| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/LayoutPath.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/java/awt/font/ImageGraphicAttribute.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/font/LineBreakMeasurer.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/font/LayoutPath.html)    [**NO FRAMES**](http://docs.google.com/LayoutPath.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

## **java.awt.font**

Class LayoutPath

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **java.awt.font.LayoutPath**

public abstract class **LayoutPath**extends [Object](http://docs.google.com/java/lang/Object.html)

LayoutPath provides a mapping between locations relative to the baseline and points in user space. Locations consist of an advance along the baseline, and an offset perpendicular to the baseline at the advance. Positive values along the perpendicular are in the direction that is 90 degrees clockwise from the baseline vector. Locations are represented as a Point2D, where x is the advance and y is the offset.

**Since:** 1.6

| **Constructor Summary** | |
| --- | --- |
| [**LayoutPath**](http://docs.google.com/java/awt/font/LayoutPath.html#LayoutPath())() |

| **Method Summary** | |
| --- | --- |
| abstract  void | [**pathToPoint**](http://docs.google.com/java/awt/font/LayoutPath.html#pathToPoint(java.awt.geom.Point2D,%20boolean,%20java.awt.geom.Point2D))([Point2D](http://docs.google.com/java/awt/geom/Point2D.html) location, boolean preceding, [Point2D](http://docs.google.com/java/awt/geom/Point2D.html) point)            Convert a location relative to the path to a point in user coordinates. |
| abstract  boolean | [**pointToPath**](http://docs.google.com/java/awt/font/LayoutPath.html#pointToPath(java.awt.geom.Point2D,%20java.awt.geom.Point2D))([Point2D](http://docs.google.com/java/awt/geom/Point2D.html) point, [Point2D](http://docs.google.com/java/awt/geom/Point2D.html) location)            Convert a point in user space to a location relative to the path. |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [toString](http://docs.google.com/java/lang/Object.html#toString()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

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

### LayoutPath

public **LayoutPath**()

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

### pointToPath

public abstract boolean **pointToPath**([Point2D](http://docs.google.com/java/awt/geom/Point2D.html) point,  
 [Point2D](http://docs.google.com/java/awt/geom/Point2D.html) location)

Convert a point in user space to a location relative to the path. The location is chosen so as to minimize the distance from the point to the path (e.g., the magnitude of the offset will be smallest). If there is more than one such location, the location with the smallest advance is chosen.

**Parameters:**point - the point to convert. If it is not the same object as location, point will remain unmodified by this call.location - a Point2D to hold the returned location. It can be the same object as point. **Returns:**true if the point is associated with the portion of the path preceding the location, false if it is associated with the portion following. The default, if the location is not at a break or sharp bend in the path, is to return true. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if point or location is null**Since:** 1.6

### pathToPoint

public abstract void **pathToPoint**([Point2D](http://docs.google.com/java/awt/geom/Point2D.html) location,  
 boolean preceding,  
 [Point2D](http://docs.google.com/java/awt/geom/Point2D.html) point)

Convert a location relative to the path to a point in user coordinates. The path might bend abruptly or be disjoint at the location's advance. If this is the case, the value of 'preceding' is used to disambiguate the portion of the path whose location and slope is to be used to interpret the offset.

**Parameters:**location - a Point2D representing the advance (in x) and offset (in y) of a location relative to the path. If location is not the same object as point, location will remain unmodified by this call.preceding - if true, the portion preceding the advance should be used, if false the portion after should be used. This has no effect if the path does not break or bend sharply at the advance.point - a Point2D to hold the returned point. It can be the same object as location. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if location or point is null**Since:** 1.6

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/LayoutPath.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
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[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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