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

Verify the following output