| | [**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/TextBalloon.html)   [**NEXT CLASS**](http://docs.google.com/TurlteDropTest.html) | [**FRAMES**](http://docs.google.com/index.html?ThoughtBalloon.html)    [**NO FRAMES**](http://docs.google.com/ThoughtBalloon.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#1t3h5sf) | [METHOD](#2s8eyo1) |

## Class ThoughtBalloon

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

public class **ThoughtBalloon**extends [TextBalloon](http://docs.google.com/TextBalloon.html)

ThoughtBalloon: this is used to represent objects in comic strips which are used to show what a character is thinking. The tip of tail points to the character who is doing the thinking

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| **Constructor Summary** | |
| --- | --- |
| [**ThoughtBalloon**](http://docs.google.com/ThoughtBalloon.html#ThoughtBalloon(java.awt.Point,%20int,%20java.awt.Point,%20java.lang.String))([Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) uLeft, int theWidth, [Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) tEnd, [String](http://java.sun.com/javase/6/docs/api/java/lang/String.html?is-external=true) theMessage)            Constructor that takes the upper left, width, tail end, and message to display |

| **Method Summary** | |
| --- | --- |
| [Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) | [**drawCircle**](http://docs.google.com/ThoughtBalloon.html#drawCircle(java.awt.Point,%20double,%20double,%20double,%20java.awt.Point,%20java.awt.Color,%20java.awt.Color,%20java.awt.Graphics2D))([Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) circleTop, double heading, double width, double distance, [Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) startPoint, [Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) fillColor, [Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) outlineColor, [Graphics2D](http://java.sun.com/javase/6/docs/api/java/awt/Graphics2D.html?is-external=true) g2)            Method to draw a circle of a given width |
| protected  void | [**drawTail**](http://docs.google.com/ThoughtBalloon.html#drawTail(int,%20java.awt.Color,%20java.awt.Color,%20java.awt.Graphics2D))(int ellipseHeight, [Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) fillColor, [Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) outlineColor, [Graphics2D](http://java.sun.com/javase/6/docs/api/java/awt/Graphics2D.html?is-external=true) g2)            Method to draw the thought ballon using the passed graphics context |
| static void | [**main**](http://docs.google.com/ThoughtBalloon.html#main(java.lang.String%5B%5D))([String](http://java.sun.com/javase/6/docs/api/java/lang/String.html?is-external=true)[] args) |

| **Methods inherited from class** [**TextBalloon**](http://docs.google.com/TextBalloon.html) |
| --- |
| [draw](http://docs.google.com/TextBalloon.html#draw(java.awt.Graphics)), [drawBalloon](http://docs.google.com/TextBalloon.html#drawBalloon(int,%20java.awt.Color,%20java.awt.Color,%20java.awt.Graphics2D)), [drawText](http://docs.google.com/TextBalloon.html#drawText(java.awt.font.LineBreakMeasurer,%20java.awt.Color,%20java.awt.Graphics2D)), [getAttrIterator](http://docs.google.com/TextBalloon.html#getAttrIterator()), [getFont](http://docs.google.com/TextBalloon.html#getFont()), [getHeight](http://docs.google.com/TextBalloon.html#getHeight(java.awt.Graphics2D,%20java.text.AttributedCharacterIterator)), [getMargin](http://docs.google.com/TextBalloon.html#getMargin()), [getMessage](http://docs.google.com/TextBalloon.html#getMessage()), [getNumLines](http://docs.google.com/TextBalloon.html#getNumLines()), [getTailEnd](http://docs.google.com/TextBalloon.html#getTailEnd()), [getUpperLeft](http://docs.google.com/TextBalloon.html#getUpperLeft()), [getWidth](http://docs.google.com/TextBalloon.html#getWidth()), [setFont](http://docs.google.com/TextBalloon.html#setFont(java.awt.Font)), [setMargin](http://docs.google.com/TextBalloon.html#setMargin(int)), [setMessage](http://docs.google.com/TextBalloon.html#setMessage(java.lang.String)), [setTailEnd](http://docs.google.com/TextBalloon.html#setTailEnd(java.awt.Point)), [setUpperLeft](http://docs.google.com/TextBalloon.html#setUpperLeft(java.awt.Point)), [setWidth](http://docs.google.com/TextBalloon.html#setWidth(int)) |

| **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** |
| --- |

### ThoughtBalloon

public **ThoughtBalloon**([Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) uLeft,  
 int theWidth,  
 [Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) tEnd,  
 [String](http://java.sun.com/javase/6/docs/api/java/lang/String.html?is-external=true) theMessage)

Constructor that takes the upper left, width, tail end, and message to display

**Parameters:**uLeft - the upper left corner of a rectangle enclosing the balloontheWidth - the width of the enclosing rectangletEnd - the point which is the end of the tail that shows who is speakingtheMessage - the message to display

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

### drawCircle

public [Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) **drawCircle**([Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) circleTop,  
 double heading,  
 double width,  
 double distance,  
 [Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) startPoint,  
 [Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) fillColor,  
 [Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) outlineColor,  
 [Graphics2D](http://java.sun.com/javase/6/docs/api/java/awt/Graphics2D.html?is-external=true) g2)

Method to draw a circle of a given width

**Parameters:**circleTop - the top point on the circleheading - the heading in degrees with 0 being northwidth - the width of the circledistance - the distance from the start pointstartPoint - the point to start the distance fromg2 - the 2d graphics context used for drawing **Returns:**a point on the circle at the given distance away from the start point

### drawTail

protected void **drawTail**(int ellipseHeight,  
 [Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) fillColor,  
 [Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) outlineColor,  
 [Graphics2D](http://java.sun.com/javase/6/docs/api/java/awt/Graphics2D.html?is-external=true) g2)

Method to draw the thought ballon using the passed graphics context

**Specified by:**[drawTail](http://docs.google.com/TextBalloon.html#drawTail(int,%20java.awt.Color,%20java.awt.Color,%20java.awt.Graphics2D)) in class [TextBalloon](http://docs.google.com/TextBalloon.html) **Parameters:**ellipseHeight - the height of the ellipsefillColor - the color to fill the tail withoutlineColor - the color to outline the tail withg2 - the 2D graphics context

### main

public static void **main**([String](http://java.sun.com/javase/6/docs/api/java/lang/String.html?is-external=true)[] args)

| | [**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/TextBalloon.html)   [**NEXT CLASS**](http://docs.google.com/TurlteDropTest.html) | [**FRAMES**](http://docs.google.com/index.html?ThoughtBalloon.html)    [**NO FRAMES**](http://docs.google.com/ThoughtBalloon.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#1t3h5sf) | [METHOD](#2s8eyo1) |