| | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-all.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/SoundException.html)   [**NEXT CLASS**](http://docs.google.com/SoundSample.html) | [**FRAMES**](http://docs.google.com/index.html?SoundExplorer.html)    [**NO FRAMES**](http://docs.google.com/SoundExplorer.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

## Class SoundExplorer

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

**All Implemented Interfaces:** [ActionListener](http://java.sun.com/javase/6/docs/api/java/awt/event/ActionListener.html?is-external=true), [MouseListener](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseListener.html?is-external=true), [MouseMotionListener](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseMotionListener.html?is-external=true), [EventListener](http://java.sun.com/javase/6/docs/api/java/util/EventListener.html?is-external=true), [LineListener](http://java.sun.com/javase/6/docs/api/javax/sound/sampled/LineListener.html?is-external=true)

public class **SoundExplorer**extends [Object](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true)implements [MouseMotionListener](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseMotionListener.html?is-external=true), [ActionListener](http://java.sun.com/javase/6/docs/api/java/awt/event/ActionListener.html?is-external=true), [MouseListener](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseListener.html?is-external=true), [LineListener](http://java.sun.com/javase/6/docs/api/javax/sound/sampled/LineListener.html?is-external=true)

This class allows you to explore a Sound. You can see the line drawing of the sound samples and play all or part of a sound. You can zoom in to see all the samples in the sound or zoom out to see the entire sound. You can click on the sound wave to see the value at that index. Copyright Georgia Institute of Technology 2004

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| **Constructor Summary** | |
| --- | --- |
| [**SoundExplorer**](http://docs.google.com/SoundExplorer.html#SoundExplorer(SimpleSound,%20boolean))([SimpleSound](http://docs.google.com/SimpleSound.html) sound, boolean inStereo)            Constructor that takes a sound and a boolean flag |

| **Method Summary** | |
| --- | --- |
| void | [**actionPerformed**](http://docs.google.com/SoundExplorer.html#actionPerformed(java.awt.event.ActionEvent))([ActionEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/ActionEvent.html?is-external=true) e)            Method to handle an action event |
| void | [**checkScroll**](http://docs.google.com/SoundExplorer.html#checkScroll())()            Method to check that the current position is in the viewing area and if not scroll to center the current position if possible |
| void | [**mouseClicked**](http://docs.google.com/SoundExplorer.html#mouseClicked(java.awt.event.MouseEvent))([MouseEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseEvent.html?is-external=true) e)            Handle a mouse click event |
| void | [**mouseDragged**](http://docs.google.com/SoundExplorer.html#mouseDragged(java.awt.event.MouseEvent))([MouseEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseEvent.html?is-external=true) e)            Method to handle a mouse dragged event |
| void | [**mouseEntered**](http://docs.google.com/SoundExplorer.html#mouseEntered(java.awt.event.MouseEvent))([MouseEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseEvent.html?is-external=true) e)            Method to handle a mouse entered event |
| void | [**mouseExited**](http://docs.google.com/SoundExplorer.html#mouseExited(java.awt.event.MouseEvent))([MouseEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseEvent.html?is-external=true) e)            Method to handle a mouse exited event |
| void | [**mouseMoved**](http://docs.google.com/SoundExplorer.html#mouseMoved(java.awt.event.MouseEvent))([MouseEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseEvent.html?is-external=true) e)            Method to handle a mouse move event |
| void | [**mousePressed**](http://docs.google.com/SoundExplorer.html#mousePressed(java.awt.event.MouseEvent))([MouseEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseEvent.html?is-external=true) e)            Method to handle a mouse press |
| void | [**mouseReleased**](http://docs.google.com/SoundExplorer.html#mouseReleased(java.awt.event.MouseEvent))([MouseEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseEvent.html?is-external=true) e)            Method to handle a mouse release |
| void | [**setBase**](http://docs.google.com/SoundExplorer.html#setBase(int))(int base)            Method to set the base for the index. |
| void | [**setTitle**](http://docs.google.com/SoundExplorer.html#setTitle(java.lang.String))([String](http://java.sun.com/javase/6/docs/api/java/lang/String.html?is-external=true) s)            Method to set the title on the main window |
| void | [**update**](http://docs.google.com/SoundExplorer.html#update(javax.sound.sampled.LineEvent))([LineEvent](http://java.sun.com/javase/6/docs/api/javax/sound/sampled/LineEvent.html?is-external=true) e)            Method to handle the line event update |

| **Methods inherited from class java.lang.**[**Object**](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true) |
| --- |
| [clone](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#clone()), [equals](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#equals(java.lang.Object)), [finalize](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#finalize()), [getClass](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#getClass()), [hashCode](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#hashCode()), [notify](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#notify()), [notifyAll](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#notifyAll()), [toString](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#toString()), [wait](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#wait()), [wait](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#wait(long)), [wait](http://java.sun.com/javase/6/docs/api/java/lang/Object.html?is-external=true#wait(long,%20int)) |

