| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/GrayFilter.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/javax/swing/FocusManager.html)   [**NEXT CLASS**](http://docs.google.com/javax/swing/GroupLayout.html) | [**FRAMES**](http://docs.google.com/index.html?javax/swing/GrayFilter.html)    [**NO FRAMES**](http://docs.google.com/GrayFilter.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#2et92p0) | [CONSTR](#1t3h5sf) | [METHOD](#4d34og8) | DETAIL: FIELD | [CONSTR](#26in1rg) | [METHOD](#35nkun2) |

## **javax.swing**

Class GrayFilter

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.awt.image.ImageFilter](http://docs.google.com/java/awt/image/ImageFilter.html)  
 [java.awt.image.RGBImageFilter](http://docs.google.com/java/awt/image/RGBImageFilter.html)  
 **javax.swing.GrayFilter**

**All Implemented Interfaces:** [ImageConsumer](http://docs.google.com/java/awt/image/ImageConsumer.html), [Cloneable](http://docs.google.com/java/lang/Cloneable.html)

public class **GrayFilter**extends [RGBImageFilter](http://docs.google.com/java/awt/image/RGBImageFilter.html)

An image filter that "disables" an image by turning it into a grayscale image, and brightening the pixels in the image. Used by buttons to create an image for a disabled button.

| **Field Summary** | |
| --- | --- |

| **Fields inherited from class java.awt.image.**[**RGBImageFilter**](http://docs.google.com/java/awt/image/RGBImageFilter.html) |
| --- |
| [canFilterIndexColorModel](http://docs.google.com/java/awt/image/RGBImageFilter.html#canFilterIndexColorModel), [newmodel](http://docs.google.com/java/awt/image/RGBImageFilter.html#newmodel), [origmodel](http://docs.google.com/java/awt/image/RGBImageFilter.html#origmodel) |

| **Fields inherited from class java.awt.image.**[**ImageFilter**](http://docs.google.com/java/awt/image/ImageFilter.html) |
| --- |
| [consumer](http://docs.google.com/java/awt/image/ImageFilter.html#consumer) |

| **Fields inherited from interface java.awt.image.**[**ImageConsumer**](http://docs.google.com/java/awt/image/ImageConsumer.html) |
| --- |
| [COMPLETESCANLINES](http://docs.google.com/java/awt/image/ImageConsumer.html#COMPLETESCANLINES), [IMAGEABORTED](http://docs.google.com/java/awt/image/ImageConsumer.html#IMAGEABORTED), [IMAGEERROR](http://docs.google.com/java/awt/image/ImageConsumer.html#IMAGEERROR), [RANDOMPIXELORDER](http://docs.google.com/java/awt/image/ImageConsumer.html#RANDOMPIXELORDER), [SINGLEFRAME](http://docs.google.com/java/awt/image/ImageConsumer.html#SINGLEFRAME), [SINGLEFRAMEDONE](http://docs.google.com/java/awt/image/ImageConsumer.html#SINGLEFRAMEDONE), [SINGLEPASS](http://docs.google.com/java/awt/image/ImageConsumer.html#SINGLEPASS), [STATICIMAGEDONE](http://docs.google.com/java/awt/image/ImageConsumer.html#STATICIMAGEDONE), [TOPDOWNLEFTRIGHT](http://docs.google.com/java/awt/image/ImageConsumer.html#TOPDOWNLEFTRIGHT) |

| **Constructor Summary** | |
| --- | --- |
| [**GrayFilter**](http://docs.google.com/javax/swing/GrayFilter.html#GrayFilter(boolean,%20int))(boolean b, int p)            Constructs a GrayFilter object that filters a color image to a grayscale image. |

| **Method Summary** | |
| --- | --- |
| static [Image](http://docs.google.com/java/awt/Image.html) | [**createDisabledImage**](http://docs.google.com/javax/swing/GrayFilter.html#createDisabledImage(java.awt.Image))([Image](http://docs.google.com/java/awt/Image.html) i)            Creates a disabled image |
| int | [**filterRGB**](http://docs.google.com/javax/swing/GrayFilter.html#filterRGB(int,%20int,%20int))(int x, int y, int rgb)            Overrides RGBImageFilter.filterRGB. |

