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

[A](#3znysh7) [B](#2et92p0) [C](#tyjcwt) [D](#3dy6vkm) [E](#1t3h5sf) [F](#4d34og8) [G](#2s8eyo1) [H](#17dp8vu) [I](#3rdcrjn) [J](#26in1rg) [L](#lnxbz9) [M](#35nkun2) [N](#1ksv4uv) [O](#44sinio) [P](#2jxsxqh) [Q](#z337ya) [R](#3j2qqm3) [S](#1y810tw) [T](#4i7ojhp) [U](#2xcytpi) [V](#1ci93xb) [W](#3whwml4) [X](#2bn6wsx) [Z](#qsh70q)

## **A**

[**AbstractShape**](http://docs.google.com/AbstractShape.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class AbstractShape: abstract class for shapes that can be represented with 2 points Copyright Georgia Institute of Technology 2007[**AbstractShape()**](http://docs.google.com/AbstractShape.html#AbstractShape()) - Constructor for class [AbstractShape](http://docs.google.com/AbstractShape.html) Constructor that takes no arguments [**AbstractShape(Point, Point)**](http://docs.google.com/AbstractShape.html#AbstractShape(java.awt.Point,%20java.awt.Point)) - Constructor for class [AbstractShape](http://docs.google.com/AbstractShape.html) Constructor that takes the first and second point [**AbstractShape(int, int, int, int)**](http://docs.google.com/AbstractShape.html#AbstractShape(int,%20int,%20int,%20int)) - Constructor for class [AbstractShape](http://docs.google.com/AbstractShape.html) Constructor that takes x1,y1,x2,y2 [**act()**](http://docs.google.com/Deer.html#act()) - Method in class [Deer](http://docs.google.com/Deer.html) Method to act during a time step pick a random direction and move some random amount up to top speed [**act()**](http://docs.google.com/Wolf.html#act()) - Method in class [Wolf](http://docs.google.com/Wolf.html) Method to act during a time step pick a random direction and move some random amount up to top speed [**actionPerformed(ActionEvent)**](http://docs.google.com/PictureExplorer.html#actionPerformed(java.awt.event.ActionEvent)) - Method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Controls the zoom menu bar [**actionPerformed(ActionEvent)**](http://docs.google.com/SoundExplorer.html#actionPerformed(java.awt.event.ActionEvent)) - Method in class [SoundExplorer](http://docs.google.com/SoundExplorer.html) Method to handle an action event [**add(Picture)**](http://docs.google.com/AnimationPanel.html#add(Picture)) - Method in class [AnimationPanel](http://docs.google.com/AnimationPanel.html) Method to add a picture [**add(TextBalloon)**](http://docs.google.com/ComicPanel.html#add(TextBalloon)) - Method in class [ComicPanel](http://docs.google.com/ComicPanel.html) Method to add a text balloon to the panel [**add(AbstractShape)**](http://docs.google.com/ShapeComponent.html#add(AbstractShape)) - Method in class [ShapeComponent](http://docs.google.com/ShapeComponent.html) Method to add a shape to the shape vector [**addFrame(Picture)**](http://docs.google.com/FrameSequencer.html#addFrame(Picture)) - Method in class [FrameSequencer](http://docs.google.com/FrameSequencer.html) Method to add a picture to the frame sequence [**addMessage(String, int, int)**](http://docs.google.com/SimplePicture.html#addMessage(java.lang.String,%20int,%20int)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to draw a message as a string on the buffered image [**addModel(Object)**](http://docs.google.com/ModelDisplay.html#addModel(java.lang.Object)) - Method in interface [ModelDisplay](http://docs.google.com/ModelDisplay.html) method to add the model to the world [**addModel(Object)**](http://docs.google.com/World.html#addModel(java.lang.Object)) - Method in class [World](http://docs.google.com/World.html) Method to add a model to this model displayer [**addMove(int, int, int, int)**](http://docs.google.com/Pen.html#addMove(int,%20int,%20int,%20int)) - Method in class [Pen](http://docs.google.com/Pen.html) Method to add a path segment if the pen is down [**addNewLines(String)**](http://docs.google.com/SimpleOutput.html#addNewLines(java.lang.String)) - Static method in class [SimpleOutput](http://docs.google.com/SimpleOutput.html) Method to add new line character if the message is too long [**addPicture(Picture)**](http://docs.google.com/MoviePlayer.html#addPicture(Picture)) - Method in class [MoviePlayer](http://docs.google.com/MoviePlayer.html) Method to add a picture to the movie [**addWordBalloon(String, int, int)**](http://docs.google.com/Cartoon.html#addWordBalloon(java.lang.String,%20int,%20int)) - Method in class [Cartoon](http://docs.google.com/Cartoon.html) Method to add a word balloon that contians the message [**alaw2linear(byte)**](http://docs.google.com/TConversionTool.html#alaw2linear(byte)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html)   [**ALTO\_SAX**](http://docs.google.com/MidiPlayer.html#ALTO_SAX) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**AnimationPanel**](http://docs.google.com/AnimationPanel.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class to show a frame-based animation Copyright Georgia Institute of Technology 2007[**AnimationPanel()**](http://docs.google.com/AnimationPanel.html#AnimationPanel()) - Constructor for class [AnimationPanel](http://docs.google.com/AnimationPanel.html) Constructor that takes no parameters [**AnimationPanel(List<Picture>)**](http://docs.google.com/AnimationPanel.html#AnimationPanel(java.util.List)) - Constructor for class [AnimationPanel](http://docs.google.com/AnimationPanel.html) Constructor that takes a list of pictures [**AnimationPanel(String)**](http://docs.google.com/AnimationPanel.html#AnimationPanel(java.lang.String)) - Constructor for class [AnimationPanel](http://docs.google.com/AnimationPanel.html) Constructor that takes the directory to read the frames from [**AnimationPanel(String, int)**](http://docs.google.com/AnimationPanel.html#AnimationPanel(java.lang.String,%20int)) - Constructor for class [AnimationPanel](http://docs.google.com/AnimationPanel.html) Constructor that takes the directory to read from and the number of frames per second [**APPLAUSE**](http://docs.google.com/MidiPlayer.html#APPLAUSE) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**ArraySorter**](http://docs.google.com/ArraySorter.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class ArraySorter has an array and can do different sorts on it[**ArraySorter(int[])**](http://docs.google.com/ArraySorter.html#ArraySorter(int%5B%5D)) - Constructor for class [ArraySorter](http://docs.google.com/ArraySorter.html) Constructor that takes the array to sort [**asArray()**](http://docs.google.com/SimpleSound.html#asArray()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method to return the byte array

## **B**

[**backward()**](http://docs.google.com/SimpleTurtle.html#backward()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to go backward by 100 pixels [**backward(int)**](http://docs.google.com/SimpleTurtle.html#backward(int)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to go backward a given number of pixels [**BASS**](http://docs.google.com/MidiPlayer.html#BASS) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**binaryFind(String, String[])**](http://docs.google.com/Searcher.html#binaryFind(java.lang.String,%20java.lang.String%5B%5D)) - Static method in class [Searcher](http://docs.google.com/Searcher.html) Method to use a binary search to find a target string in a sorted array of strings [**BIRD**](http://docs.google.com/MidiPlayer.html#BIRD) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**blockingPlay()**](http://docs.google.com/SimpleSound.html#blockingPlay()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Plays the sound, then sleeps for how long the sound SHOULD last. [**blockingPlayAtRateDur(double, double)**](http://docs.google.com/SimpleSound.html#blockingPlayAtRateDur(double,%20double)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) First, checks the value of durInFrames to make sure that it is not larger than Integer.MAX\_VALUE to guarrantee safe casting. [**blockingPlayAtRateInRange(float, int, int)**](http://docs.google.com/SimpleSound.html#blockingPlayAtRateInRange(float,%20int,%20int)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Calls playAtRateInRange(rate, startFrame, endFrame, true) . [**blockingPlayOld()**](http://docs.google.com/SimpleSound.html#blockingPlayOld()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Creates a new Playback thread, starts it, then waits for the entire sound to finish playing before it returns. [**ButtonPanel**](http://docs.google.com/ButtonPanel.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that holds the buttons for the movie player[**ButtonPanel(MoviePlayer)**](http://docs.google.com/ButtonPanel.html#ButtonPanel(MoviePlayer)) - Constructor for class [ButtonPanel](http://docs.google.com/ButtonPanel.html) Constructor that doesn't take any parameters [**bytesToInt16(byte[], int, boolean)**](http://docs.google.com/TConversionTool.html#bytesToInt16(byte%5B%5D,%20int,%20boolean)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html) Converts 2 successive bytes starting at byteOffset in buffer to a signed integer sample with 16bit range. [**bytesToInt24(byte[], int, boolean)**](http://docs.google.com/TConversionTool.html#bytesToInt24(byte%5B%5D,%20int,%20boolean)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html) Converts 3 successive bytes starting at byteOffset in buffer to a signed integer sample with 24bit range. [**bytesToInt32(byte[], int, boolean)**](http://docs.google.com/TConversionTool.html#bytesToInt32(byte%5B%5D,%20int,%20boolean)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html) Converts a 4 successive bytes starting at byteOffset in buffer to a signed 32bit integer sample.

## **C**

[**CaptureButtonPanel**](http://docs.google.com/CaptureButtonPanel.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class ButtonPanel: holds buttons for video capture Copyright Georgia Institute of Technology 2005[**CaptureButtonPanel()**](http://docs.google.com/CaptureButtonPanel.html#CaptureButtonPanel()) - Constructor for class [CaptureButtonPanel](http://docs.google.com/CaptureButtonPanel.html) A constructor that takes no arguments [**CaptureButtonPanel(VideoCapturer, RegionInterface)**](http://docs.google.com/CaptureButtonPanel.html#CaptureButtonPanel(VideoCapturer,%20RegionInterface)) - Constructor for class [CaptureButtonPanel](http://docs.google.com/CaptureButtonPanel.html) A constructor that takes the object that handles the video capture and the object that handles the region selection [**captureMovie()**](http://docs.google.com/MovieCapturer.html#captureMovie()) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to capture a movie until the done flag is set to true [**captureMovie(int)**](http://docs.google.com/MovieCapturer.html#captureMovie(int)) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to capture a movie for the passed number of seconds [**captureMovie(int, int, int, int)**](http://docs.google.com/MovieCapturer.html#captureMovie(int,%20int,%20int,%20int)) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to capture a movie until the done flag is set to true [**captureMovie(int, int, int, int, int)**](http://docs.google.com/MovieCapturer.html#captureMovie(int,%20int,%20int,%20int,%20int)) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to capture a movie in a rectangular region for the passed number of seconds [**captureMovie()**](http://docs.google.com/StartMovieCapture.html#captureMovie()) - Method in class [StartMovieCapture](http://docs.google.com/StartMovieCapture.html) Method to capture a movie until the stop method is called and sets the active thread to null [**capturePicture()**](http://docs.google.com/StartMovieCapture.html#capturePicture()) - Method in class [StartMovieCapture](http://docs.google.com/StartMovieCapture.html) Method to capture a picture [**captureRegion(int, int, int, int)**](http://docs.google.com/MovieCapturer.html#captureRegion(int,%20int,%20int,%20int)) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to capture a part of the screen [**captureRegion()**](http://docs.google.com/MovieCapturer.html#captureRegion()) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to capture a region of the screen [**captureScreen()**](http://docs.google.com/MovieCapturer.html#captureScreen()) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to capture the entire screen [**captureScreen()**](http://docs.google.com/VideoCapturer.html#captureScreen()) - Method in interface [VideoCapturer](http://docs.google.com/VideoCapturer.html) Method that captures the screen [**Cartoon**](http://docs.google.com/Cartoon.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class to create a cartoon out of a picture[**Cartoon(Picture)**](http://docs.google.com/Cartoon.html#Cartoon(Picture)) - Constructor for class [Cartoon](http://docs.google.com/Cartoon.html) Constructor that takes the picture [**CELLO**](http://docs.google.com/MidiPlayer.html#CELLO) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**changeToBaseOne()**](http://docs.google.com/PictureExplorer.html#changeToBaseOne()) - Method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Changes the number system to start at one [**checkScroll()**](http://docs.google.com/PictureExplorer.html#checkScroll()) - Method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Method to check that the current position is in the viewing area and if not scroll to center the current position if possible [**checkScroll()**](http://docs.google.com/SoundExplorer.html#checkScroll()) - Method in class [SoundExplorer](http://docs.google.com/SoundExplorer.html) Method to check that the current position is in the viewing area and if not scroll to center the current position if possible [**CLARINET**](http://docs.google.com/MidiPlayer.html#CLARINET) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**cleanUp()**](http://docs.google.com/MidiPlayer.html#cleanUp()) - Method in class [MidiPlayer](http://docs.google.com/MidiPlayer.html) Method to clean up the midi player [**clearBackground()**](http://docs.google.com/ModelDisplay.html#clearBackground()) - Method in interface [ModelDisplay](http://docs.google.com/ModelDisplay.html) Method to clear the background [**clearBackground()**](http://docs.google.com/World.html#clearBackground()) - Method in class [World](http://docs.google.com/World.html) Method to clear the background picture [**clearPath()**](http://docs.google.com/Pen.html#clearPath()) - Method in class [Pen](http://docs.google.com/Pen.html) Method to clear the path stored for this pen [**clearPath()**](http://docs.google.com/SimpleTurtle.html#clearPath()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to clear the path (history of where the turtle has been) [**clearShapes()**](http://docs.google.com/RegionInterface.html#clearShapes()) - Method in interface [RegionInterface](http://docs.google.com/RegionInterface.html) Method to clear the picked region (a shape) [**clearShapes()**](http://docs.google.com/ShapeComponent.html#clearShapes()) - Method in class [ShapeComponent](http://docs.google.com/ShapeComponent.html) Clear all shapes out of the shape vector [**close()**](http://docs.google.com/MidiPlayer.html#close()) - Method in class [MidiPlayer](http://docs.google.com/MidiPlayer.html) Method to close the midi player [**close()**](http://docs.google.com/PictureFrame.html#close()) - Method in class [PictureFrame](http://docs.google.com/PictureFrame.html) A method to close a picture frame [**color**](http://docs.google.com/AbstractShape.html#color) - Variable in class [AbstractShape](http://docs.google.com/AbstractShape.html) the color of this shape [**colorArray**](http://docs.google.com/ColorSquares.html#colorArray) - Variable in class [ColorSquares](http://docs.google.com/ColorSquares.html)   [**ColorChooser**](http://docs.google.com/ColorChooser.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)A class to make working with a color chooser easier for students.[**ColorChooser()**](http://docs.google.com/ColorChooser.html#ColorChooser()) - Constructor for class [ColorChooser](http://docs.google.com/ColorChooser.html)   [**colorDistance(Color)**](http://docs.google.com/Pixel.html#colorDistance(java.awt.Color)) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to get the distance between this pixel's color and the passed color [**colorDistance(Color, Color)**](http://docs.google.com/Pixel.html#colorDistance(java.awt.Color,%20java.awt.Color)) - Static method in class [Pixel](http://docs.google.com/Pixel.html) Method to compute the color distances between two color objects [**ColorSquares**](http://docs.google.com/ColorSquares.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that demonstrates creating buttons with different colors in a panel[**ColorSquares()**](http://docs.google.com/ColorSquares.html#ColorSquares()) - Constructor for class [ColorSquares](http://docs.google.com/ColorSquares.html) Constructor that takes no arguments [**ComicPanel**](http://docs.google.com/ComicPanel.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class to create a comic panel.[**ComicPanel(Picture)**](http://docs.google.com/ComicPanel.html#ComicPanel(Picture)) - Constructor for class [ComicPanel](http://docs.google.com/ComicPanel.html) Constructor that takes just the picture to use [**ComicStrip**](http://docs.google.com/ComicStrip.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class to display a comic strip.[**ComicStrip(String, String, ComicPanel[])**](http://docs.google.com/ComicStrip.html#ComicStrip(java.lang.String,%20java.lang.String,%20ComicPanel%5B%5D)) - Constructor for class [ComicStrip](http://docs.google.com/ComicStrip.html) Constructor that takes the name, author, and an array of panels [**connect()**](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html#connect()) - Method in class [JpegImagesToMovie.ImageDataSource](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html)   [**containsTurtle(Turtle)**](http://docs.google.com/World.html#containsTurtle(Turtle)) - Method in class [World](http://docs.google.com/World.html) Method to check if this world contains the passed turtle [**controllerUpdate(ControllerEvent)**](http://docs.google.com/JpegImagesToMovie.html#controllerUpdate(javax.media.ControllerEvent)) - Method in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html) Controller Listener. [**convert(String, String)**](http://docs.google.com/SimpleSound.html#convert(java.lang.String,%20java.lang.String)) - Static method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method to convert a mp3 sound into a wav sound [**copyPicture(SimplePicture)**](http://docs.google.com/SimplePicture.html#copyPicture(SimplePicture)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method that will copy all of the passed source picture into the current picture object [**createDataSink(Processor, MediaLocator)**](http://docs.google.com/JpegImagesToMovie.html#createDataSink(javax.media.Processor,%20javax.media.MediaLocator)) - Method in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html) Create the DataSink. [**createGraphics()**](http://docs.google.com/SimplePicture.html#createGraphics()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to get a Graphics2D object for this picture which can be used to do 2D drawing on the picture [**createLocationPanel(Font)**](http://docs.google.com/PictureExplorer.html#createLocationPanel(java.awt.Font)) - Method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Create the pixel location panel [**createMediaLocator(String)**](http://docs.google.com/JpegImagesToMovie.html#createMediaLocator(java.lang.String)) - Static method in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html) Create a media locator from the given string.

## **D**

[**DatabaseManager**](http://docs.google.com/DatabaseManager.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that handles the connection with the database[**DatabaseManager(String, String)**](http://docs.google.com/DatabaseManager.html#DatabaseManager(java.lang.String,%20java.lang.String)) - Constructor for class [DatabaseManager](http://docs.google.com/DatabaseManager.html) Constructor that takes the driver name and url [**dataSinkUpdate(DataSinkEvent)**](http://docs.google.com/JpegImagesToMovie.html#dataSinkUpdate(javax.media.datasink.DataSinkEvent)) - Method in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html) Event handler for the file writer. [**Deer**](http://docs.google.com/Deer.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that represents a deer.[**Deer(ModelDisplay)**](http://docs.google.com/Deer.html#Deer(ModelDisplay)) - Constructor for class [Deer](http://docs.google.com/Deer.html) Constructor that takes the model display (the original position will be randomally assigned [**Deer(int, int, ModelDisplay)**](http://docs.google.com/Deer.html#Deer(int,%20int,%20ModelDisplay)) - Constructor for class [Deer](http://docs.google.com/Deer.html) Constructor that takes the x and y and a model display to draw it on [**delAllAfter()**](http://docs.google.com/MoviePlayer.html#delAllAfter()) - Method in class [MoviePlayer](http://docs.google.com/MoviePlayer.html) Method to delete all the frames after the current one [**delAllBefore()**](http://docs.google.com/MoviePlayer.html#delAllBefore()) - Method in class [MoviePlayer](http://docs.google.com/MoviePlayer.html) Method to delete all the frames before the current one [**deleteLastFrame()**](http://docs.google.com/FrameSequencer.html#deleteLastFrame()) - Method in class [FrameSequencer](http://docs.google.com/FrameSequencer.html) Method to delete the last frame [**die()**](http://docs.google.com/Deer.html#die()) - Method in class [Deer](http://docs.google.com/Deer.html) Method that handles when a deer dies [**DigitalPicture**](http://docs.google.com/DigitalPicture.html) - Interface in [<Unnamed>](http://docs.google.com/package-summary.html)Interface to describe a digital picture.[**disconnect()**](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html#disconnect()) - Method in class [JpegImagesToMovie.ImageDataSource](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html)   [**displayImage()**](http://docs.google.com/PictureFrame.html#displayImage()) - Method in class [PictureFrame](http://docs.google.com/PictureFrame.html) A method to make sure the frame is displayed [**displayPixelInformation(String, String)**](http://docs.google.com/PictureExplorer.html#displayPixelInformation(java.lang.String,%20java.lang.String)) - Method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Method to display the pixel information from the passed x and y but also converts x and y from strings [**doIt(int, int, int, List<String>, MediaLocator, String)**](http://docs.google.com/JpegImagesToMovie.html#doIt(int,%20int,%20int,%20java.util.List,%20javax.media.MediaLocator,%20java.lang.String)) - Method in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html) Method to write out the movie for a given type [**doItAVI(int, int, int, List<String>, String)**](http://docs.google.com/JpegImagesToMovie.html#doItAVI(int,%20int,%20int,%20java.util.List,%20java.lang.String)) - Method in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html) Method to write out an AVI movie [**doItAVI(int, int, int, List<String>, MediaLocator)**](http://docs.google.com/JpegImagesToMovie.html#doItAVI(int,%20int,%20int,%20java.util.List,%20javax.media.MediaLocator)) - Method in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html) Method to write out an AVI movie [**doItAVI(int, int, int, List<String>, MediaLocator, String)**](http://docs.google.com/JpegImagesToMovie.html#doItAVI(int,%20int,%20int,%20java.util.List,%20javax.media.MediaLocator,%20java.lang.String)) - Method in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html) Method to write out the movie for an AVI movie [**doItQuicktime(int, int, int, List<String>, MediaLocator)**](http://docs.google.com/JpegImagesToMovie.html#doItQuicktime(int,%20int,%20int,%20java.util.List,%20javax.media.MediaLocator)) - Method in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html) Method to write out a quicktime movie [**doItQuicktime(int, int, int, List<String>, String)**](http://docs.google.com/JpegImagesToMovie.html#doItQuicktime(int,%20int,%20int,%20java.util.List,%20java.lang.String)) - Method in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html) Method to write out a quicktime movie [**draw(Graphics)**](http://docs.google.com/AbstractShape.html#draw(java.awt.Graphics)) - Method in class [AbstractShape](http://docs.google.com/AbstractShape.html) Abstract method to draw the shape given the graphics context [**draw(Graphics)**](http://docs.google.com/AnimationPanel.html#draw(java.awt.Graphics)) - Method in class [AnimationPanel](http://docs.google.com/AnimationPanel.html) Method to paint the frames [**draw(Graphics)**](http://docs.google.com/RectangleShape.html#draw(java.awt.Graphics)) - Method in class [RectangleShape](http://docs.google.com/RectangleShape.html) Draw the shape [**draw(Graphics)**](http://docs.google.com/TextBalloon.html#draw(java.awt.Graphics)) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to draw the text ballon using the passed graphics context [**drawBalloon(int, Color, Color, Graphics2D)**](http://docs.google.com/TextBalloon.html#drawBalloon(int,%20java.awt.Color,%20java.awt.Color,%20java.awt.Graphics2D)) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to draw the speech balloon [**drawCircle(Point, double, double, double, Point, Color, Color, Graphics2D)**](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)) - Method in class [ThoughtBalloon](http://docs.google.com/ThoughtBalloon.html) Method to draw a circle of a given width [**drawInfoString(Graphics)**](http://docs.google.com/SimpleTurtle.html#drawInfoString(java.awt.Graphics)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to draw the information string [**drawString(String, int, int)**](http://docs.google.com/SimplePicture.html#drawString(java.lang.String,%20int,%20int)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to draw a string at the given location on the picture [**drawTail(int, Color, Color, Graphics2D)**](http://docs.google.com/SpeechBalloon.html#drawTail(int,%20java.awt.Color,%20java.awt.Color,%20java.awt.Graphics2D)) - Method in class [SpeechBalloon](http://docs.google.com/SpeechBalloon.html) method to draw the tail of the balloon [**drawTail(int, Color, Color, Graphics2D)**](http://docs.google.com/TextBalloon.html#drawTail(int,%20java.awt.Color,%20java.awt.Color,%20java.awt.Graphics2D)) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to draw the tail of the balloon [**drawTail(int, Color, Color, Graphics2D)**](http://docs.google.com/ThoughtBalloon.html#drawTail(int,%20java.awt.Color,%20java.awt.Color,%20java.awt.Graphics2D)) - Method in class [ThoughtBalloon](http://docs.google.com/ThoughtBalloon.html) Method to draw the thought ballon using the passed graphics context [**drawText(LineBreakMeasurer, Color, Graphics2D)**](http://docs.google.com/TextBalloon.html#drawText(java.awt.font.LineBreakMeasurer,%20java.awt.Color,%20java.awt.Graphics2D)) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to draw the text in the balloon [**drop(Picture)**](http://docs.google.com/SimpleTurtle.html#drop(Picture)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to draw a passed picture at the current turtle location and rotation in a picture or model display

## **E**

[**ended**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#ended) - Variable in class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html)   [**endOfStream()**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#endOfStream()) - Method in class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html)   [**explore()**](http://docs.google.com/SimplePicture.html#explore()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to open a picture explorer on a copy of this simple picture [**explore()**](http://docs.google.com/SimpleSound.html#explore()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method to open a sound viewer on a copy of this sound

## **F**

[**FileChooser**](http://docs.google.com/FileChooser.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)A class to make working with a file chooser easier for students.[**FileChooser()**](http://docs.google.com/FileChooser.html#FileChooser()) - Constructor for class [FileChooser](http://docs.google.com/FileChooser.html)   [**fileDone**](http://docs.google.com/JpegImagesToMovie.html#fileDone) - Variable in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html)   [**fileSuccess**](http://docs.google.com/JpegImagesToMovie.html#fileSuccess) - Variable in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html)   [**FLUTE**](http://docs.google.com/MidiPlayer.html#FLUTE) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**format**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#format) - Variable in class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html)   [**forward()**](http://docs.google.com/SimpleTurtle.html#forward()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to move the turtle foward 100 pixels [**forward(int)**](http://docs.google.com/SimpleTurtle.html#forward(int)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to move the turtle forward the given number of pixels [**frame**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#frame) - Variable in class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html)   [**frame**](http://docs.google.com/PictureFrame.html#frame) - Variable in class [PictureFrame](http://docs.google.com/PictureFrame.html) Main window used as the frame [**FrameSequencer**](http://docs.google.com/FrameSequencer.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class used to save frames in a movie to a directory and show frames from a movie.[**FrameSequencer(String)**](http://docs.google.com/FrameSequencer.html#FrameSequencer(java.lang.String)) - Constructor for class [FrameSequencer](http://docs.google.com/FrameSequencer.html) Constructor that takes a directory name [**FrameSequencer(String, String)**](http://docs.google.com/FrameSequencer.html#FrameSequencer(java.lang.String,%20java.lang.String)) - Constructor for class [FrameSequencer](http://docs.google.com/FrameSequencer.html) Constructor that takes a directory name and a base file name [**FRENCH\_HORN**](http://docs.google.com/MidiPlayer.html#FRENCH_HORN) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)  

## **G**

[**Geometry**](http://docs.google.com/Geometry.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class to hold methods for doing simple geometry All methods are static (class) methods.[**Geometry()**](http://docs.google.com/Geometry.html#Geometry()) - Constructor for class [Geometry](http://docs.google.com/Geometry.html)   [**getAlpha()**](http://docs.google.com/Pixel.html#getAlpha()) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to get the amount of alpha (transparency) at this pixel. [**getAttrIterator()**](http://docs.google.com/TextBalloon.html#getAttrIterator()) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to get the attributed character iterator used to display the text [**getAudioFileFormat()**](http://docs.google.com/SimpleSound.html#getAudioFileFormat()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method that returns the AudioFileFormat describing this simple sound. [**getAverage()**](http://docs.google.com/Pixel.html#getAverage()) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to get the average of the colors of this pixel [**getBaseName()**](http://docs.google.com/FrameSequencer.html#getBaseName()) - Method in class [FrameSequencer](http://docs.google.com/FrameSequencer.html) Method to get the base name [**getBasicPixel(int, int)**](http://docs.google.com/DigitalPicture.html#getBasicPixel(int,%20int)) - Method in interface [DigitalPicture](http://docs.google.com/DigitalPicture.html)   [**getBasicPixel(int, int)**](http://docs.google.com/SimplePicture.html#getBasicPixel(int,%20int)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to return the pixel value as an int for the given x and y location [**getBlue()**](http://docs.google.com/Pixel.html#getBlue()) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to get the amount of blue at this pixel. [**getBlue(int)**](http://docs.google.com/Pixel.html#getBlue(int)) - Static method in class [Pixel](http://docs.google.com/Pixel.html) Method to get the blue value from a pixel represented as an int [**getBodyColor()**](http://docs.google.com/SimpleTurtle.html#getBodyColor()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to get the body color [**getBuffer()**](http://docs.google.com/SimpleSound.html#getBuffer()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method that returns the byte array representation of this simple sound. [**getBufferedImage()**](http://docs.google.com/DigitalPicture.html#getBufferedImage()) - Method in interface [DigitalPicture](http://docs.google.com/DigitalPicture.html)   [**getBufferedImage()**](http://docs.google.com/SimplePicture.html#getBufferedImage()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to get the buffered image [**getChannels()**](http://docs.google.com/SimpleSound.html#getChannels()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Obtains the number of channels of this sound. [**getClosestDeer(double)**](http://docs.google.com/Wolf.html#getClosestDeer(double)) - Method in class [Wolf](http://docs.google.com/Wolf.html) Method to get the closest deer within the passed distance to this wolf [**getColor()**](http://docs.google.com/Pen.html#getColor()) - Method in class [Pen](http://docs.google.com/Pen.html) Method to get the pen (ink) color [**getColor()**](http://docs.google.com/Pixel.html#getColor()) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to get a color object that represents the color at this pixel. [**getContentDescriptor()**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#getContentDescriptor()) - Method in class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html)   [**getContentLength()**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#getContentLength()) - Method in class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html)   [**getContentType()**](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html#getContentType()) - Method in class [JpegImagesToMovie.ImageDataSource](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html) Content type is of RAW since we are sending buffers of video frames without a container format. [**getControl(String)**](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html#getControl(java.lang.String)) - Method in class [JpegImagesToMovie.ImageDataSource](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html)   [**getControl(String)**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#getControl(java.lang.String)) - Method in class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html)   [**getControls()**](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html#getControls()) - Method in class [JpegImagesToMovie.ImageDataSource](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html)   [**getControls()**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#getControls()) - Method in class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html)   [**getCurrentX()**](http://docs.google.com/ImageDisplay.html#getCurrentX()) - Method in class [ImageDisplay](http://docs.google.com/ImageDisplay.html) Method to get the current x [**getCurrentY()**](http://docs.google.com/ImageDisplay.html#getCurrentY()) - Method in class [ImageDisplay](http://docs.google.com/ImageDisplay.html) Method to get the current y [**getCurrIndex()**](http://docs.google.com/AnimationPanel.html#getCurrIndex()) - Method in class [AnimationPanel](http://docs.google.com/AnimationPanel.html) Method to get the current index [**getDEBUG()**](http://docs.google.com/SimpleSound.html#getDEBUG()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method to get the value of the debug flag [**getDirectory()**](http://docs.google.com/FrameSequencer.html#getDirectory()) - Method in class [FrameSequencer](http://docs.google.com/FrameSequencer.html) Method to get the directory to write the frames to [**getDirectory(String)**](http://docs.google.com/SimpleInput.html#getDirectory(java.lang.String)) - Static method in class [SimpleInput](http://docs.google.com/SimpleInput.html) Method to get the name of a directory [**getDistance(double, double, double, double)**](http://docs.google.com/Geometry.html#getDistance(double,%20double,%20double,%20double)) - Static method in class [Geometry](http://docs.google.com/Geometry.html) Method to get the distance between two points [**getDistance(int, int)**](http://docs.google.com/SimpleTurtle.html#getDistance(int,%20int)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Get the distance from the passed x and y location [**getDuration()**](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html#getDuration()) - Method in class [JpegImagesToMovie.ImageDataSource](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html) We could have derived the duration from the number of frames and frame rate. [**getExtension()**](http://docs.google.com/SimplePicture.html#getExtension()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to get the extension for this picture [**getFileName()**](http://docs.google.com/DigitalPicture.html#getFileName()) - Method in interface [DigitalPicture](http://docs.google.com/DigitalPicture.html)   [**getFileName()**](http://docs.google.com/SimplePicture.html#getFileName()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to get the file name associated with the picture [**getFileName()**](http://docs.google.com/SimpleSound.html#getFileName()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method that returns the name of the file this sound came from. [**getFinalPicture()**](http://docs.google.com/ComicPanel.html#getFinalPicture()) - Method in class [ComicPanel](http://docs.google.com/ComicPanel.html)   [**getFont()**](http://docs.google.com/TextBalloon.html#getFont()) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to get the font used to display the message [**getFormat()**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#getFormat()) - Method in class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html) Return the format of each video frame. [**getFrame(int)**](http://docs.google.com/SimpleSound.html#getFrame(int)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Returns an array containing all of the bytes in the specified frame. [**getFrameNames()**](http://docs.google.com/MovieWriter.html#getFrameNames()) - Method in class [MovieWriter](http://docs.google.com/MovieWriter.html) Method to get the list of jpeg frames [**getFrameNumber()**](http://docs.google.com/FrameSequencer.html#getFrameNumber()) - Method in class [FrameSequencer](http://docs.google.com/FrameSequencer.html) Method to get the frame number [**getFrameSequencer()**](http://docs.google.com/MovieCapturer.html#getFrameSequencer()) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to get the current directory [**getFrameSequencer()**](http://docs.google.com/VideoCapturer.html#getFrameSequencer()) - Method in interface [VideoCapturer](http://docs.google.com/VideoCapturer.html) Method to get the frame sequencer [**getFramesPerSec()**](http://docs.google.com/AnimationPanel.html#getFramesPerSec()) - Method in class [AnimationPanel](http://docs.google.com/AnimationPanel.html) Method to get the frames per second [**getFramesPerSecond()**](http://docs.google.com/MovieCapturer.html#getFramesPerSecond()) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to get the number of frames per second [**getFramesPerSecond()**](http://docs.google.com/VideoCapturer.html#getFramesPerSecond()) - Method in interface [VideoCapturer](http://docs.google.com/VideoCapturer.html) Method to return the number of frames per second [**getGraphics()**](http://docs.google.com/ModelDisplay.html#getGraphics()) - Method in interface [ModelDisplay](http://docs.google.com/ModelDisplay.html) Method that returns the graphics context for this model display [**getGraphics()**](http://docs.google.com/SimplePicture.html#getGraphics()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to get a graphics object for this picture to use to draw on [**getGraphics()**](http://docs.google.com/World.html#getGraphics()) - Method in class [World](http://docs.google.com/World.html) Method to get the graphics context for drawing on [**getGreen()**](http://docs.google.com/Pixel.html#getGreen()) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to get the amount of green at this pixel. [**getGreen(int)**](http://docs.google.com/Pixel.html#getGreen(int)) - Static method in class [Pixel](http://docs.google.com/Pixel.html) Method to get the green value from a pixel represented as an int [**getHead()**](http://docs.google.com/Deer.html#getHead()) - Static method in class [Deer](http://docs.google.com/Deer.html) Method to get the head of the linked list of deer [**getHead()**](http://docs.google.com/Wolf.html#getHead()) - Static method in class [Wolf](http://docs.google.com/Wolf.html) Method to get the head of the linked list of wolves [**getHeading()**](http://docs.google.com/SimpleTurtle.html#getHeading()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to get the current heading [**getHeight()**](http://docs.google.com/AbstractShape.html#getHeight()) - Method in class [AbstractShape](http://docs.google.com/AbstractShape.html) Method to get the height of the bounding rectangle [**getHeight()**](http://docs.google.com/DigitalPicture.html#getHeight()) - Method in interface [DigitalPicture](http://docs.google.com/DigitalPicture.html)   [**getHeight()**](http://docs.google.com/ModelDisplay.html#getHeight()) - Method in interface [ModelDisplay](http://docs.google.com/ModelDisplay.html) Method to get the height of the display [**getHeight()**](http://docs.google.com/SimplePicture.html#getHeight()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to get the height of the picture in pixels [**getHeight()**](http://docs.google.com/SimpleTurtle.html#getHeight()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to return the height of this object [**getHeight(Graphics2D, AttributedCharacterIterator)**](http://docs.google.com/TextBalloon.html#getHeight(java.awt.Graphics2D,%20java.text.AttributedCharacterIterator)) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to get the height of the balloon [**getHeight()**](http://docs.google.com/World.html#getHeight()) - Method in class [World](http://docs.google.com/World.html) Method to get the height in pixels [**getImage()**](http://docs.google.com/DigitalPicture.html#getImage()) - Method in interface [DigitalPicture](http://docs.google.com/DigitalPicture.html)   [**getImage()**](http://docs.google.com/ImageDisplay.html#getImage()) - Method in class [ImageDisplay](http://docs.google.com/ImageDisplay.html) Method to get the image [**getImage()**](http://docs.google.com/SimplePicture.html#getImage()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to get an image from the picture [**getInfoColor()**](http://docs.google.com/SimpleTurtle.html#getInfoColor()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to get the information color [**getInstrumentNames()**](http://docs.google.com/MidiPlayer.html#getInstrumentNames()) - Method in class [MidiPlayer](http://docs.google.com/MidiPlayer.html) Method to get the map of index number to instrument names [**getIntNumber(String)**](http://docs.google.com/SimpleInput.html#getIntNumber(java.lang.String)) - Static method in class [SimpleInput](http://docs.google.com/SimpleInput.html) Method to allow the user to input an integer. [**getIntNumber(String, int, int)**](http://docs.google.com/SimpleInput.html#getIntNumber(java.lang.String,%20int,%20int)) - Static method in class [SimpleInput](http://docs.google.com/SimpleInput.html) Method to get an integer between a minimum and maximum (inclusive) [**getLastTurtle()**](http://docs.google.com/World.html#getLastTurtle()) - Method in class [World](http://docs.google.com/World.html) Metod to get the last turtle in this world [**getLeftSample(int)**](http://docs.google.com/SimpleSound.html#getLeftSample(int)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Obtains the left sample of the audio data contained at the specified frame. [**getLength()**](http://docs.google.com/SimpleSound.html#getLength()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method to return the length of the sound as the number of samples [**getLengthInBytes()**](http://docs.google.com/SimpleSound.html#getLengthInBytes()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Obtains the length of this sound in bytes. [**getLengthInFrames()**](http://docs.google.com/SimpleSound.html#getLengthInFrames()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Obtains the length of the audio data contained in the file, expressed in sample frames. [**getListForQuery(String)**](http://docs.google.com/DatabaseManager.html#getListForQuery(java.lang.String)) - Method in class [DatabaseManager](http://docs.google.com/DatabaseManager.html) Method to execute a query and return a list of strings for the first returned row [**getLocator()**](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html#getLocator()) - Method in class [JpegImagesToMovie.ImageDataSource](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html)   [**getMargin()**](http://docs.google.com/TextBalloon.html#getMargin()) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to get the margin [**getMediaDirectory()**](http://docs.google.com/FileChooser.html#getMediaDirectory()) - Static method in class [FileChooser](http://docs.google.com/FileChooser.html) Method to get the directory for the media [**getMediaPath(String)**](http://docs.google.com/FileChooser.html#getMediaPath(java.lang.String)) - Static method in class [FileChooser](http://docs.google.com/FileChooser.html) Method to get the full path for the passed file name [**getMediaPath(String)**](http://docs.google.com/SimplePicture.html#getMediaPath(java.lang.String)) - Static method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to get the directory for the media [**getMessage()**](http://docs.google.com/TextBalloon.html#getMessage()) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to get the message that is displayed in the balloon [**getMinX()**](http://docs.google.com/AbstractShape.html#getMinX()) - Method in class [AbstractShape](http://docs.google.com/AbstractShape.html) Method to get minimum x value of the bounding rectangle [**getMinY()**](http://docs.google.com/AbstractShape.html#getMinY()) - Method in class [AbstractShape](http://docs.google.com/AbstractShape.html) Method to get the minimum y value of the bounding rectangle [**getModelDisplay()**](http://docs.google.com/SimpleTurtle.html#getModelDisplay()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to get the model display for this simple turtle [**getMoviePlayer()**](http://docs.google.com/FrameSequencer.html#getMoviePlayer()) - Method in class [FrameSequencer](http://docs.google.com/FrameSequencer.html) Method to get the movie player to use to show this sequence [**getName()**](http://docs.google.com/SimpleTurtle.html#getName()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to get the name of the turtle [**getNext()**](http://docs.google.com/Deer.html#getNext()) - Method in class [Deer](http://docs.google.com/Deer.html) Method to get the next Deer in the linked list [**getNext()**](http://docs.google.com/Wolf.html#getNext()) - Method in class [Wolf](http://docs.google.com/Wolf.html) Method to get the next Wolf in the linked list [**getNumber(String)**](http://docs.google.com/SimpleInput.html#getNumber(java.lang.String)) - Static method in class [SimpleInput](http://docs.google.com/SimpleInput.html) Method to allow the user to input a number. [**getNumFrames()**](http://docs.google.com/FrameSequencer.html#getNumFrames()) - Method in class [FrameSequencer](http://docs.google.com/FrameSequencer.html) Method to get the number of frames in this sequence [**getNumLines()**](http://docs.google.com/TextBalloon.html#getNumLines()) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to get the number of lines of text. [**getNumSamples()**](http://docs.google.com/SimpleSound.html#getNumSamples()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Returns the number of samples in this sound [**getPen()**](http://docs.google.com/SimpleTurtle.html#getPen()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to get the pen [**getPenColor()**](http://docs.google.com/SimpleTurtle.html#getPenColor()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to get the pen color [**getPenWidth()**](http://docs.google.com/SimpleTurtle.html#getPenWidth()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to get the pen width [**getPicture()**](http://docs.google.com/SimpleTurtle.html#getPicture()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to get the picture for this simple turtle [**getPicture()**](http://docs.google.com/World.html#getPicture()) - Method in class [World](http://docs.google.com/World.html) Method to get the background picture [**getPictureFrame()**](http://docs.google.com/SimplePicture.html#getPictureFrame()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to get the picture frame for the picture [**getPictureWithHeight(int)**](http://docs.google.com/SimplePicture.html#getPictureWithHeight(int)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to create a new picture of the passed height. [**getPictureWithWidth(int)**](http://docs.google.com/SimplePicture.html#getPictureWithWidth(int)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to create a new picture of the passed width. [**getPixel(int, int)**](http://docs.google.com/DigitalPicture.html#getPixel(int,%20int)) - Method in interface [DigitalPicture](http://docs.google.com/DigitalPicture.html)   [**getPixel(int, int)**](http://docs.google.com/SimplePicture.html#getPixel(int,%20int)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to get a pixel object for the given x and y location [**getPixels()**](http://docs.google.com/SimplePicture.html#getPixels()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to get a one-dimensional array of Pixels for this simple picture [**getPlaybacks()**](http://docs.google.com/SimpleSound.html#getPlaybacks()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method that returns the vector of playback threads currently active on this sound. [**getPlaying()**](http://docs.google.com/Playback.html#getPlaying()) - Method in class [Playback](http://docs.google.com/Playback.html) Method to return true if this playback thread is playing and false otherwise [**getPointAtDistance(int, int, double, double)**](http://docs.google.com/Geometry.html#getPointAtDistance(int,%20int,%20double,%20double)) - Static method in class [Geometry](http://docs.google.com/Geometry.html) Method to get a new point at a given distance from an old point along a heading (angle in degrees) [**getPointAtDistance(Point, double, double)**](http://docs.google.com/Geometry.html#getPointAtDistance(java.awt.Point,%20double,%20double)) - Static method in class [Geometry](http://docs.google.com/Geometry.html) Method to get a new point at a given distance from an old point along a heading (angle in degrees) [**getPreferredScrollableViewportSize()**](http://docs.google.com/ImageDisplay.html#getPreferredScrollableViewportSize()) - Method in class [ImageDisplay](http://docs.google.com/ImageDisplay.html) Method to return the preferred size [**getRed()**](http://docs.google.com/Pixel.html#getRed()) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to get the amount of red at this pixel. [**getRed(int)**](http://docs.google.com/Pixel.html#getRed(int)) - Static method in class [Pixel](http://docs.google.com/Pixel.html) Method to get the red value from a pixel represented as an int [**getRegion()**](http://docs.google.com/MovieCapturer.html#getRegion()) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to get the region to capture [**getRegion()**](http://docs.google.com/VideoCapturer.html#getRegion()) - Method in interface [VideoCapturer](http://docs.google.com/VideoCapturer.html) Method to get the region to capture [**getRightSample(int)**](http://docs.google.com/SimpleSound.html#getRightSample(int)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Obtains the right sample of the audio data contained at the specified frame. [**getSample(int)**](http://docs.google.com/SimpleSound.html#getSample(int)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method to create and return a SoundSample object for the given frame number [**getSamples()**](http://docs.google.com/SimpleSound.html#getSamples()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method to create and return an array of SoundSample objects [**getSampleValue(int)**](http://docs.google.com/SimpleSound.html#getSampleValue(int)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) If this is a mono sound, obtains the single sample contained within this frame, else obtains the first (left) sample contained in the specified frame. [**getSampleValueAt(int)**](http://docs.google.com/SimpleSound.html#getSampleValueAt(int)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method to get the sample at the passed index and handle any SoundExceptions [**getSamplingRate()**](http://docs.google.com/SimpleSound.html#getSamplingRate()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method to get the sampling rate of this sound [**getScrollableBlockIncrement(Rectangle, int, int)**](http://docs.google.com/ImageDisplay.html#getScrollableBlockIncrement(java.awt.Rectangle,%20int,%20int)) - Method in class [ImageDisplay](http://docs.google.com/ImageDisplay.html) Method to return the block increment for scrolling [**getScrollableTracksViewportHeight()**](http://docs.google.com/ImageDisplay.html#getScrollableTracksViewportHeight()) - Method in class [ImageDisplay](http://docs.google.com/ImageDisplay.html) Method to check if the viewport height is the source height [**getScrollableTracksViewportWidth()**](http://docs.google.com/ImageDisplay.html#getScrollableTracksViewportWidth()) - Method in class [ImageDisplay](http://docs.google.com/ImageDisplay.html) Method to check if the viewport width is the source width [**getScrollableUnitIncrement(Rectangle, int, int)**](http://docs.google.com/ImageDisplay.html#getScrollableUnitIncrement(java.awt.Rectangle,%20int,%20int)) - Method in class [ImageDisplay](http://docs.google.com/ImageDisplay.html) Method to return the unit increment for scrolling [**getShellColor()**](http://docs.google.com/SimpleTurtle.html#getShellColor()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to get the shell color [**getShowInfo()**](http://docs.google.com/SimpleTurtle.html#getShowInfo()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to get value of show info [**getSlope(double, double, double, double)**](http://docs.google.com/Geometry.html#getSlope(double,%20double,%20double,%20double)) - Static method in class [Geometry](http://docs.google.com/Geometry.html) Method to get the slope between two points [**getSlopeAngle(double, double, double, double)**](http://docs.google.com/Geometry.html#getSlopeAngle(double,%20double,%20double,%20double)) - Static method in class [Geometry](http://docs.google.com/Geometry.html) Method to get the slope angle between 2 points The slope angle is the interior angle of the triange of the slope line with the y and x axis. [**getSoundExplorer()**](http://docs.google.com/SimpleSound.html#getSoundExplorer()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method that returns the SoundExplorer [**getStreams()**](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html#getStreams()) - Method in class [JpegImagesToMovie.ImageDataSource](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html) Return the ImageSourceStreams. [**getString(String)**](http://docs.google.com/SimpleInput.html#getString(java.lang.String)) - Static method in class [SimpleInput](http://docs.google.com/SimpleInput.html) Method to get a string input by the user. [**getStringForQuery(String)**](http://docs.google.com/DatabaseManager.html#getStringForQuery(java.lang.String)) - Method in class [DatabaseManager](http://docs.google.com/DatabaseManager.html) Method to execute a query and return a string of the first result [**getSynthesizer()**](http://docs.google.com/MidiPlayer.html#getSynthesizer()) - Method in class [MidiPlayer](http://docs.google.com/MidiPlayer.html) Method to return the synthesizer [**getTailEnd()**](http://docs.google.com/TextBalloon.html#getTailEnd()) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to get the point that is the end of the tail that indicates who is speaking [**getTitle()**](http://docs.google.com/DigitalPicture.html#getTitle()) - Method in interface [DigitalPicture](http://docs.google.com/DigitalPicture.html)   [**getTitle()**](http://docs.google.com/SimplePicture.html#getTitle()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to get the title of the picture [**getTransformEnclosingRect(AffineTransform)**](http://docs.google.com/SimplePicture.html#getTransformEnclosingRect(java.awt.geom.AffineTransform)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to get the coordinates of the enclosing rectangle after this transformation is applied to the current picture [**getTranslationEnclosingRect(AffineTransform)**](http://docs.google.com/SimplePicture.html#getTranslationEnclosingRect(java.awt.geom.AffineTransform)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to get the coordinates of the enclosing rectangle after this transformation is applied to the current picture [**getTurtleHeading(double, double, double, double)**](http://docs.google.com/Geometry.html#getTurtleHeading(double,%20double,%20double,%20double)) - Static method in class [Geometry](http://docs.google.com/Geometry.html) Method to return the heading for a turtle which uses 0 degrees as north [**getTurtleIterator()**](http://docs.google.com/World.html#getTurtleIterator()) - Method in class [World](http://docs.google.com/World.html) Method to get an iterator on the list of turtles [**getTurtleList()**](http://docs.google.com/World.html#getTurtleList()) - Method in class [World](http://docs.google.com/World.html) Method to get the list of turtles in the world [**getUpperLeft()**](http://docs.google.com/TextBalloon.html#getUpperLeft()) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to get the upper left point of the rectangle that encloses the balloon [**getValue()**](http://docs.google.com/SoundSample.html#getValue()) - Method in class [SoundSample](http://docs.google.com/SoundSample.html) Method to get the value of this sample as in int and handle the possible sound exception [**getWidth()**](http://docs.google.com/AbstractShape.html#getWidth()) - Method in class [AbstractShape](http://docs.google.com/AbstractShape.html) Method to get the width of the bounding rectangle [**getWidth()**](http://docs.google.com/DigitalPicture.html#getWidth()) - Method in interface [DigitalPicture](http://docs.google.com/DigitalPicture.html)   [**getWidth()**](http://docs.google.com/ModelDisplay.html#getWidth()) - Method in interface [ModelDisplay](http://docs.google.com/ModelDisplay.html) Method to get the width of the display [**getWidth()**](http://docs.google.com/Pen.html#getWidth()) - Method in class [Pen](http://docs.google.com/Pen.html) Method to get the width of the pen [**getWidth()**](http://docs.google.com/SimplePicture.html#getWidth()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to get the width of the picture in pixels [**getWidth()**](http://docs.google.com/SimpleTurtle.html#getWidth()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to return the width of this object [**getWidth()**](http://docs.google.com/TextBalloon.html#getWidth()) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to get the width of the rectangle that encloses the balloon [**getWidth()**](http://docs.google.com/World.html#getWidth()) - Method in class [World](http://docs.google.com/World.html) Method to get the width in pixels [**getX()**](http://docs.google.com/Pixel.html#getX()) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to get the x location of this pixel. [**getXPos()**](http://docs.google.com/SimpleTurtle.html#getXPos()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to get the current x position [**getY()**](http://docs.google.com/Pixel.html#getY()) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to get the y location of this pixel. [**getYPos()**](http://docs.google.com/SimpleTurtle.html#getYPos()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to get the current y position [**Greeter**](http://docs.google.com/Greeter.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class to show how to define a very simple class.[**Greeter()**](http://docs.google.com/Greeter.html#Greeter()) - Constructor for class [Greeter](http://docs.google.com/Greeter.html)   [**GUITAR**](http://docs.google.com/MidiPlayer.html#GUITAR) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)  

## **H**

[**HARMONICA**](http://docs.google.com/MidiPlayer.html#HARMONICA) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**HARP**](http://docs.google.com/MidiPlayer.html#HARP) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**height**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#height) - Variable in class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html)   [**HELICOPTER**](http://docs.google.com/MidiPlayer.html#HELICOPTER) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**hide()**](http://docs.google.com/PictureFrame.html#hide()) - Method in class [PictureFrame](http://docs.google.com/PictureFrame.html) A method to hide the frame [**hide()**](http://docs.google.com/SimplePicture.html#hide()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to hide the picture [**hide()**](http://docs.google.com/SimpleTurtle.html#hide()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to hide the turtle (stop showing it) This doesn't affect the pen status

## **I**

[**ICE\_CUBE**](http://docs.google.com/MidiPlayer.html#ICE_CUBE) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**ImageDisplay**](http://docs.google.com/ImageDisplay.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class to display an image and the current location with a + sign Copyright Georgia Institute of Technology 2004[**ImageDisplay(Image)**](http://docs.google.com/ImageDisplay.html#ImageDisplay(java.awt.Image)) - Constructor for class [ImageDisplay](http://docs.google.com/ImageDisplay.html) Constructor that takes the image to display [**ImageDisplay(Image, int, int)**](http://docs.google.com/ImageDisplay.html#ImageDisplay(java.awt.Image,%20int,%20int)) - Constructor for class [ImageDisplay](http://docs.google.com/ImageDisplay.html) Constructor that takes the image and current x and y [**imageIcon**](http://docs.google.com/PictureFrame.html#imageIcon) - Variable in class [PictureFrame](http://docs.google.com/PictureFrame.html) ImageIcon used to display the picture in the label [**images**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#images) - Variable in class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html)   [**init()**](http://docs.google.com/ColorSquares.html#init()) - Method in class [ColorSquares](http://docs.google.com/ColorSquares.html) Method to initialize the panel [**init()**](http://docs.google.com/Deer.html#init()) - Method in class [Deer](http://docs.google.com/Deer.html) Method to initialize the new deer object [**init()**](http://docs.google.com/Wolf.html#init()) - Method in class [Wolf](http://docs.google.com/Wolf.html) Method to initialize the new wolf object [**insertionSort()**](http://docs.google.com/ArraySorter.html#insertionSort()) - Method in class [ArraySorter](http://docs.google.com/ArraySorter.html) Method to do an insertion sort on the array [**intToBytes16(int, byte[], int, boolean)**](http://docs.google.com/TConversionTool.html#intToBytes16(int,%20byte%5B%5D,%20int,%20boolean)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html) Converts a 16 bit sample of type int to 2 bytes in an array. [**intToBytes24(int, byte[], int, boolean)**](http://docs.google.com/TConversionTool.html#intToBytes24(int,%20byte%5B%5D,%20int,%20boolean)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html) Converts a 24 bit sample of type int to 3 bytes in an array. [**intToBytes32(int, byte[], int, boolean)**](http://docs.google.com/TConversionTool.html#intToBytes32(int,%20byte%5B%5D,%20int,%20boolean)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html) Converts a 32 bit sample of type int to 4 bytes in an array. [**intToUnsignedByte(int)**](http://docs.google.com/TConversionTool.html#intToUnsignedByte(int)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html)   [**intToUnsignedBytes16(int, byte[], int, boolean)**](http://docs.google.com/TConversionTool.html#intToUnsignedBytes16(int,%20byte%5B%5D,%20int,%20boolean)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html)   [**intToUnsignedBytes24(int, byte[], int, boolean)**](http://docs.google.com/TConversionTool.html#intToUnsignedBytes24(int,%20byte%5B%5D,%20int,%20boolean)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html)   [**intToUnsignedBytes32(int, byte[], int, boolean)**](http://docs.google.com/TConversionTool.html#intToUnsignedBytes32(int,%20byte%5B%5D,%20int,%20boolean)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html)   [**isPenDown()**](http://docs.google.com/Pen.html#isPenDown()) - Method in class [Pen](http://docs.google.com/Pen.html) Method to get pen down status [**isPenDown()**](http://docs.google.com/SimpleTurtle.html#isPenDown()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to check if the pen is down [**isShown()**](http://docs.google.com/FrameSequencer.html#isShown()) - Method in class [FrameSequencer](http://docs.google.com/FrameSequencer.html) Method to check if the frame sequence is being shown [**isStereo()**](http://docs.google.com/SimpleSound.html#isStereo()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method to check if a sound is stereo (2 channels) or not [**isVisible()**](http://docs.google.com/SimpleTurtle.html#isVisible()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to get the value of the visible flag

## **J**

[**JAZZ\_GUITAR**](http://docs.google.com/MidiPlayer.html#JAZZ_GUITAR) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**JpegImagesToMovie**](http://docs.google.com/JpegImagesToMovie.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)This program takes a list of JPEG image files and converts them into a QuickTime or AVI movie.[**JpegImagesToMovie()**](http://docs.google.com/JpegImagesToMovie.html#JpegImagesToMovie()) - Constructor for class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html)   [**JpegImagesToMovie.ImageDataSource**](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)A DataSource to read from a list of JPEG image files and turn that into a stream of JMF buffers.[**JpegImagesToMovie.ImageDataSource(int, int, int, List)**](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html#JpegImagesToMovie.ImageDataSource(int,%20int,%20int,%20java.util.List)) - Constructor for class [JpegImagesToMovie.ImageDataSource](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html)   [**JpegImagesToMovie.ImageSourceStream**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)The source stream to go along with ImageDataSource.[**JpegImagesToMovie.ImageSourceStream(int, int, int, List)**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#JpegImagesToMovie.ImageSourceStream(int,%20int,%20int,%20java.util.List)) - Constructor for class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html)  

## **L**

[**linear2alaw(short)**](http://docs.google.com/TConversionTool.html#linear2alaw(short)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html)   [**linear2ulaw(int)**](http://docs.google.com/TConversionTool.html#linear2ulaw(int)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html) Converts a linear signed 16bit sample to a uLaw byte. [**linearFind(String, String[])**](http://docs.google.com/Searcher.html#linearFind(java.lang.String,%20java.lang.String%5B%5D)) - Static method in class [Searcher](http://docs.google.com/Searcher.html) Implement a linear search through the list [**load(Image)**](http://docs.google.com/DigitalPicture.html#load(java.awt.Image)) - Method in interface [DigitalPicture](http://docs.google.com/DigitalPicture.html)   [**load(String)**](http://docs.google.com/DigitalPicture.html#load(java.lang.String)) - Method in interface [DigitalPicture](http://docs.google.com/DigitalPicture.html)   [**load(Image)**](http://docs.google.com/SimplePicture.html#load(java.awt.Image)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to load the buffered image with the passed image [**load(String)**](http://docs.google.com/SimplePicture.html#load(java.lang.String)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to write the contents of the picture to a file with the passed name without throwing errors [**loadFromFile(String)**](http://docs.google.com/SimpleSound.html#loadFromFile(java.lang.String)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Resets the fields of this sound so that it now represents the sound in the specified file. [**loadImage(String)**](http://docs.google.com/SimplePicture.html#loadImage(java.lang.String)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to load the picture from the passed file name this just calls load(fileName) and is for name compatibility [**loadOrFail(String)**](http://docs.google.com/SimplePicture.html#loadOrFail(java.lang.String)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to load the picture from the passed file name [**loadPictureAndShowIt(String)**](http://docs.google.com/SimplePicture.html#loadPictureAndShowIt(java.lang.String)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to load a picture from a file name and show it in a picture frame

## **M**

[**main(String[])**](http://docs.google.com/AnimationPanel.html#main(java.lang.String%5B%5D)) - Static method in class [AnimationPanel](http://docs.google.com/AnimationPanel.html) Method to test [**main(String[])**](http://docs.google.com/ArraySorter.html#main(java.lang.String%5B%5D)) - Static method in class [ArraySorter](http://docs.google.com/ArraySorter.html)   [**main(String[])**](http://docs.google.com/CaptureButtonPanel.html#main(java.lang.String%5B%5D)) - Static method in class [CaptureButtonPanel](http://docs.google.com/CaptureButtonPanel.html)   [**main(String[])**](http://docs.google.com/Cartoon.html#main(java.lang.String%5B%5D)) - Static method in class [Cartoon](http://docs.google.com/Cartoon.html)   [**main(String[])**](http://docs.google.com/ColorSquares.html#main(java.lang.String%5B%5D)) - Static method in class [ColorSquares](http://docs.google.com/ColorSquares.html)   [**main(String[])**](http://docs.google.com/ComicPanel.html#main(java.lang.String%5B%5D)) - Static method in class [ComicPanel](http://docs.google.com/ComicPanel.html)   [**main(String[])**](http://docs.google.com/ComicStrip.html#main(java.lang.String%5B%5D)) - Static method in class [ComicStrip](http://docs.google.com/ComicStrip.html)   [**main(String[])**](http://docs.google.com/DatabaseManager.html#main(java.lang.String%5B%5D)) - Static method in class [DatabaseManager](http://docs.google.com/DatabaseManager.html)   [**main(String[])**](http://docs.google.com/Deer.html#main(java.lang.String%5B%5D)) - Static method in class [Deer](http://docs.google.com/Deer.html) main method for testing [**main(String[])**](http://docs.google.com/FrameSequencer.html#main(java.lang.String%5B%5D)) - Static method in class [FrameSequencer](http://docs.google.com/FrameSequencer.html)   [**main(String[])**](http://docs.google.com/Greeter.html#main(java.lang.String%5B%5D)) - Static method in class [Greeter](http://docs.google.com/Greeter.html)   [**main(String[])**](http://docs.google.com/JpegImagesToMovie.html#main(java.lang.String%5B%5D)) - Static method in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html)   [**main(String[])**](http://docs.google.com/MovieCapturePanel.html#main(java.lang.String%5B%5D)) - Static method in class [MovieCapturePanel](http://docs.google.com/MovieCapturePanel.html)   [**main(String[])**](http://docs.google.com/MovieCapturer.html#main(java.lang.String%5B%5D)) - Static method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html)   [**main(String[])**](http://docs.google.com/MovieMaker.html#main(java.lang.String%5B%5D)) - Static method in class [MovieMaker](http://docs.google.com/MovieMaker.html)   [**main(String[])**](http://docs.google.com/MoviePlayer.html#main(java.lang.String%5B%5D)) - Static method in class [MoviePlayer](http://docs.google.com/MoviePlayer.html)   [**main(String[])**](http://docs.google.com/MovieWriter.html#main(java.lang.String%5B%5D)) - Static method in class [MovieWriter](http://docs.google.com/MovieWriter.html)   [**main(String[])**](http://docs.google.com/Picture.html#main(java.lang.String%5B%5D)) - Static method in class [Picture](http://docs.google.com/Picture.html)   [**main(String[])**](http://docs.google.com/PictureExplorer.html#main(java.lang.String%5B%5D)) - Static method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Test Main. [**main(String[])**](http://docs.google.com/Searcher.html#main(java.lang.String%5B%5D)) - Static method in class [Searcher](http://docs.google.com/Searcher.html) Main for testing binary find [**main(String[])**](http://docs.google.com/ShapeComponent.html#main(java.lang.String%5B%5D)) - Static method in class [ShapeComponent](http://docs.google.com/ShapeComponent.html)   [**main(String[])**](http://docs.google.com/Sound.html#main(java.lang.String%5B%5D)) - Static method in class [Sound](http://docs.google.com/Sound.html)   [**main(String[])**](http://docs.google.com/SpeechBalloon.html#main(java.lang.String%5B%5D)) - Static method in class [SpeechBalloon](http://docs.google.com/SpeechBalloon.html)   [**main(String[])**](http://docs.google.com/Test.html#main(java.lang.String%5B%5D)) - Static method in class [Test](http://docs.google.com/Test.html)   [**main(String[])**](http://docs.google.com/ThoughtBalloon.html#main(java.lang.String%5B%5D)) - Static method in class [ThoughtBalloon](http://docs.google.com/ThoughtBalloon.html)   [**main(String[])**](http://docs.google.com/TurlteDropTest.html#main(java.lang.String%5B%5D)) - Static method in class [TurlteDropTest](http://docs.google.com/TurlteDropTest.html)   [**main(String[])**](http://docs.google.com/Turtle.html#main(java.lang.String%5B%5D)) - Static method in class [Turtle](http://docs.google.com/Turtle.html)   [**main(String[])**](http://docs.google.com/TurtleTest.html#main(java.lang.String%5B%5D)) - Static method in class [TurtleTest](http://docs.google.com/TurtleTest.html)   [**main(String[])**](http://docs.google.com/Wolf.html#main(java.lang.String%5B%5D)) - Static method in class [Wolf](http://docs.google.com/Wolf.html) main method for testing [**makeAIS()**](http://docs.google.com/SimpleSound.html#makeAIS()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Creates an AudioInputStream for this sound from the buffer and the audioFileFormat. [**makeRectangleMovie(String)**](http://docs.google.com/MovieMaker.html#makeRectangleMovie(java.lang.String)) - Method in class [MovieMaker](http://docs.google.com/MovieMaker.html)   [**MAX\_NEG**](http://docs.google.com/SimpleSound.html#MAX_NEG) - Static variable in class [SimpleSound](http://docs.google.com/SimpleSound.html) Constant for max negative value [**MAX\_POS**](http://docs.google.com/SimpleSound.html#MAX_POS) - Static variable in class [SimpleSound](http://docs.google.com/SimpleSound.html) Constant for max positive value [**mergeSort()**](http://docs.google.com/ArraySorter.html#mergeSort()) - Method in class [ArraySorter](http://docs.google.com/ArraySorter.html) Method to do a merge sort of the array [**MidiPlayer**](http://docs.google.com/MidiPlayer.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that knows how to play notes using the midi standard Copyright 2004 Georgia Institute of Technology[**MidiPlayer()**](http://docs.google.com/MidiPlayer.html#MidiPlayer()) - Constructor for class [MidiPlayer](http://docs.google.com/MidiPlayer.html) Constructor that takes no arguments [**modelChanged()**](http://docs.google.com/ModelDisplay.html#modelChanged()) - Method in interface [ModelDisplay](http://docs.google.com/ModelDisplay.html) method to notify the thing that displays that the model has changed [**modelChanged()**](http://docs.google.com/World.html#modelChanged()) - Method in class [World](http://docs.google.com/World.html) Method that allows the model to notify the display [**ModelDisplay**](http://docs.google.com/ModelDisplay.html) - Interface in [<Unnamed>](http://docs.google.com/package-summary.html)Interface to used to communicate between a model and its display Copyright Georgia Institute of Technology 2004[**mouseClicked(MouseEvent)**](http://docs.google.com/PictureExplorer.html#mouseClicked(java.awt.event.MouseEvent)) - Method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Method called when the mouse is clicked [**mouseClicked(MouseEvent)**](http://docs.google.com/SoundExplorer.html#mouseClicked(java.awt.event.MouseEvent)) - Method in class [SoundExplorer](http://docs.google.com/SoundExplorer.html) Handle a mouse click event [**mouseDragged(MouseEvent)**](http://docs.google.com/PictureExplorer.html#mouseDragged(java.awt.event.MouseEvent)) - Method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Called when the mouse is dragged (button held down and moved) [**mouseDragged(MouseEvent)**](http://docs.google.com/ShapeComponent.MyMouseMotionAdapter.html#mouseDragged(java.awt.event.MouseEvent)) - Method in class [ShapeComponent.MyMouseMotionAdapter](http://docs.google.com/ShapeComponent.MyMouseMotionAdapter.html) Method to handle the drag of a mouse [**mouseDragged(MouseEvent)**](http://docs.google.com/SoundExplorer.html#mouseDragged(java.awt.event.MouseEvent)) - Method in class [SoundExplorer](http://docs.google.com/SoundExplorer.html) Method to handle a mouse dragged event [**mouseEntered(MouseEvent)**](http://docs.google.com/PictureExplorer.html#mouseEntered(java.awt.event.MouseEvent)) - Method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Method called when the component is entered (mouse moves over it) [**mouseEntered(MouseEvent)**](http://docs.google.com/SoundExplorer.html#mouseEntered(java.awt.event.MouseEvent)) - Method in class [SoundExplorer](http://docs.google.com/SoundExplorer.html) Method to handle a mouse entered event [**mouseExited(MouseEvent)**](http://docs.google.com/PictureExplorer.html#mouseExited(java.awt.event.MouseEvent)) - Method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Method called when the mouse moves over the component [**mouseExited(MouseEvent)**](http://docs.google.com/SoundExplorer.html#mouseExited(java.awt.event.MouseEvent)) - Method in class [SoundExplorer](http://docs.google.com/SoundExplorer.html) Method to handle a mouse exited event [**mouseMoved(MouseEvent)**](http://docs.google.com/PictureExplorer.html#mouseMoved(java.awt.event.MouseEvent)) - Method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Method called when the mouse is moved with no buttons down [**mouseMoved(MouseEvent)**](http://docs.google.com/SoundExplorer.html#mouseMoved(java.awt.event.MouseEvent)) - Method in class [SoundExplorer](http://docs.google.com/SoundExplorer.html) Method to handle a mouse move event [**mousePressed(MouseEvent)**](http://docs.google.com/PictureExplorer.html#mousePressed(java.awt.event.MouseEvent)) - Method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Method called when the mouse button is pushed down [**mousePressed(MouseEvent)**](http://docs.google.com/ShapeComponent.MyMouseAdapter.html#mousePressed(java.awt.event.MouseEvent)) - Method in class [ShapeComponent.MyMouseAdapter](http://docs.google.com/ShapeComponent.MyMouseAdapter.html) Method to handle when the user presses down the button [**mousePressed(MouseEvent)**](http://docs.google.com/SoundExplorer.html#mousePressed(java.awt.event.MouseEvent)) - Method in class [SoundExplorer](http://docs.google.com/SoundExplorer.html) Method to handle a mouse press [**mouseReleased(MouseEvent)**](http://docs.google.com/PictureExplorer.html#mouseReleased(java.awt.event.MouseEvent)) - Method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Method called when the mouse button is released [**mouseReleased(MouseEvent)**](http://docs.google.com/ShapeComponent.MyMouseAdapter.html#mouseReleased(java.awt.event.MouseEvent)) - Method in class [ShapeComponent.MyMouseAdapter](http://docs.google.com/ShapeComponent.MyMouseAdapter.html) Method to handle when the user releases the mouse [**mouseReleased(MouseEvent)**](http://docs.google.com/SoundExplorer.html#mouseReleased(java.awt.event.MouseEvent)) - Method in class [SoundExplorer](http://docs.google.com/SoundExplorer.html) Method to handle a mouse release [**moveTo(int, int)**](http://docs.google.com/SimpleTurtle.html#moveTo(int,%20int)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to move to turtle to the given x and y location [**MovieCapturePanel**](http://docs.google.com/MovieCapturePanel.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class MovieCapturePanel: a panel used to capture a movie Copyright Georgia Institute of Technology 2007[**MovieCapturePanel(String)**](http://docs.google.com/MovieCapturePanel.html#MovieCapturePanel(java.lang.String)) - Constructor for class [MovieCapturePanel](http://docs.google.com/MovieCapturePanel.html) A constructor that takes a directory to write the frames to [**MovieCapturePanel()**](http://docs.google.com/MovieCapturePanel.html#MovieCapturePanel()) - Constructor for class [MovieCapturePanel](http://docs.google.com/MovieCapturePanel.html) Constructor that takes no arguments [**MovieCapturer**](http://docs.google.com/MovieCapturer.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that captures a movie to a series of jpg frames Copyright Georgia Institute of Technology 2007[**MovieCapturer(String)**](http://docs.google.com/MovieCapturer.html#MovieCapturer(java.lang.String)) - Constructor for class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Constructor that takes the directory to write the frames to [**MovieCapturer(String, String)**](http://docs.google.com/MovieCapturer.html#MovieCapturer(java.lang.String,%20java.lang.String)) - Constructor for class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Constructor that takes the directory to write to and the base name to use for the files [**MovieMaker**](http://docs.google.com/MovieMaker.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html) [**MovieMaker()**](http://docs.google.com/MovieMaker.html#MovieMaker()) - Constructor for class [MovieMaker](http://docs.google.com/MovieMaker.html)   [**MoviePlayer**](http://docs.google.com/MoviePlayer.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that can play movies from multiple frames Copyright Georgia Institute of Technology 2007[**MoviePlayer(List<Picture>)**](http://docs.google.com/MoviePlayer.html#MoviePlayer(java.util.List)) - Constructor for class [MoviePlayer](http://docs.google.com/MoviePlayer.html) Constructor that takes a list of pictures [**MoviePlayer(String)**](http://docs.google.com/MoviePlayer.html#MoviePlayer(java.lang.String)) - Constructor for class [MoviePlayer](http://docs.google.com/MoviePlayer.html) Constructor that takes a directory and shows a movie from it [**MoviePlayer()**](http://docs.google.com/MoviePlayer.html#MoviePlayer()) - Constructor for class [MoviePlayer](http://docs.google.com/MoviePlayer.html) Constructor to create a movie player by asking the user to pick the directory that contains the JPEG frames [**MovieWriter**](http://docs.google.com/MovieWriter.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class to write out an AVI or Quicktime movie from a series of JPEG (jpg) frames in a directory[**MovieWriter()**](http://docs.google.com/MovieWriter.html#MovieWriter()) - Constructor for class [MovieWriter](http://docs.google.com/MovieWriter.html) Constructor that takes no arguments [**MovieWriter(String)**](http://docs.google.com/MovieWriter.html#MovieWriter(java.lang.String)) - Constructor for class [MovieWriter](http://docs.google.com/MovieWriter.html) Constructor that takes the directory that has the frames [**MovieWriter(int)**](http://docs.google.com/MovieWriter.html#MovieWriter(int)) - Constructor for class [MovieWriter](http://docs.google.com/MovieWriter.html) Constructor that takes the frame rate [**MovieWriter(int, String)**](http://docs.google.com/MovieWriter.html#MovieWriter(int,%20java.lang.String)) - Constructor for class [MovieWriter](http://docs.google.com/MovieWriter.html) Constructor that takes the frame rate and the directory that the frames are stored in [**MovieWriter(String, int, String)**](http://docs.google.com/MovieWriter.html#MovieWriter(java.lang.String,%20int,%20java.lang.String)) - Constructor for class [MovieWriter](http://docs.google.com/MovieWriter.html) Constructor that takes the directory with the frames the frame rate, and the output url (dir,name, and extendsion) [**MUSIC\_BOX**](http://docs.google.com/MidiPlayer.html#MUSIC_BOX) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)  

## **N**

[**nextImage**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#nextImage) - Variable in class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html)  

## **O**

[**OBOE**](http://docs.google.com/MidiPlayer.html#OBOE) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**OVAL**](http://docs.google.com/AbstractShape.html#OVAL) - Static variable in class [AbstractShape](http://docs.google.com/AbstractShape.html)  

## **P**

[**p1**](http://docs.google.com/AbstractShape.html#p1) - Variable in class [AbstractShape](http://docs.google.com/AbstractShape.html) the first point in the shape [**p2**](http://docs.google.com/AbstractShape.html#p2) - Variable in class [AbstractShape](http://docs.google.com/AbstractShape.html) the second point in the shape [**paintComponent(Graphics)**](http://docs.google.com/AnimationPanel.html#paintComponent(java.awt.Graphics)) - Method in class [AnimationPanel](http://docs.google.com/AnimationPanel.html) Method to paint the component [**paintComponent(Graphics)**](http://docs.google.com/ImageDisplay.html#paintComponent(java.awt.Graphics)) - Method in class [ImageDisplay](http://docs.google.com/ImageDisplay.html) Method to handle displaying this object [**paintComponent(Graphics)**](http://docs.google.com/PathSegment.html#paintComponent(java.awt.Graphics)) - Method in class [PathSegment](http://docs.google.com/PathSegment.html) Method to paint this path segment [**paintComponent(Graphics)**](http://docs.google.com/Pen.html#paintComponent(java.awt.Graphics)) - Method in class [Pen](http://docs.google.com/Pen.html) Metod to paint the pen path [**paintComponent(Graphics)**](http://docs.google.com/ShapeComponent.html#paintComponent(java.awt.Graphics)) - Method in class [ShapeComponent](http://docs.google.com/ShapeComponent.html) Method to paint the shape canvas and all objects in it [**paintComponent(Graphics)**](http://docs.google.com/SimpleTurtle.html#paintComponent(java.awt.Graphics)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to paint the turtle [**paintComponent(Graphics)**](http://docs.google.com/World.html#paintComponent(java.awt.Graphics)) - Method in class [World](http://docs.google.com/World.html) Method to paint this component [**partition(int, int)**](http://docs.google.com/ArraySorter.html#partition(int,%20int)) - Method in class [ArraySorter](http://docs.google.com/ArraySorter.html) Method to partition the array around a pivot point. [**PathSegment**](http://docs.google.com/PathSegment.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)This class represents a displayable path segment it has a color, width, and a Line2D object Copyright Georgia Institute of Technology 2005[**PathSegment(Color, int, Line2D.Float)**](http://docs.google.com/PathSegment.html#PathSegment(java.awt.Color,%20int,%20java.awt.geom.Line2D.Float)) - Constructor for class [PathSegment](http://docs.google.com/PathSegment.html) Constructor that takes the color, width, and line [**Pen**](http://docs.google.com/Pen.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class to represent a pen which has a color, width, and a list of path segments that it should draw.[**Pen()**](http://docs.google.com/Pen.html#Pen()) - Constructor for class [Pen](http://docs.google.com/Pen.html) Constructor that takes no arguments [**Pen(Color, int)**](http://docs.google.com/Pen.html#Pen(java.awt.Color,%20int)) - Constructor for class [Pen](http://docs.google.com/Pen.html) Constructor that takes all the ink color, and width [**Pen(Color, int, boolean)**](http://docs.google.com/Pen.html#Pen(java.awt.Color,%20int,%20boolean)) - Constructor for class [Pen](http://docs.google.com/Pen.html) Constructor that takes the ink color, width, and penDown flag [**penDown()**](http://docs.google.com/SimpleTurtle.html#penDown()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the pen down [**penUp()**](http://docs.google.com/SimpleTurtle.html#penUp()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to lift the pen up [**PIANO**](http://docs.google.com/MidiPlayer.html#PIANO) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**PICCOLO**](http://docs.google.com/MidiPlayer.html#PICCOLO) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**pickAColor()**](http://docs.google.com/ColorChooser.html#pickAColor()) - Static method in class [ColorChooser](http://docs.google.com/ColorChooser.html) Method to let the user pick a color and return the color object. [**pickADirectory()**](http://docs.google.com/FileChooser.html#pickADirectory()) - Static method in class [FileChooser](http://docs.google.com/FileChooser.html) Method to let the user pick a directory and return the full path name as a string. [**pickAFile()**](http://docs.google.com/FileChooser.html#pickAFile()) - Static method in class [FileChooser](http://docs.google.com/FileChooser.html) Method to let the user pick a file and return the full file name as a string. [**pickMediaPath()**](http://docs.google.com/FileChooser.html#pickMediaPath()) - Static method in class [FileChooser](http://docs.google.com/FileChooser.html) Method to pick a media path using the file chooser and set it [**pickPath(JFileChooser)**](http://docs.google.com/FileChooser.html#pickPath(javax.swing.JFileChooser)) - Static method in class [FileChooser](http://docs.google.com/FileChooser.html) Method to pick an item using the file chooser [**Picture**](http://docs.google.com/Picture.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)A class that represents a picture.[**Picture()**](http://docs.google.com/Picture.html#Picture()) - Constructor for class [Picture](http://docs.google.com/Picture.html) Constructor that takes no arguments [**Picture(String)**](http://docs.google.com/Picture.html#Picture(java.lang.String)) - Constructor for class [Picture](http://docs.google.com/Picture.html) Constructor that takes a file name and creates the picture [**Picture(int, int)**](http://docs.google.com/Picture.html#Picture(int,%20int)) - Constructor for class [Picture](http://docs.google.com/Picture.html) Constructor that takes the width and height [**Picture(Picture)**](http://docs.google.com/Picture.html#Picture(Picture)) - Constructor for class [Picture](http://docs.google.com/Picture.html) Constructor that takes a picture and creates a copy of that picture [**Picture(BufferedImage)**](http://docs.google.com/Picture.html#Picture(java.awt.image.BufferedImage)) - Constructor for class [Picture](http://docs.google.com/Picture.html) Constructor that takes a buffered image [**PictureExplorer**](http://docs.google.com/PictureExplorer.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Displays a picture and lets you explore the picture by displaying the x, y, red, green, and blue values of the pixel at the cursor when you click a mouse button or press and hold a mouse button while moving the cursor.[**PictureExplorer(DigitalPicture)**](http://docs.google.com/PictureExplorer.html#PictureExplorer(DigitalPicture)) - Constructor for class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Public constructor [**PictureFrame**](http://docs.google.com/PictureFrame.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that holds a digital picture and displays it.[**PictureFrame()**](http://docs.google.com/PictureFrame.html#PictureFrame()) - Constructor for class [PictureFrame](http://docs.google.com/PictureFrame.html) A constructor that takes no arguments. [**PictureFrame(DigitalPicture)**](http://docs.google.com/PictureFrame.html#PictureFrame(DigitalPicture)) - Constructor for class [PictureFrame](http://docs.google.com/PictureFrame.html) A constructor that takes a picture to display [**Pixel**](http://docs.google.com/Pixel.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that references a pixel in a picture.[**Pixel(DigitalPicture, int, int)**](http://docs.google.com/Pixel.html#Pixel(DigitalPicture,%20int,%20int)) - Constructor for class [Pixel](http://docs.google.com/Pixel.html) A constructor that take the x and y location for the pixel and the picture the pixel is coming from [**play(int)**](http://docs.google.com/FrameSequencer.html#play(int)) - Method in class [FrameSequencer](http://docs.google.com/FrameSequencer.html) Method to play the frames (pictures) added so far [**play()**](http://docs.google.com/SimpleSound.html#play()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Creates a new Playback thread and starts it. [**playAtRateDur(double, double)**](http://docs.google.com/SimpleSound.html#playAtRateDur(double,%20double)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Checks the value of durInFrames to make sure that it is not larger than Integer.MAX\_VALUE to guarrantee safe casting. [**playAtRateInRange(float, int, int)**](http://docs.google.com/SimpleSound.html#playAtRateInRange(float,%20int,%20int)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Calls playAtRateInRange(rate, startFrame, endFrame, false) . [**playAtRateInRange(float, int, int, boolean)**](http://docs.google.com/SimpleSound.html#playAtRateInRange(float,%20int,%20int,%20boolean)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Plays the specified segment of this sound at the given sample rate. [**Playback**](http://docs.google.com/Playback.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)The class Playback extends from Thread and allows for playback of a simple sound.[**Playback(SimpleSound)**](http://docs.google.com/Playback.html#Playback(SimpleSound)) - Constructor for class [Playback](http://docs.google.com/Playback.html) Constructor that takes the simple sound to be played [**playJingleBells()**](http://docs.google.com/MidiPlayer.html#playJingleBells()) - Method in class [MidiPlayer](http://docs.google.com/MidiPlayer.html) Method to play Jingle Bells [**playJingleBells4()**](http://docs.google.com/MidiPlayer.html#playJingleBells4()) - Method in class [MidiPlayer](http://docs.google.com/MidiPlayer.html) Method to play the first 4 measures of jingle bells with each measure taking 1000 milliseconds (1 second) [**playJingleBellsV1V2()**](http://docs.google.com/MidiPlayer.html#playJingleBellsV1V2()) - Method in class [MidiPlayer](http://docs.google.com/MidiPlayer.html) Method to play the first verse of jingle bells with each measure taking 1000 milliseconds (1 second) It is in 2/4 time [**playMovie()**](http://docs.google.com/MovieCapturer.html#playMovie()) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to play the captured movie [**playMovie()**](http://docs.google.com/MoviePlayer.html#playMovie()) - Method in class [MoviePlayer](http://docs.google.com/MoviePlayer.html) Method to play the movie from the beginning [**playMovie(int)**](http://docs.google.com/MoviePlayer.html#playMovie(int)) - Method in class [MoviePlayer](http://docs.google.com/MoviePlayer.html) Method to play the movie from the beginning [**playMovie()**](http://docs.google.com/VideoCapturer.html#playMovie()) - Method in interface [VideoCapturer](http://docs.google.com/VideoCapturer.html) Method to play the captured movie [**playNote(int, int, int)**](http://docs.google.com/MidiPlayer.html#playNote(int,%20int,%20int)) - Method in class [MidiPlayer](http://docs.google.com/MidiPlayer.html) Method to play a note [**playNote(int, int)**](http://docs.google.com/MidiPlayer.html#playNote(int,%20int)) - Method in class [MidiPlayer](http://docs.google.com/MidiPlayer.html) Method to play a note [**playNote(int, int, int)**](http://docs.google.com/SimpleSound.html#playNote(int,%20int,%20int)) - Static method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method to play a note using MIDI [**playNotesOnChannel(int, int[], int[], int[])**](http://docs.google.com/MidiPlayer.html#playNotesOnChannel(int,%20int%5B%5D,%20int%5B%5D,%20int%5B%5D)) - Method in class [MidiPlayer](http://docs.google.com/MidiPlayer.html) Method to play an array of notes with the given durations and intensities [**printError(String)**](http://docs.google.com/SimpleSound.html#printError(java.lang.String)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Invokes printError(message, null) [**printError(String, Exception)**](http://docs.google.com/SimpleSound.html#printError(java.lang.String,%20java.lang.Exception)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Prints the given String to the "standard" error output stream, then prints a stack trace on the exception, and then exits the program. [**prUsage()**](http://docs.google.com/JpegImagesToMovie.html#prUsage()) - Static method in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html)  