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

### SoundExplorer

public **SoundExplorer**([SimpleSound](http://docs.google.com/SimpleSound.html) sound,  
 boolean inStereo)

Constructor that takes a sound and a boolean flag

**Parameters:**sound - the sound to viewinStereo - true if you want to show it in stereo

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

### setTitle

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

Method to set the title on the main window

**Parameters:**s - the string to use as the title

### mouseClicked

public void **mouseClicked**([MouseEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseEvent.html?is-external=true) e)

Handle a mouse click event

**Specified by:**[mouseClicked](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseListener.html?is-external=true#mouseClicked(java.awt.event.MouseEvent)) in interface [MouseListener](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseListener.html?is-external=true) **Parameters:**e - the mouse event

### mousePressed

public void **mousePressed**([MouseEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseEvent.html?is-external=true) e)

Method to handle a mouse press

**Specified by:**[mousePressed](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseListener.html?is-external=true#mousePressed(java.awt.event.MouseEvent)) in interface [MouseListener](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseListener.html?is-external=true) **Parameters:**e - the mouse event

### mouseReleased

public void **mouseReleased**([MouseEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseEvent.html?is-external=true) e)

Method to handle a mouse release

**Specified by:**[mouseReleased](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseListener.html?is-external=true#mouseReleased(java.awt.event.MouseEvent)) in interface [MouseListener](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseListener.html?is-external=true) **Parameters:**e - the mouse event

### mouseEntered

public void **mouseEntered**([MouseEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseEvent.html?is-external=true) e)

Method to handle a mouse entered event

**Specified by:**[mouseEntered](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseListener.html?is-external=true#mouseEntered(java.awt.event.MouseEvent)) in interface [MouseListener](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseListener.html?is-external=true) **Parameters:**e - the mouse event

### mouseExited

public void **mouseExited**([MouseEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseEvent.html?is-external=true) e)

Method to handle a mouse exited event

**Specified by:**[mouseExited](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseListener.html?is-external=true#mouseExited(java.awt.event.MouseEvent)) in interface [MouseListener](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseListener.html?is-external=true) **Parameters:**e - the mouse event

### mouseDragged

public void **mouseDragged**([MouseEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseEvent.html?is-external=true) e)

Method to handle a mouse dragged event

**Specified by:**[mouseDragged](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseMotionListener.html?is-external=true#mouseDragged(java.awt.event.MouseEvent)) in interface [MouseMotionListener](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseMotionListener.html?is-external=true) **Parameters:**e - the mouse event

### mouseMoved

public void **mouseMoved**([MouseEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseEvent.html?is-external=true) e)

Method to handle a mouse move event

**Specified by:**[mouseMoved](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseMotionListener.html?is-external=true#mouseMoved(java.awt.event.MouseEvent)) in interface [MouseMotionListener](http://java.sun.com/javase/6/docs/api/java/awt/event/MouseMotionListener.html?is-external=true) **Parameters:**e - the mouse event

### update

public void **update**([LineEvent](http://java.sun.com/javase/6/docs/api/javax/sound/sampled/LineEvent.html?is-external=true) e)

Method to handle the line event update

**Specified by:**[update](http://java.sun.com/javase/6/docs/api/javax/sound/sampled/LineListener.html?is-external=true#update(javax.sound.sampled.LineEvent)) in interface [LineListener](http://java.sun.com/javase/6/docs/api/javax/sound/sampled/LineListener.html?is-external=true) **Parameters:**e - the line event

### actionPerformed

public void **actionPerformed**([ActionEvent](http://java.sun.com/javase/6/docs/api/java/awt/event/ActionEvent.html?is-external=true) e)

Method to handle an action event

**Specified by:**[actionPerformed](http://java.sun.com/javase/6/docs/api/java/awt/event/ActionListener.html?is-external=true#actionPerformed(java.awt.event.ActionEvent)) in interface [ActionListener](http://java.sun.com/javase/6/docs/api/java/awt/event/ActionListener.html?is-external=true) **Parameters:**e - the action event

### checkScroll

public void **checkScroll**()

Method to check that the current position is in the viewing area and if not scroll to center the current position if possible

### setBase

public void **setBase**(int base)

Method to set the base for the index. The default is a base of 0.

**Parameters:**base - the new base to use (for example use setBase(1)) to use base 1 instead of 0

| | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-all.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/SoundException.html)   [**NEXT CLASS**](http://docs.google.com/SoundSample.html) | [**FRAMES**](http://docs.google.com/index.html?SoundExplorer.html)    [**NO FRAMES**](http://docs.google.com/SoundExplorer.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |