| | [**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   [**NEXT CLASS**](http://docs.google.com/AnimationPanel.html) | [**FRAMES**](http://docs.google.com/index.html?AbstractShape.html)    [**NO FRAMES**](http://docs.google.com/AbstractShape.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: [FIELD](#1t3h5sf) | [CONSTR](#lnxbz9) | [METHOD](#2jxsxqh) |

## Class AbstractShape

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

**Direct Known Subclasses:** [RectangleShape](http://docs.google.com/RectangleShape.html)

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

Class AbstractShape: abstract class for shapes that can be represented with 2 points Copyright Georgia Institute of Technology 2007

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| **Field Summary** | |
| --- | --- |
| protected  [Color](http://java.sun.com/javase/6/docs/api/java/awt/Color.html?is-external=true) | [**color**](http://docs.google.com/AbstractShape.html#color)            the color of this shape |
| static [String](http://java.sun.com/javase/6/docs/api/java/lang/String.html?is-external=true) | [**OVAL**](http://docs.google.com/AbstractShape.html#OVAL) |
| protected  [Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) | [**p1**](http://docs.google.com/AbstractShape.html#p1)            the first point in the shape |
| protected  [Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) | [**p2**](http://docs.google.com/AbstractShape.html#p2)            the second point in the shape |
| static [String](http://java.sun.com/javase/6/docs/api/java/lang/String.html?is-external=true) | [**RECTANGLE**](http://docs.google.com/AbstractShape.html#RECTANGLE) |

| **Constructor Summary** | |
| --- | --- |
| [**AbstractShape**](http://docs.google.com/AbstractShape.html#AbstractShape())()            Constructor that takes no arguments |
| [**AbstractShape**](http://docs.google.com/AbstractShape.html#AbstractShape(int,%20int,%20int,%20int))(int x1, int y1, int x2, int y2)            Constructor that takes x1,y1,x2,y2 |
| [**AbstractShape**](http://docs.google.com/AbstractShape.html#AbstractShape(java.awt.Point,%20java.awt.Point))([Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) firstPoint, [Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) secondPoint)            Constructor that takes the first and second point |

| **Method Summary** | |
| --- | --- |
| abstract  void | [**draw**](http://docs.google.com/AbstractShape.html#draw(java.awt.Graphics))([Graphics](http://java.sun.com/javase/6/docs/api/java/awt/Graphics.html?is-external=true) g)            Abstract method to draw the shape given the graphics context |
| int | [**getHeight**](http://docs.google.com/AbstractShape.html#getHeight())()            Method to get the height of the bounding rectangle |
| int | [**getMinX**](http://docs.google.com/AbstractShape.html#getMinX())()            Method to get minimum x value of the bounding rectangle |
| int | [**getMinY**](http://docs.google.com/AbstractShape.html#getMinY())()            Method to get the minimum y value of the bounding rectangle |
| int | [**getWidth**](http://docs.google.com/AbstractShape.html#getWidth())()            Method to get the width of the bounding rectangle |
| void | [**setPoint1Values**](http://docs.google.com/AbstractShape.html#setPoint1Values(int,%20int))(int newX, int newY)            Method to set the point values for point1 that defines the shape |
| void | [**setPoint2Values**](http://docs.google.com/AbstractShape.html#setPoint2Values(int,%20int))(int newX, int newY)            Method to set the point values for point2 that defines the shape |

| **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)) |

| **Field Detail** |
| --- |

### RECTANGLE

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

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#AbstractShape.RECTANGLE)

### OVAL

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

**See Also:**[Constant Field Values](http://docs.google.com/constant-values.html#AbstractShape.OVAL)

### color

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

the color of this shape

### p1

protected [Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) **p1**

the first point in the shape

### p2

protected [Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) **p2**

the second point in the shape

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

### AbstractShape

public **AbstractShape**()

Constructor that takes no arguments

### AbstractShape

public **AbstractShape**([Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) firstPoint,  
 [Point](http://java.sun.com/javase/6/docs/api/java/awt/Point.html?is-external=true) secondPoint)

Constructor that takes the first and second point

**Parameters:**firstPoint - the first point that defines the shapesecondPoint - the second point that defines the shape

### AbstractShape

public **AbstractShape**(int x1,  
 int y1,  
 int x2,  
 int y2)

Constructor that takes x1,y1,x2,y2

**Parameters:**x1 - x value of the first point that defines the shapey1 - y value of the first point that defines the shapex2 - x value of the second point that defines the shapey2 - y value of the second point that defines the shape

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

### getMinX

public int **getMinX**()

Method to get minimum x value of the bounding rectangle

**Returns:**the minimum x value of the two points that define the shape

### getMinY

public int **getMinY**()

Method to get the minimum y value of the bounding rectangle

**Returns:**the minimum y value of the two points that define the shape

### getWidth

public int **getWidth**()

Method to get the width of the bounding rectangle

**Returns:**the width of the bounding rectangle

### getHeight

public int **getHeight**()

Method to get the height of the bounding rectangle

**Returns:**the height of the bounding rectangle

### setPoint1Values

public void **setPoint1Values**(int newX,  
 int newY)

Method to set the point values for point1 that defines the shape

**Parameters:**newX - the new x value for point 1newY - the new y value for point 1

### setPoint2Values

public void **setPoint2Values**(int newX,  
 int newY)

Method to set the point values for point2 that defines the shape

**Parameters:**newX - the new x value for point 2newY - the new y value for point 2

### draw

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

Abstract method to draw the shape given the graphics context

**Parameters:**g - the graphics context to draw the shape on

| | [**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) | | --- | --- | --- | --- | --- | --- | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
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