| | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-all.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/PathSegment.html)   [**NEXT CLASS**](http://docs.google.com/Picture.html) | [**FRAMES**](http://docs.google.com/index.html?Pen.html)    [**NO FRAMES**](http://docs.google.com/Pen.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#17dp8vu) |

## Class Pen

[java.lang.Object](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true)  
 **Pen**

public class **Pen**extends [Object](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true)

Class to represent a pen which has a color, width, and a list of path segments that it should draw. A pen also knows if it is up or down Copyright Georgia Institute of Technology 2004

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| **Constructor Summary** | |
| --- | --- |
| [**Pen**](http://docs.google.com/Pen.html#Pen())()            Constructor that takes no arguments |
| [**Pen**](http://docs.google.com/Pen.html#Pen(java.awt.Color,%20int))([Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) color, int width)            Constructor that takes all the ink color, and width |
| [**Pen**](http://docs.google.com/Pen.html#Pen(java.awt.Color,%20int,%20boolean))([Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) color, int width, boolean penDown)            Constructor that takes the ink color, width, and penDown flag |

| **Method Summary** | |
| --- | --- |
| void | [**addMove**](http://docs.google.com/Pen.html#addMove(int,%20int,%20int,%20int))(int x1, int y1, int x2, int y2)            Method to add a path segment if the pen is down |
| void | [**clearPath**](http://docs.google.com/Pen.html#clearPath())()            Method to clear the path stored for this pen |
| [Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) | [**getColor**](http://docs.google.com/Pen.html#getColor())()            Method to get the pen (ink) color |
| int | [**getWidth**](http://docs.google.com/Pen.html#getWidth())()            Method to get the width of the pen |
| boolean | [**isPenDown**](http://docs.google.com/Pen.html#isPenDown())()            Method to get pen down status |
| void | [**paintComponent**](http://docs.google.com/Pen.html#paintComponent(java.awt.Graphics))([Graphics](http://java.sun.com/javase/6/docs/api/java/awt/Graphics.html?is-external=true) g)            Metod to paint the pen path |
| void | [**setColor**](http://docs.google.com/Pen.html#setColor(java.awt.Color))([Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) color)            Method to set the pen (ink) color |
| void | [**setPenDown**](http://docs.google.com/Pen.html#setPenDown(boolean))(boolean value)            Method to set the pen down value |
| void | [**setWidth**](http://docs.google.com/Pen.html#setWidth(int))(int width)            Method to set the width of the pen |

| **Methods inherited from class java.lang.**[**Object**](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true) |
| --- |
| [clone](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#clone()), [equals](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#equals(java.lang.Object)), [finalize](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#finalize()), [getClass](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#getClass()), [hashCode](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#hashCode()), [notify](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#notify()), [notifyAll](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#notifyAll()), [toString](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#toString()), [wait](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#wait()), [wait](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#wait(long)), [wait](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#wait(long,%20int)) |

| **Constructor Detail** |
| --- |

### Pen

public **Pen**()

Constructor that takes no arguments

### Pen

public **Pen**([Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) color,  
 int width)

Constructor that takes all the ink color, and width

**Parameters:**color - the ink colorwidth - the width in pixels

### Pen

public **Pen**([Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) color,  
 int width,  
 boolean penDown)

Constructor that takes the ink color, width, and penDown flag

**Parameters:**color - the ink colorwidth - the width in pixelspenDown - the flag if the pen is down

| **Method Detail** |
| --- |

### isPenDown

public boolean **isPenDown**()

Method to get pen down status

**Returns:**true if the pen is down else false

### setPenDown

public void **setPenDown**(boolean value)

Method to set the pen down value

**Parameters:**value - the new value to use

### getColor

public [Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) **getColor**()

Method to get the pen (ink) color

**Returns:**the ink color

### setColor

public void **setColor**([Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) color)

Method to set the pen (ink) color

**Parameters:**color - the color to use

### getWidth

public int **getWidth**()

Method to get the width of the pen

**Returns:**the width in pixels

### setWidth

public void **setWidth**(int width)

Method to set the width of the pen

**Parameters:**width - the width to use in pixels

### addMove

public void **addMove**(int x1,  
 int y1,  
 int x2,  
 int y2)

Method to add a path segment if the pen is down

**Parameters:**x1 - the first xy1 - the first yx2 - the second xy2 - the second y

### clearPath

public void **clearPath**()

Method to clear the path stored for this pen

### paintComponent

public void **paintComponent**([Graphics](http://java.sun.com/javase/6/docs/api/java/awt/Graphics.html?is-external=true) g)

Metod to paint the pen path

**Parameters:**g - the graphics context

| | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-all.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/PathSegment.html)   [**NEXT CLASS**](http://docs.google.com/Picture.html) | [**FRAMES**](http://docs.google.com/index.html?Pen.html)    [**NO FRAMES**](http://docs.google.com/Pen.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
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