## **Q**

[**quicksort(int, int)**](http://docs.google.com/ArraySorter.html#quicksort(int,%20int)) - Method in class [ArraySorter](http://docs.google.com/ArraySorter.html) Do the quicsort on the array from the passed from to the passed to indicies

## **R**

[**read(Buffer)**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#read(javax.media.Buffer)) - Method in class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html) This is called from the Processor to read a frame worth of video data. [**RECTANGLE**](http://docs.google.com/AbstractShape.html#RECTANGLE) - Static variable in class [AbstractShape](http://docs.google.com/AbstractShape.html)   [**RectangleShape**](http://docs.google.com/RectangleShape.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class Rectangle: inherits from Shape and draws a rectangle Copyright Georgia Institute of Technology 2007[**RectangleShape()**](http://docs.google.com/RectangleShape.html#RectangleShape()) - Constructor for class [RectangleShape](http://docs.google.com/RectangleShape.html) No argument constructor [**RectangleShape(Point, Point)**](http://docs.google.com/RectangleShape.html#RectangleShape(java.awt.Point,%20java.awt.Point)) - Constructor for class [RectangleShape](http://docs.google.com/RectangleShape.html) Constructor that takes two points to define the shape [**RectangleShape(int, int, int, int)**](http://docs.google.com/RectangleShape.html#RectangleShape(int,%20int,%20int,%20int)) - Constructor for class [RectangleShape](http://docs.google.com/RectangleShape.html) Constructor that takes x1,y1,x2,y2 [**RegionInterface**](http://docs.google.com/RegionInterface.html) - Interface in [<Unnamed>](http://docs.google.com/package-summary.html)Interface for working with getting a region of an image Copyright Georgia Institute of Technology 2007[**remove(TextBalloon)**](http://docs.google.com/ComicPanel.html#remove(TextBalloon)) - Method in class [ComicPanel](http://docs.google.com/ComicPanel.html) Method to remove a text balloon from the panel [**remove(Object)**](http://docs.google.com/ModelDisplay.html#remove(java.lang.Object)) - Method in interface [ModelDisplay](http://docs.google.com/ModelDisplay.html) Method to remove the model from the world [**remove(Shape)**](http://docs.google.com/ShapeComponent.html#remove(java.awt.Shape)) - Method in class [ShapeComponent](http://docs.google.com/ShapeComponent.html) Method to remove a shape from the shape vector [**remove(int)**](http://docs.google.com/ShapeComponent.html#remove(int)) - Method in class [ShapeComponent](http://docs.google.com/ShapeComponent.html) Method to remove a shape given the index [**remove(Object)**](http://docs.google.com/World.html#remove(java.lang.Object)) - Method in class [World](http://docs.google.com/World.html) Method to remove the passed object from the world [**removeAllAfter()**](http://docs.google.com/AnimationPanel.html#removeAllAfter()) - Method in class [AnimationPanel](http://docs.google.com/AnimationPanel.html) Method to remove all after the current index [**removeAllBefore()**](http://docs.google.com/AnimationPanel.html#removeAllBefore()) - Method in class [AnimationPanel](http://docs.google.com/AnimationPanel.html) Method to remove all before current from list [**removePlayback(Playback)**](http://docs.google.com/SimpleSound.html#removePlayback(Playback)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Deletes the specified playback object from the Vector. [**repaint()**](http://docs.google.com/PictureExplorer.html#repaint()) - Method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Repaints the image on the scrollpane. [**repaint()**](http://docs.google.com/PictureFrame.html#repaint()) - Method in class [PictureFrame](http://docs.google.com/PictureFrame.html) Method to force the picture frame to repaint (redraw) [**repaint()**](http://docs.google.com/SimplePicture.html#repaint()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to force the picture to redraw itself. [**rest(int)**](http://docs.google.com/MidiPlayer.html#rest(int)) - Method in class [MidiPlayer](http://docs.google.com/MidiPlayer.html) Method to rest for a specified number of milliseconds [**run()**](http://docs.google.com/MovieCapturer.html#run()) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to run the captured movie [**run()**](http://docs.google.com/Playback.html#run()) - Method in class [Playback](http://docs.google.com/Playback.html) Starts this thread. [**run()**](http://docs.google.com/StartMovieCapture.html#run()) - Method in class [StartMovieCapture](http://docs.google.com/StartMovieCapture.html) Method to start the thread