| **Methods inherited from class java.awt.image.**[**RGBImageFilter**](http://docs.google.com/java/awt/image/RGBImageFilter.html) |
| --- |
| [filterIndexColorModel](http://docs.google.com/java/awt/image/RGBImageFilter.html#filterIndexColorModel(java.awt.image.IndexColorModel)), [filterRGBPixels](http://docs.google.com/java/awt/image/RGBImageFilter.html#filterRGBPixels(int,%20int,%20int,%20int,%20int%5B%5D,%20int,%20int)), [setColorModel](http://docs.google.com/java/awt/image/RGBImageFilter.html#setColorModel(java.awt.image.ColorModel)), [setPixels](http://docs.google.com/java/awt/image/RGBImageFilter.html#setPixels(int,%20int,%20int,%20int,%20java.awt.image.ColorModel,%20byte%5B%5D,%20int,%20int)), [setPixels](http://docs.google.com/java/awt/image/RGBImageFilter.html#setPixels(int,%20int,%20int,%20int,%20java.awt.image.ColorModel,%20int%5B%5D,%20int,%20int)), [substituteColorModel](http://docs.google.com/java/awt/image/RGBImageFilter.html#substituteColorModel(java.awt.image.ColorModel,%20java.awt.image.ColorModel)) |

| **Methods inherited from class java.awt.image.**[**ImageFilter**](http://docs.google.com/java/awt/image/ImageFilter.html) |
| --- |
| [clone](http://docs.google.com/java/awt/image/ImageFilter.html#clone()), [getFilterInstance](http://docs.google.com/java/awt/image/ImageFilter.html#getFilterInstance(java.awt.image.ImageConsumer)), [imageComplete](http://docs.google.com/java/awt/image/ImageFilter.html#imageComplete(int)), [resendTopDownLeftRight](http://docs.google.com/java/awt/image/ImageFilter.html#resendTopDownLeftRight(java.awt.image.ImageProducer)), [setDimensions](http://docs.google.com/java/awt/image/ImageFilter.html#setDimensions(int,%20int)), [setHints](http://docs.google.com/java/awt/image/ImageFilter.html#setHints(int)), [setProperties](http://docs.google.com/java/awt/image/ImageFilter.html#setProperties(java.util.Hashtable)) |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [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** |
| --- |

### GrayFilter

public **GrayFilter**(boolean b,  
 int p)

Constructs a GrayFilter object that filters a color image to a grayscale image. Used by buttons to create disabled ("grayed out") button images.

**Parameters:**b - a boolean -- true if the pixels should be brightenedp - an int in the range 0..100 that determines the percentage of gray, where 100 is the darkest gray, and 0 is the lightest

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

### createDisabledImage

public static [Image](http://docs.google.com/java/awt/Image.html) **createDisabledImage**([Image](http://docs.google.com/java/awt/Image.html) i)

Creates a disabled image

### filterRGB

public int **filterRGB**(int x,  
 int y,  
 int rgb)

Overrides RGBImageFilter.filterRGB.

**Specified by:**[filterRGB](http://docs.google.com/java/awt/image/RGBImageFilter.html#filterRGB(int,%20int,%20int)) in class [RGBImageFilter](http://docs.google.com/java/awt/image/RGBImageFilter.html) **Parameters:**x - the X coordinate of the pixely - the Y coordinate of the pixelrgb - the integer pixel representation in the default RGB color model **Returns:**a filtered pixel in the default RGB color model.**See Also:**[ColorModel.getRGBdefault()](http://docs.google.com/java/awt/image/ColorModel.html#getRGBdefault()), [RGBImageFilter.filterRGBPixels(int, int, int, int, int[], int, int)](http://docs.google.com/java/awt/image/RGBImageFilter.html#filterRGBPixels(int,%20int,%20int,%20int,%20int%5B%5D,%20int,%20int))

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/GrayFilter.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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