

# SWING - MOUSEMOTIONADAPTER CLASS

[http://www.tutorialspoint.com/swing/swing\\_mousemotionadapter.htm](http://www.tutorialspoint.com/swing/swing_mousemotionadapter.htm)

Copyright © tutorialspoint.com

## Introduction

The class **MouseMotionAdapter** is an abstract *adapter* class for receiving mouse motion 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.MouseMotionAdapter** class:

```
public abstract class MouseMotionAdapter
    extends Object
    implements MouseMotionListener
```

## Class constructors

S.N.	Constructor & Description
1	<b>MouseMotionAdapter</b>

## Class methods

S.N.	Method & Description
1	<b>void mouseDragged</b> <i>MouseEvent</i> Invoked when a mouse button is pressed on a component and then dragged.
2	<b>void mouseMoved</b> <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 classes:

- java.lang.Object

## MouseMotionAdapter 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){
    SwingAdapterDemo swingAdapterDemo = new SwingAdapterDemo();
    swingAdapterDemo.showMouseMotionAdapterDemo();
}

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 showMouseMotionAdapterDemo(){
    headerLabel.setText("Listener in action: MouseMotionAdapter");

    JPanel panel = new JPanel();
    panel.setBackground(Color.magenta);
    panel.setLayout(new FlowLayout());
    panel.addMouseMotionListener(new MouseMotionAdapter(){
        public void mouseMoved(MouseEvent e) {
            statusLabel.setText("Mouse Moved: (" + e.getX() + ", " + e.getY() + ")");
        }
    });

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