## **S**

[**scale(double, double)**](http://docs.google.com/SimplePicture.html#scale(double,%20double)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to create a new picture by scaling the current picture by the given x and y factors [**Searcher**](http://docs.google.com/Searcher.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that demonstrates search algorithms[**Searcher()**](http://docs.google.com/Searcher.html#Searcher()) - Constructor for class [Searcher](http://docs.google.com/Searcher.html)   [**selectionSort()**](http://docs.google.com/ArraySorter.html#selectionSort()) - Method in class [ArraySorter](http://docs.google.com/ArraySorter.html) Method to do a selection sort on the array [**setAllPixelsToAColor(Color)**](http://docs.google.com/SimplePicture.html#setAllPixelsToAColor(java.awt.Color)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to set the color in the picture to the passed color [**setAlpha(int)**](http://docs.google.com/Pixel.html#setAlpha(int)) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to set the alpha (transparency) to a new alpha value [**setAudioFileFormat(AudioFileFormat)**](http://docs.google.com/SimpleSound.html#setAudioFileFormat(javax.sound.sampled.AudioFileFormat)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Changes the AudioFileFormat of this sound. [**setAutoRepaint(boolean)**](http://docs.google.com/World.html#setAutoRepaint(boolean)) - Method in class [World](http://docs.google.com/World.html) Method to set the automatically repaint flag [**setBackgroundImage(BufferedImage)**](http://docs.google.com/RegionInterface.html#setBackgroundImage(java.awt.image.BufferedImage)) - Method in interface [RegionInterface](http://docs.google.com/RegionInterface.html) Method to set the background image to select the region from [**setBackgroundImage(BufferedImage)**](http://docs.google.com/ShapeComponent.html#setBackgroundImage(java.awt.image.BufferedImage)) - Method in class [ShapeComponent](http://docs.google.com/ShapeComponent.html)   [**setBase(int)**](http://docs.google.com/SoundExplorer.html#setBase(int)) - Method in class [SoundExplorer](http://docs.google.com/SoundExplorer.html) Method to set the base for the index. [**setBaseName(String)**](http://docs.google.com/FrameSequencer.html#setBaseName(java.lang.String)) - Method in class [FrameSequencer](http://docs.google.com/FrameSequencer.html) Method to set the base name [**setBasicPixel(int, int, int)**](http://docs.google.com/DigitalPicture.html#setBasicPixel(int,%20int,%20int)) - Method in interface [DigitalPicture](http://docs.google.com/DigitalPicture.html)   [**setBasicPixel(int, int, int)**](http://docs.google.com/SimplePicture.html#setBasicPixel(int,%20int,%20int)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to set the value of a pixel in the picture from an int [**setBlue(int)**](http://docs.google.com/Pixel.html#setBlue(int)) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to set the blue to a new blue value [**setBodyColor(Color)**](http://docs.google.com/SimpleTurtle.html#setBodyColor(java.awt.Color)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the body color which will also set the pen color [**setBuffer(byte[])**](http://docs.google.com/SimpleSound.html#setBuffer(byte%5B%5D)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Changes the byte array that represents this sound. [**setChannel(int)**](http://docs.google.com/MidiPlayer.html#setChannel(int)) - Method in class [MidiPlayer](http://docs.google.com/MidiPlayer.html) Method to change the current channel [**setColor(Color)**](http://docs.google.com/Pen.html#setColor(java.awt.Color)) - Method in class [Pen](http://docs.google.com/Pen.html) Method to set the pen (ink) color [**setColor(Color)**](http://docs.google.com/Pixel.html#setColor(java.awt.Color)) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to set the pixel color to the passed in color object. [**setColor(Color)**](http://docs.google.com/SimpleTurtle.html#setColor(java.awt.Color)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the color of the turtle. [**setCurrentX(int)**](http://docs.google.com/ImageDisplay.html#setCurrentX(int)) - Method in class [ImageDisplay](http://docs.google.com/ImageDisplay.html) Method to set the current x [**setCurrentY(int)**](http://docs.google.com/ImageDisplay.html#setCurrentY(int)) - Method in class [ImageDisplay](http://docs.google.com/ImageDisplay.html) Method to set the current y [**setDirectory(String)**](http://docs.google.com/FrameSequencer.html#setDirectory(java.lang.String)) - Method in class [FrameSequencer](http://docs.google.com/FrameSequencer.html) Method to set the directory to write the frames to [**setFileName(String)**](http://docs.google.com/SimplePicture.html#setFileName(java.lang.String)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to set the file name [**setFont(Font)**](http://docs.google.com/TextBalloon.html#setFont(java.awt.Font)) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to set the font used to display the balloon [**setFrame(int, byte[])**](http://docs.google.com/SimpleSound.html#setFrame(int,%20byte%5B%5D)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Changes the value of each byte of the specified frame. [**setFrameRate(int)**](http://docs.google.com/MoviePlayer.html#setFrameRate(int)) - Method in class [MoviePlayer](http://docs.google.com/MoviePlayer.html)   [**setFramesPerSec(int)**](http://docs.google.com/AnimationPanel.html#setFramesPerSec(int)) - Method in class [AnimationPanel](http://docs.google.com/AnimationPanel.html) Method to set the frames per second to show the movie [**setFramesPerSecond(int)**](http://docs.google.com/MovieCapturer.html#setFramesPerSecond(int)) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to set the number of frames per second [**setFramesPerSecond(int)**](http://docs.google.com/VideoCapturer.html#setFramesPerSecond(int)) - Method in interface [VideoCapturer](http://docs.google.com/VideoCapturer.html) Method to set the number of frames per second [**setGreen(int)**](http://docs.google.com/Pixel.html#setGreen(int)) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to set the green to a new green value [**setHeading(double)**](http://docs.google.com/SimpleTurtle.html#setHeading(double)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the heading [**setHeight(int)**](http://docs.google.com/SimpleTurtle.html#setHeight(int)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the height of this object [**setImage(Image)**](http://docs.google.com/ImageDisplay.html#setImage(java.awt.Image)) - Method in class [ImageDisplay](http://docs.google.com/ImageDisplay.html) Method to set the image [**setInfoColor(Color)**](http://docs.google.com/SimpleTurtle.html#setInfoColor(java.awt.Color)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the information color [**setInstrument(int)**](http://docs.google.com/MidiPlayer.html#setInstrument(int)) - Method in class [MidiPlayer](http://docs.google.com/MidiPlayer.html) Method to set the instrument to play [**setLeftSample(int, int)**](http://docs.google.com/SimpleSound.html#setLeftSample(int,%20int)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html)   [**setLocator(MediaLocator)**](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html#setLocator(javax.media.MediaLocator)) - Method in class [JpegImagesToMovie.ImageDataSource](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html)   [**setMargin(int)**](http://docs.google.com/TextBalloon.html#setMargin(int)) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to set the margin [**setMediaPath(String)**](http://docs.google.com/FileChooser.html#setMediaPath(java.lang.String)) - Static method in class [FileChooser](http://docs.google.com/FileChooser.html) Method to set the media path by setting the directory to use [**setMediaPath(String)**](http://docs.google.com/SimplePicture.html#setMediaPath(java.lang.String)) - Static method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to set the media path by setting the directory to use [**setMessage(String)**](http://docs.google.com/TextBalloon.html#setMessage(java.lang.String)) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to set the message that is displayed in the balloon [**setModelDisplay(ModelDisplay)**](http://docs.google.com/SimpleTurtle.html#setModelDisplay(ModelDisplay)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the model display for this simple turtle [**setName(String)**](http://docs.google.com/SimpleTurtle.html#setName(java.lang.String)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the name of the turtle [**setPen(Pen)**](http://docs.google.com/SimpleTurtle.html#setPen(Pen)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the pen [**setPenColor(Color)**](http://docs.google.com/SimpleTurtle.html#setPenColor(java.awt.Color)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the pen color [**setPenDown(boolean)**](http://docs.google.com/Pen.html#setPenDown(boolean)) - Method in class [Pen](http://docs.google.com/Pen.html) Method to set the pen down value [**setPenDown(boolean)**](http://docs.google.com/SimpleTurtle.html#setPenDown(boolean)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the pen down boolean variable [**setPenWidth(int)**](http://docs.google.com/SimpleTurtle.html#setPenWidth(int)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the pen width [**setPicture(Picture)**](http://docs.google.com/PictureFrame.html#setPicture(Picture)) - Method in class [PictureFrame](http://docs.google.com/PictureFrame.html) Method to set the picture to show in this picture frame [**setPicture(Picture)**](http://docs.google.com/SimpleTurtle.html#setPicture(Picture)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the picture for this simple turtle [**setPicture(Picture)**](http://docs.google.com/World.html#setPicture(Picture)) - Method in class [World](http://docs.google.com/World.html) Method to set the background picture [**setPictureFrame(PictureFrame)**](http://docs.google.com/SimplePicture.html#setPictureFrame(PictureFrame)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to set the picture frame for this picture [**setPoint1Values(int, int)**](http://docs.google.com/AbstractShape.html#setPoint1Values(int,%20int)) - Method in class [AbstractShape](http://docs.google.com/AbstractShape.html) Method to set the point values for point1 that defines the shape [**setPoint2Values(int, int)**](http://docs.google.com/AbstractShape.html#setPoint2Values(int,%20int)) - Method in class [AbstractShape](http://docs.google.com/AbstractShape.html) Method to set the point values for point2 that defines the shape [**setRed(int)**](http://docs.google.com/Pixel.html#setRed(int)) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to set the red to a new red value [**setRegion(Rectangle)**](http://docs.google.com/MovieCapturer.html#setRegion(java.awt.Rectangle)) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to set the region to capture (makes sure that the width and height is a multiple of 4 for compression later [**setRegion(Rectangle)**](http://docs.google.com/VideoCapturer.html#setRegion(java.awt.Rectangle)) - Method in interface [VideoCapturer](http://docs.google.com/VideoCapturer.html) Method that sets a region to capture [**setRightSample(int, int)**](http://docs.google.com/SimpleSound.html#setRightSample(int,%20int)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html)   [**setSampleValue(int, int)**](http://docs.google.com/SimpleSound.html#setSampleValue(int,%20int)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Changes the value of the sample found at the specified frame. [**setSampleValueAt(int, int)**](http://docs.google.com/SimpleSound.html#setSampleValueAt(int,%20int)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method to set the sample value at the passed index to the passed value [**setShape(String)**](http://docs.google.com/ShapeComponent.html#setShape(java.lang.String)) - Method in class [ShapeComponent](http://docs.google.com/ShapeComponent.html) Set the type of the shape that will be created when the user clicks in the shape canvas. [**setShellColor(Color)**](http://docs.google.com/SimpleTurtle.html#setShellColor(java.awt.Color)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the shell color [**setShowInfo(boolean)**](http://docs.google.com/SimpleTurtle.html#setShowInfo(boolean)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to show the turtle information string [**setShown(boolean)**](http://docs.google.com/FrameSequencer.html#setShown(boolean)) - Method in class [FrameSequencer](http://docs.google.com/FrameSequencer.html) Method to set the shown flag [**setSoundExplorer(SoundExplorer)**](http://docs.google.com/SimpleSound.html#setSoundExplorer(SoundExplorer)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Changes the explorer of this object. [**setTailEnd(Point)**](http://docs.google.com/TextBalloon.html#setTailEnd(java.awt.Point)) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to set the end point of the tail which indicates who is speaking [**setTitle(String)**](http://docs.google.com/DigitalPicture.html#setTitle(java.lang.String)) - Method in interface [DigitalPicture](http://docs.google.com/DigitalPicture.html)   [**setTitle(String)**](http://docs.google.com/PictureExplorer.html#setTitle(java.lang.String)) - Method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Set the title of the frame [**setTitle(String)**](http://docs.google.com/PictureFrame.html#setTitle(java.lang.String)) - Method in class [PictureFrame](http://docs.google.com/PictureFrame.html) Method to set the title for the picture frame [**setTitle(String)**](http://docs.google.com/SimplePicture.html#setTitle(java.lang.String)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to set the title for the picture [**setTitle(String)**](http://docs.google.com/SoundExplorer.html#setTitle(java.lang.String)) - Method in class [SoundExplorer](http://docs.google.com/SoundExplorer.html) Method to set the title on the main window [**setUpperLeft(Point)**](http://docs.google.com/TextBalloon.html#setUpperLeft(java.awt.Point)) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to set the upper left point of the rectangle that encloses the balloon [**setValue(int)**](http://docs.google.com/SoundSample.html#setValue(int)) - Method in class [SoundSample](http://docs.google.com/SoundSample.html) Method to set the value of this sample and handle the sound exception [**setVideoCapture(VideoCapturer)**](http://docs.google.com/ShapeComponent.html#setVideoCapture(VideoCapturer)) - Method in class [ShapeComponent](http://docs.google.com/ShapeComponent.html)   [**setVisible(boolean)**](http://docs.google.com/MoviePlayer.html#setVisible(boolean)) - Method in class [MoviePlayer](http://docs.google.com/MoviePlayer.html) Method to set the visibility of the frame [**setVisible(boolean)**](http://docs.google.com/PictureFrame.html#setVisible(boolean)) - Method in class [PictureFrame](http://docs.google.com/PictureFrame.html) A method to set the visible flag on the frame [**setVisible(boolean)**](http://docs.google.com/SimplePicture.html#setVisible(boolean)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to make this picture visible or not [**setVisible(boolean)**](http://docs.google.com/SimpleTurtle.html#setVisible(boolean)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the visible flag [**setVisible(boolean)**](http://docs.google.com/World.html#setVisible(boolean)) - Method in class [World](http://docs.google.com/World.html) Method to set the visibility of the world [**setWidth(int)**](http://docs.google.com/Pen.html#setWidth(int)) - Method in class [Pen](http://docs.google.com/Pen.html) Method to set the width of the pen [**setWidth(int)**](http://docs.google.com/SimpleTurtle.html#setWidth(int)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to set the width of this object [**setWidth(int)**](http://docs.google.com/TextBalloon.html#setWidth(int)) - Method in class [TextBalloon](http://docs.google.com/TextBalloon.html) Method to set the width of the rectangle that encloses the balloon [**ShapeComponent**](http://docs.google.com/ShapeComponent.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class ShapeCanvas: holds shapes in a custom drawn area and handles a region selection Copyright Georgia Institute of Technology 2007[**ShapeComponent()**](http://docs.google.com/ShapeComponent.html#ShapeComponent()) - Constructor for class [ShapeComponent](http://docs.google.com/ShapeComponent.html) A constructor that uses the default size [**ShapeComponent(int, int)**](http://docs.google.com/ShapeComponent.html#ShapeComponent(int,%20int)) - Constructor for class [ShapeComponent](http://docs.google.com/ShapeComponent.html) A constructor that takes the width and height [**ShapeComponent(BufferedImage)**](http://docs.google.com/ShapeComponent.html#ShapeComponent(java.awt.image.BufferedImage)) - Constructor for class [ShapeComponent](http://docs.google.com/ShapeComponent.html) A constructor that takes a buffered image for the background [**ShapeComponent.MyMouseAdapter**](http://docs.google.com/ShapeComponent.MyMouseAdapter.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)An inner class for handling the mouse listener interface[**ShapeComponent.MyMouseAdapter()**](http://docs.google.com/ShapeComponent.MyMouseAdapter.html#ShapeComponent.MyMouseAdapter()) - Constructor for class [ShapeComponent.MyMouseAdapter](http://docs.google.com/ShapeComponent.MyMouseAdapter.html)   [**ShapeComponent.MyMouseMotionAdapter**](http://docs.google.com/ShapeComponent.MyMouseMotionAdapter.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Inner class for handling the mouse motion listener[**ShapeComponent.MyMouseMotionAdapter()**](http://docs.google.com/ShapeComponent.MyMouseMotionAdapter.html#ShapeComponent.MyMouseMotionAdapter()) - Constructor for class [ShapeComponent.MyMouseMotionAdapter](http://docs.google.com/ShapeComponent.MyMouseMotionAdapter.html)   [**show()**](http://docs.google.com/DigitalPicture.html#show()) - Method in interface [DigitalPicture](http://docs.google.com/DigitalPicture.html)   [**show()**](http://docs.google.com/FrameSequencer.html#show()) - Method in class [FrameSequencer](http://docs.google.com/FrameSequencer.html) Method to show the frame sequence [**show()**](http://docs.google.com/SimplePicture.html#show()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to show the picture in a picture frame [**show()**](http://docs.google.com/SimpleTurtle.html#show()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to show the turtle (doesn't affect the pen status [**showAll()**](http://docs.google.com/AnimationPanel.html#showAll()) - Method in class [AnimationPanel](http://docs.google.com/AnimationPanel.html) show all frames starting at 0 [**showAllFromCurrent()**](http://docs.google.com/AnimationPanel.html#showAllFromCurrent()) - Method in class [AnimationPanel](http://docs.google.com/AnimationPanel.html) show animation from current index [**showError(String)**](http://docs.google.com/SimpleOutput.html#showError(java.lang.String)) - Static method in class [SimpleOutput](http://docs.google.com/SimpleOutput.html) Method to show an error to a user [**showHelp()**](http://docs.google.com/CaptureButtonPanel.html#showHelp()) - Method in class [CaptureButtonPanel](http://docs.google.com/CaptureButtonPanel.html) Method to show help [**showInformation(String)**](http://docs.google.com/SimpleOutput.html#showInformation(java.lang.String)) - Static method in class [SimpleOutput](http://docs.google.com/SimpleOutput.html) Method to show information to the user [**showNext()**](http://docs.google.com/AnimationPanel.html#showNext()) - Method in class [AnimationPanel](http://docs.google.com/AnimationPanel.html) Method to show just the next frame [**showNext()**](http://docs.google.com/MoviePlayer.html#showNext()) - Method in class [MoviePlayer](http://docs.google.com/MoviePlayer.html) Method to show the next image [**showPrev()**](http://docs.google.com/AnimationPanel.html#showPrev()) - Method in class [AnimationPanel](http://docs.google.com/AnimationPanel.html) Method to show the previous frame [**showPrevious()**](http://docs.google.com/MoviePlayer.html#showPrevious()) - Method in class [MoviePlayer](http://docs.google.com/MoviePlayer.html) Method to show the previous image [**showWarning(String)**](http://docs.google.com/SimpleOutput.html#showWarning(java.lang.String)) - Static method in class [SimpleOutput](http://docs.google.com/SimpleOutput.html) Method to show a warning to a user [**SimpleInput**](http://docs.google.com/SimpleInput.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class to make it easy to get input from a user using JOptionPane Copyright Georgia Institute of Technology 2004[**SimpleInput()**](http://docs.google.com/SimpleInput.html#SimpleInput()) - Constructor for class [SimpleInput](http://docs.google.com/SimpleInput.html)   [**SimpleOutput**](http://docs.google.com/SimpleOutput.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class to make it easy to do output to the user using JOptionPane Copyright Georgia Institute of Technology 2004[**SimpleOutput()**](http://docs.google.com/SimpleOutput.html#SimpleOutput()) - Constructor for class [SimpleOutput](http://docs.google.com/SimpleOutput.html)   [**SimplePicture**](http://docs.google.com/SimplePicture.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)A class that represents a simple picture.[**SimplePicture()**](http://docs.google.com/SimplePicture.html#SimplePicture()) - Constructor for class [SimplePicture](http://docs.google.com/SimplePicture.html) A Constructor that takes no arguments. [**SimplePicture(String)**](http://docs.google.com/SimplePicture.html#SimplePicture(java.lang.String)) - Constructor for class [SimplePicture](http://docs.google.com/SimplePicture.html) A Constructor that takes a file name and uses the file to create a picture [**SimplePicture(int, int)**](http://docs.google.com/SimplePicture.html#SimplePicture(int,%20int)) - Constructor for class [SimplePicture](http://docs.google.com/SimplePicture.html) A constructor that takes the width and height desired for a picture and creates a buffered image of that size. [**SimplePicture(int, int, Color)**](http://docs.google.com/SimplePicture.html#SimplePicture(int,%20int,%20java.awt.Color)) - Constructor for class [SimplePicture](http://docs.google.com/SimplePicture.html) A constructor that takes the width and height desired for a picture and creates a buffered image of that size. [**SimplePicture(SimplePicture)**](http://docs.google.com/SimplePicture.html#SimplePicture(SimplePicture)) - Constructor for class [SimplePicture](http://docs.google.com/SimplePicture.html) A Constructor that takes a picture to copy information from [**SimplePicture(BufferedImage)**](http://docs.google.com/SimplePicture.html#SimplePicture(java.awt.image.BufferedImage)) - Constructor for class [SimplePicture](http://docs.google.com/SimplePicture.html) A constructor that takes a buffered image [**SimpleSound**](http://docs.google.com/SimpleSound.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)The SimpleSound class is an implementation of the Java Sound API specifically designed for use with students.[**SimpleSound()**](http://docs.google.com/SimpleSound.html#SimpleSound()) - Constructor for class [SimpleSound](http://docs.google.com/SimpleSound.html) Constructs a SimpleSound of 3 seconds long. [**SimpleSound(int)**](http://docs.google.com/SimpleSound.html#SimpleSound(int)) - Constructor for class [SimpleSound](http://docs.google.com/SimpleSound.html) Constructs a SimpleSound of the specified length. [**SimpleSound(int, int)**](http://docs.google.com/SimpleSound.html#SimpleSound(int,%20int)) - Constructor for class [SimpleSound](http://docs.google.com/SimpleSound.html) Constructs a SimpleSound of the specified length. [**SimpleSound(int, boolean)**](http://docs.google.com/SimpleSound.html#SimpleSound(int,%20boolean)) - Constructor for class [SimpleSound](http://docs.google.com/SimpleSound.html) Constructs a simple sound with the given sample size in bits and type of endian (big or little) [**SimpleSound(String)**](http://docs.google.com/SimpleSound.html#SimpleSound(java.lang.String)) - Constructor for class [SimpleSound](http://docs.google.com/SimpleSound.html) Constructs a new SimpleSound from the given file. [**SimpleSound(SimpleSound)**](http://docs.google.com/SimpleSound.html#SimpleSound(SimpleSound)) - Constructor for class [SimpleSound](http://docs.google.com/SimpleSound.html) Constructor that creates a new SimpleSound by copying a passed SimpleSound [**SimpleTurtle**](http://docs.google.com/SimpleTurtle.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that represents a Logo-style turtle.[**SimpleTurtle(int, int)**](http://docs.google.com/SimpleTurtle.html#SimpleTurtle(int,%20int)) - Constructor for class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Constructor that takes the x and y position for the turtle [**SimpleTurtle(int, int, ModelDisplay)**](http://docs.google.com/SimpleTurtle.html#SimpleTurtle(int,%20int,%20ModelDisplay)) - Constructor for class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Constructor that takes the x and y position and the model displayer [**SimpleTurtle(ModelDisplay)**](http://docs.google.com/SimpleTurtle.html#SimpleTurtle(ModelDisplay)) - Constructor for class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Constructor that takes a model display and adds a turtle in the middle of it [**SimpleTurtle(int, int, Picture)**](http://docs.google.com/SimpleTurtle.html#SimpleTurtle(int,%20int,%20Picture)) - Constructor for class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Constructor that takes the x and y position and the picture to draw on [**SimpleTurtle(Picture)**](http://docs.google.com/SimpleTurtle.html#SimpleTurtle(Picture)) - Constructor for class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Constructor that takes the picture to draw on and will appear in the middle [**Sound**](http://docs.google.com/Sound.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that represents a sound.[**Sound(String)**](http://docs.google.com/Sound.html#Sound(java.lang.String)) - Constructor for class [Sound](http://docs.google.com/Sound.html) Constructor that takes a file name [**Sound(int)**](http://docs.google.com/Sound.html#Sound(int)) - Constructor for class [Sound](http://docs.google.com/Sound.html) Constructor that takes the number of samples in the sound [**Sound(int, int)**](http://docs.google.com/Sound.html#Sound(int,%20int)) - Constructor for class [Sound](http://docs.google.com/Sound.html) Constructor that takes the number of samples that this sound will have and the sample rate [**Sound(Sound)**](http://docs.google.com/Sound.html#Sound(Sound)) - Constructor for class [Sound](http://docs.google.com/Sound.html) Constructor that takes a sound to copy [**SoundException**](http://docs.google.com/SoundException.html) - Exception in [<Unnamed>](http://docs.google.com/package-summary.html)Class to use to report a sound exception Copyright Georgia Institute of Technology 2004[**SoundException(String)**](http://docs.google.com/SoundException.html#SoundException(java.lang.String)) - Constructor for exception [SoundException](http://docs.google.com/SoundException.html)   [**SoundExplorer**](http://docs.google.com/SoundExplorer.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)This class allows you to explore a Sound.[**SoundExplorer(SimpleSound, boolean)**](http://docs.google.com/SoundExplorer.html#SoundExplorer(SimpleSound,%20boolean)) - Constructor for class [SoundExplorer](http://docs.google.com/SoundExplorer.html) Constructor that takes a sound and a boolean flag [**SoundSample**](http://docs.google.com/SoundSample.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that represents a sample of a sound.[**SoundSample(SimpleSound, int)**](http://docs.google.com/SoundSample.html#SoundSample(SimpleSound,%20int)) - Constructor for class [SoundSample](http://docs.google.com/SoundSample.html) Constructor that takes a sound and valueArray [**SpeechBalloon**](http://docs.google.com/SpeechBalloon.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)SpeechBalloon: this is used to represent objects in comic strips which are used to show what a character is saying.[**SpeechBalloon(Point, int, Point, String)**](http://docs.google.com/SpeechBalloon.html#SpeechBalloon(java.awt.Point,%20int,%20java.awt.Point,%20java.lang.String)) - Constructor for class [SpeechBalloon](http://docs.google.com/SpeechBalloon.html) Constructor that takes the upper left, width, tail end, and message to display [**start()**](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html#start()) - Method in class [JpegImagesToMovie.ImageDataSource](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html)   [**startCapture()**](http://docs.google.com/MovieCapturer.html#startCapture()) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to start capturing the movie [**startCapture(int)**](http://docs.google.com/MovieCapturer.html#startCapture(int)) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to start captureing the movie and continue for the passed number of seconds [**startCapture()**](http://docs.google.com/VideoCapturer.html#startCapture()) - Method in interface [VideoCapturer](http://docs.google.com/VideoCapturer.html) Method to start the capture [**startCapture(int)**](http://docs.google.com/VideoCapturer.html#startCapture(int)) - Method in interface [VideoCapturer](http://docs.google.com/VideoCapturer.html) Method to start the capture and capture numSeconds of video [**StartMovieCapture**](http://docs.google.com/StartMovieCapture.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that is Runnable to start Movie Capture and stop it Copyright Georgia Institute of Technology 2007[**StartMovieCapture(FrameSequencer, int, Rectangle)**](http://docs.google.com/StartMovieCapture.html#StartMovieCapture(FrameSequencer,%20int,%20java.awt.Rectangle)) - Constructor for class [StartMovieCapture](http://docs.google.com/StartMovieCapture.html) Constructor that takes the frame sequencer, number of frames per second, and the region to capture [**stateTransitionOK**](http://docs.google.com/JpegImagesToMovie.html#stateTransitionOK) - Variable in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html)   [**STEEL\_GUITAR**](http://docs.google.com/MidiPlayer.html#STEEL_GUITAR) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**stop()**](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html#stop()) - Method in class [JpegImagesToMovie.ImageDataSource](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html)   [**stop()**](http://docs.google.com/StartMovieCapture.html#stop()) - Method in class [StartMovieCapture](http://docs.google.com/StartMovieCapture.html) Method to stop the thread [**stopCapture()**](http://docs.google.com/MovieCapturer.html#stopCapture()) - Method in class [MovieCapturer](http://docs.google.com/MovieCapturer.html) Method to stop capturing the movie [**stopCapture()**](http://docs.google.com/VideoCapturer.html#stopCapture()) - Method in interface [VideoCapturer](http://docs.google.com/VideoCapturer.html) Method to stop the capture [**stopPlaying()**](http://docs.google.com/Playback.html#stopPlaying()) - Method in class [Playback](http://docs.google.com/Playback.html) Stops this thread by breaking the while loop in the run method. [**streams**](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html#streams) - Variable in class [JpegImagesToMovie.ImageDataSource](http://docs.google.com/JpegImagesToMovie.ImageDataSource.html)  

## **T**

[**TConversionTool**](http://docs.google.com/TConversionTool.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html) [**TConversionTool()**](http://docs.google.com/TConversionTool.html#TConversionTool()) - Constructor for class [TConversionTool](http://docs.google.com/TConversionTool.html)   [**TELEPHONE**](http://docs.google.com/MidiPlayer.html#TELEPHONE) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**TENOR\_SAX**](http://docs.google.com/MidiPlayer.html#TENOR_SAX) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**Test**](http://docs.google.com/Test.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class for simple testing Copyright Georgia Institute of Technology 2004[**Test()**](http://docs.google.com/Test.html#Test()) - Constructor for class [Test](http://docs.google.com/Test.html)   [**testConnection()**](http://docs.google.com/DatabaseManager.html#testConnection()) - Method in class [DatabaseManager](http://docs.google.com/DatabaseManager.html) Method for testing the connection [**testInsertionSort()**](http://docs.google.com/ArraySorter.html#testInsertionSort()) - Static method in class [ArraySorter](http://docs.google.com/ArraySorter.html) Method to test insertion sort [**testMergeSort()**](http://docs.google.com/ArraySorter.html#testMergeSort()) - Static method in class [ArraySorter](http://docs.google.com/ArraySorter.html)   [**testQuery(String, int)**](http://docs.google.com/DatabaseManager.html#testQuery(java.lang.String,%20int)) - Method in class [DatabaseManager](http://docs.google.com/DatabaseManager.html) Method to test a query and print the results [**testQuicksort()**](http://docs.google.com/ArraySorter.html#testQuicksort()) - Static method in class [ArraySorter](http://docs.google.com/ArraySorter.html)   [**testSelectionSort()**](http://docs.google.com/ArraySorter.html#testSelectionSort()) - Static method in class [ArraySorter](http://docs.google.com/ArraySorter.html) Method to test selection sort [**TextBalloon**](http://docs.google.com/TextBalloon.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)TextBalloon: this is used to represent objects in comic strips which are used to show what a character is saying or thinking.[**TextBalloon(Point, int, Point, String)**](http://docs.google.com/TextBalloon.html#TextBalloon(java.awt.Point,%20int,%20java.awt.Point,%20java.lang.String)) - Constructor for class [TextBalloon](http://docs.google.com/TextBalloon.html) Constructor that takes the upper left, width, tail end, and message to display [**ThoughtBalloon**](http://docs.google.com/ThoughtBalloon.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)ThoughtBalloon: this is used to represent objects in comic strips which are used to show what a character is thinking.[**ThoughtBalloon(Point, int, Point, String)**](http://docs.google.com/ThoughtBalloon.html#ThoughtBalloon(java.awt.Point,%20int,%20java.awt.Point,%20java.lang.String)) - Constructor for class [ThoughtBalloon](http://docs.google.com/ThoughtBalloon.html) Constructor that takes the upper left, width, tail end, and message to display [**TIMPANI**](http://docs.google.com/MidiPlayer.html#TIMPANI) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**toString()**](http://docs.google.com/Picture.html#toString()) - Method in class [Picture](http://docs.google.com/Picture.html) Method to return a string with information about this picture. [**toString()**](http://docs.google.com/Pixel.html#toString()) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to return a string with information about this pixel [**toString()**](http://docs.google.com/SimplePicture.html#toString()) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to return a string with information about this picture [**toString()**](http://docs.google.com/SimpleSound.html#toString()) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Obtains a string representation of this JavaSound. [**toString()**](http://docs.google.com/SimpleTurtle.html#toString()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to return a string with informaiton about this turtle [**toString()**](http://docs.google.com/Sound.html#toString()) - Method in class [Sound](http://docs.google.com/Sound.html) Method to return the string representation of this sound [**toString()**](http://docs.google.com/SoundSample.html#toString()) - Method in class [SoundSample](http://docs.google.com/SoundSample.html) Method to return a string with the information about this object [**toString()**](http://docs.google.com/World.html#toString()) - Method in class [World](http://docs.google.com/World.html) Method that returns information about this world in the form of a string [**TROMBONE**](http://docs.google.com/MidiPlayer.html#TROMBONE) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**TRUMPET**](http://docs.google.com/MidiPlayer.html#TRUMPET) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**TUBA**](http://docs.google.com/MidiPlayer.html#TUBA) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**TurlteDropTest**](http://docs.google.com/TurlteDropTest.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html) [**TurlteDropTest()**](http://docs.google.com/TurlteDropTest.html#TurlteDropTest()) - Constructor for class [TurlteDropTest](http://docs.google.com/TurlteDropTest.html)   [**turn(double)**](http://docs.google.com/SimpleTurtle.html#turn(double)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to turn the turtle the passed degrees use negative to turn left and pos to turn right [**turnLeft()**](http://docs.google.com/SimpleTurtle.html#turnLeft()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to turn left [**turnRight()**](http://docs.google.com/SimpleTurtle.html#turnRight()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to turn right [**turnToFace(SimpleTurtle)**](http://docs.google.com/SimpleTurtle.html#turnToFace(SimpleTurtle)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to turn to face another simple turtle [**turnToFace(int, int)**](http://docs.google.com/SimpleTurtle.html#turnToFace(int,%20int)) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to turn towards the given x and y [**Turtle**](http://docs.google.com/Turtle.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that represents a turtle which is similar to a Logo turtle.[**Turtle(int, int, Picture)**](http://docs.google.com/Turtle.html#Turtle(int,%20int,%20Picture)) - Constructor for class [Turtle](http://docs.google.com/Turtle.html) Constructor that takes the x and y and a picture to draw on [**Turtle(int, int, ModelDisplay)**](http://docs.google.com/Turtle.html#Turtle(int,%20int,%20ModelDisplay)) - Constructor for class [Turtle](http://docs.google.com/Turtle.html) Constructor that takes the x and y and a model display to draw it on [**Turtle(ModelDisplay)**](http://docs.google.com/Turtle.html#Turtle(ModelDisplay)) - Constructor for class [Turtle](http://docs.google.com/Turtle.html) Constructor that takes the model display [**Turtle(Picture)**](http://docs.google.com/Turtle.html#Turtle(Picture)) - Constructor for class [Turtle](http://docs.google.com/Turtle.html) Constructor that takes a picture to draw on [**TurtleTest**](http://docs.google.com/TurtleTest.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html) [**TurtleTest()**](http://docs.google.com/TurtleTest.html#TurtleTest()) - Constructor for class [TurtleTest](http://docs.google.com/TurtleTest.html)  

## **U**

[**ulaw2linear(byte)**](http://docs.google.com/TConversionTool.html#ulaw2linear(byte)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html)   [**unsignedByteToInt(byte)**](http://docs.google.com/TConversionTool.html#unsignedByteToInt(byte)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html)   [**unsignedByteToInt16(byte[], int, boolean)**](http://docs.google.com/TConversionTool.html#unsignedByteToInt16(byte%5B%5D,%20int,%20boolean)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html)   [**unsignedByteToInt24(byte[], int, boolean)**](http://docs.google.com/TConversionTool.html#unsignedByteToInt24(byte%5B%5D,%20int,%20boolean)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html)   [**unsignedByteToInt32(byte[], int, boolean)**](http://docs.google.com/TConversionTool.html#unsignedByteToInt32(byte%5B%5D,%20int,%20boolean)) - Static method in class [TConversionTool](http://docs.google.com/TConversionTool.html)   [**update(Graphics)**](http://docs.google.com/ShapeComponent.html#update(java.awt.Graphics)) - Method in class [ShapeComponent](http://docs.google.com/ShapeComponent.html) Update normally clears the background and calls paint override it here to just call paint [**update(LineEvent)**](http://docs.google.com/SoundExplorer.html#update(javax.sound.sampled.LineEvent)) - Method in class [SoundExplorer](http://docs.google.com/SoundExplorer.html) Method to handle the line event update [**updateDisplay()**](http://docs.google.com/SimpleTurtle.html#updateDisplay()) - Method in class [SimpleTurtle](http://docs.google.com/SimpleTurtle.html) Method to update the display of this turtle and also check that the turtle is in the bounds [**updateImage()**](http://docs.google.com/PictureFrame.html#updateImage()) - Method in class [PictureFrame](http://docs.google.com/PictureFrame.html) A method to update the picture frame image with the image in the picture [**updateImageAndShowIt()**](http://docs.google.com/PictureFrame.html#updateImageAndShowIt()) - Method in class [PictureFrame](http://docs.google.com/PictureFrame.html) A method to update the picture frame image with the image in the picture and show it [**updatePicture(int, int, int, int)**](http://docs.google.com/Pixel.html#updatePicture(int,%20int,%20int,%20int)) - Method in class [Pixel](http://docs.google.com/Pixel.html) Method to update the picture based on the passed color values for this pixel

## **V**

[**VideoCapturer**](http://docs.google.com/VideoCapturer.html) - Interface in [<Unnamed>](http://docs.google.com/package-summary.html)Interface for working with video capture Copyright Georgia Institute of Technology 2007[**VIOLIN**](http://docs.google.com/MidiPlayer.html#VIOLIN) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)  

## **W**

[**waitFileSync**](http://docs.google.com/JpegImagesToMovie.html#waitFileSync) - Variable in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html)   [**waitForFileDone()**](http://docs.google.com/JpegImagesToMovie.html#waitForFileDone()) - Method in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html) Block until file writing is done. [**waitForState(Processor, int)**](http://docs.google.com/JpegImagesToMovie.html#waitForState(javax.media.Processor,%20int)) - Method in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html) Block until the processor has transitioned to the given state. [**waitSync**](http://docs.google.com/JpegImagesToMovie.html#waitSync) - Variable in class [JpegImagesToMovie](http://docs.google.com/JpegImagesToMovie.html)   [**WHISTLE**](http://docs.google.com/MidiPlayer.html#WHISTLE) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)   [**width**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#width) - Variable in class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html)   [**willReadBlock()**](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html#willReadBlock()) - Method in class [JpegImagesToMovie.ImageSourceStream](http://docs.google.com/JpegImagesToMovie.ImageSourceStream.html) We should never need to block assuming data are read from files. [**Wolf**](http://docs.google.com/Wolf.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class that represents a wolf.[**Wolf(ModelDisplay)**](http://docs.google.com/Wolf.html#Wolf(ModelDisplay)) - Constructor for class [Wolf](http://docs.google.com/Wolf.html) Constructor that takes the model display (the original position will be randomly assigned) [**Wolf(int, int, ModelDisplay)**](http://docs.google.com/Wolf.html#Wolf(int,%20int,%20ModelDisplay)) - Constructor for class [Wolf](http://docs.google.com/Wolf.html) Constructor that takes the x and y and a model display to draw it on [**World**](http://docs.google.com/World.html) - Class in [<Unnamed>](http://docs.google.com/package-summary.html)Class to represent a 2d world that can hold turtles and display them Copyright Georgia Institute of Technology 2004[**World()**](http://docs.google.com/World.html#World()) - Constructor for class [World](http://docs.google.com/World.html) Constructor that takes no arguments [**World(boolean)**](http://docs.google.com/World.html#World(boolean)) - Constructor for class [World](http://docs.google.com/World.html) Constructor that takes a boolean to say if this world should be visible or not [**World(int, int)**](http://docs.google.com/World.html#World(int,%20int)) - Constructor for class [World](http://docs.google.com/World.html) Constructor that takes a width and height for this world [**write(String)**](http://docs.google.com/ComicPanel.html#write(java.lang.String)) - Method in class [ComicPanel](http://docs.google.com/ComicPanel.html) Method to write out the comic panel [**write(String)**](http://docs.google.com/SimplePicture.html#write(java.lang.String)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to write the contents of the picture to a file with the passed name without throwing errors [**write(String)**](http://docs.google.com/SimpleSound.html#write(java.lang.String)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Method to write this sound to a file [**writeAVI()**](http://docs.google.com/MoviePlayer.html#writeAVI()) - Method in class [MoviePlayer](http://docs.google.com/MoviePlayer.html) Method to write out the movie frames as a Quicktime movie [**writeAVI()**](http://docs.google.com/MovieWriter.html#writeAVI()) - Method in class [MovieWriter](http://docs.google.com/MovieWriter.html) Method to write the movie frames in AVI format [**writeOrFail(String)**](http://docs.google.com/SimplePicture.html#writeOrFail(java.lang.String)) - Method in class [SimplePicture](http://docs.google.com/SimplePicture.html) Method to write the contents of the picture to a file with the passed name [**writeQuicktime()**](http://docs.google.com/MoviePlayer.html#writeQuicktime()) - Method in class [MoviePlayer](http://docs.google.com/MoviePlayer.html) Method to write out the movie frames as a Quicktime movie [**writeQuicktime()**](http://docs.google.com/MovieWriter.html#writeQuicktime()) - Method in class [MovieWriter](http://docs.google.com/MovieWriter.html) Method to write the movie frames as quicktime [**writeToFile(String)**](http://docs.google.com/SimpleSound.html#writeToFile(java.lang.String)) - Method in class [SimpleSound](http://docs.google.com/SimpleSound.html) Creates an audioInputStream from this sound, and then writes this stream out to the file with the specified name.

## **X**

[**XYLOPHONE**](http://docs.google.com/MidiPlayer.html#XYLOPHONE) - Static variable in class [MidiPlayer](http://docs.google.com/MidiPlayer.html)  

## **Z**

[**zoom(double)**](http://docs.google.com/PictureExplorer.html#zoom(double)) - Method in class [PictureExplorer](http://docs.google.com/PictureExplorer.html) Zooms in the on picture by scaling the image.[A](#3znysh7) [B](#2et92p0) [C](#tyjcwt) [D](#3dy6vkm) [E](#1t3h5sf) [F](#4d34og8) [G](#2s8eyo1) [H](#17dp8vu) [I](#3rdcrjn) [J](#26in1rg) [L](#lnxbz9) [M](#35nkun2) [N](#1ksv4uv) [O](#44sinio) [P](#2jxsxqh) [Q](#z337ya) [R](#3j2qqm3) [S](#1y810tw) [T](#4i7ojhp) [U](#2xcytpi) [V](#1ci93xb) [W](#3whwml4) [X](#2bn6wsx) [Z](#qsh70q)

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