AWT MOUSELISTENER INTERFACE

The class which processes the MouseEvent should implement this interface.The object of that class must be registered with a component. The object can be registered using the addMouseListener method.

Interface declaration

Following is the declaration for **java.awt.event.MouseListener** interface:

```
public interface MouseListener
    extends EventListener
```

Interface methods

S.N.	Method & Description
1	**void mouseClicked**_MouseEvente_ Invoked when the mouse button has been clicked _pressedandreleased_ on a component.
2	**void mouseEntered**_MouseEvente_ Invoked when the mouse enters a component.
3	**void mouseExited**_MouseEvente_ Invoked when the mouse exits a component.
4	**void mousePressed**_MouseEvente_ Invoked when a mouse button has been pressed on a component.
5	**void mouseReleased**_MouseEvente_ Invoked when a mouse button has been released on a component.

Methods inherited

This interface inherits methods from the following interfaces:

- java.awt.EventListener

MouseListener Example

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

AwtListenerDemo.java

```
package com.tutorialspoint.gui;
```

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

public class AwtListenerDemo {
    private Frame mainFrame;
    private Label headerLabel;
    private Label statusLabel;
    private Panel controlPanel;

    public AwtListenerDemo(){
        prepareGUI();
    }

    public static void main(String[] args){
        AwtListenerDemo  awtListenerDemo = new AwtListenerDemo();
        awtListenerDemo.showMouseListenerDemo();
    }

    private void prepareGUI(){
        mainFrame = new Frame("Java AWT 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 Label();
        headerLabel.setAlignment(Label.CENTER);
        statusLabel = new Label();
        statusLabel.setAlignment(Label.CENTER);
        statusLabel.setSize(350,100);

        controlPanel = new Panel();
        controlPanel.setLayout(new FlowLayout());

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

    private void showMouseListenerDemo(){
        headerLabel.setText("Listener in action: MouseListener");

        Panel panel = new Panel();
        panel.setBackground(Color.magenta);
        panel.setLayout(new FlowLayout());
        panel.addMouseListener(new CustomMouseListener());

        Label msglabel = new Label();
        msglabel.setAlignment(Label.CENTER);
        msglabel.setText("Welcome to TutorialsPoint AWT Tutorial.");

        msglabel.addMouseListener(new CustomMouseListener());
        panel.add(msglabel);

        controlPanel.add(panel);

        mainFrame.setVisible(true);
    }

    class CustomMouseListener implements MouseListener{

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

```java
        public void mousePressed(MouseEvent e) {
        }

        public void mouseReleased(MouseEvent e) {
        }

        public void mouseEntered(MouseEvent e) {
        }

        public void mouseExited(MouseEvent e) {
        }
    }
}
```
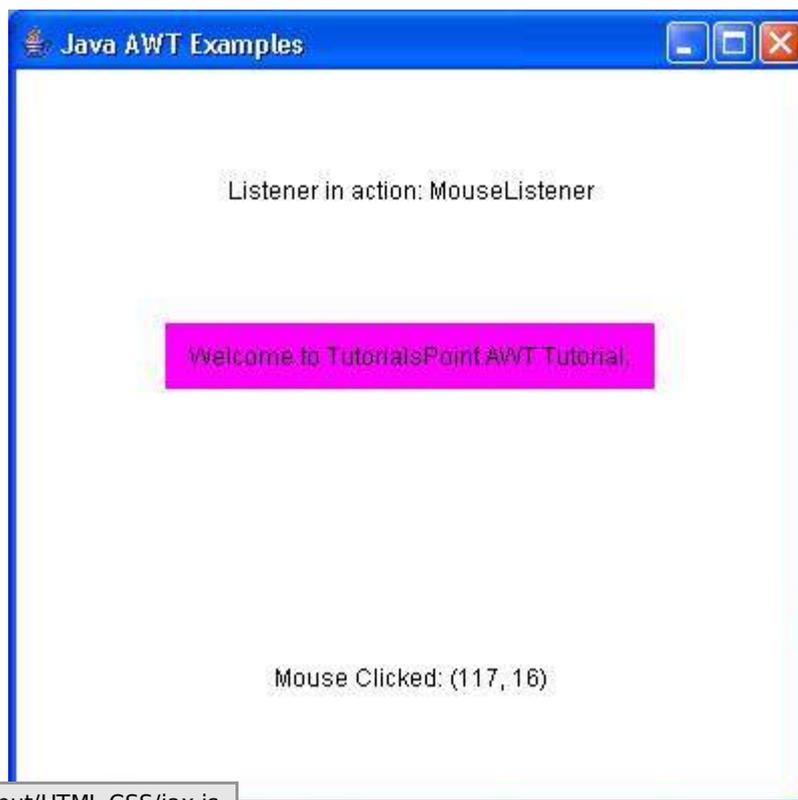
Compile the program using command prompt. Go to **D:/ > AWT** and type the following command.

```
D:\AWT>javac com\tutorialspoint\gui\AwtListenerDemo.java
```

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

```
D:\AWT>java com.tutorialspoint.gui.AwtListenerDemo
```

Verify the following output