

AWT MOUSEMOTIONLISTENER INTERFACE

http://www.tutorialspoint.com/awt/awt_mousemotion_listener.htm

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Introduction

The interface **MouseMotionListener** is used for receiving mouse motion events on a component. The class that process mouse motion events needs to implements this interface.

Class declaration

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

```
public interface MouseMotionListener
extends EventListener
```

Interface methods

S.N. Method & Description

- | S.N. | Method & Description |
|------|--|
| 1 | void mouseDragged <i>MouseEvent</i> Invoked when a mouse button is pressed on a component and then dragged. |
| 2 | void mouseMoved <i>MouseEvent</i> Invoked when the mouse cursor has been moved onto a component but no buttons have been pushed. |

Methods inherited

This class inherits methods from the following interfaces:

- java.awt.event.EventListener

MouseMotionListener 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;

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.showMouseMotionListenerDemo();
}

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 showMouseMotionListenerDemo(){
    headerLabel.setText("Listener in action: MouseMotionListener");

    Panel panel = new Panel();
    panel.setBackground(Color.magenta);
    panel.setLayout(new FlowLayout());
    panel.addMouseMotionListener(new CustomMouseMotionListener());

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

    controlPanel.add(panel);

    mainFrame.setVisible(true);
}

class CustomMouseMotionListener implements MouseMotionListener {

    public void mouseDragged(MouseEvent e) {
        statusLabel.setText("Mouse Dragged: ("+e.getX()+", "+e.getY() +")");
    }

    public void mouseMoved(MouseEvent e) {
        statusLabel.setText("Mouse Moved: ("+e.getX()+", "+e.getY() +")");
    }
}
}

```

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

