

JSynth

Generated by Doxygen 1.8.11

Contents

1	Namespace Index	1
1.1	Packages	1
2	Hierarchical Index	3
2.1	Class Hierarchy	3
3	Class Index	5
3.1	Class List	5
4	File Index	7
4.1	File List	7
5	Namespace Documentation	9
5.1	Package gui	9
5.2	Package main	9
6	Class Documentation	11
6.1	main.AudioOutput Interface Reference	11
6.1.1	Detailed Description	11
6.1.2	Member Function Documentation	11
6.1.2.1	ReadAudio(AudioFormat af)	11
6.2	main.Main Class Reference	12
6.2.1	Detailed Description	13
6.2.2	Constructor & Destructor Documentation	13
6.2.2.1	Main()	13
6.2.3	Member Function Documentation	14

6.2.3.1	buildGUI()	14
6.2.3.2	GetOSC()	14
6.2.3.3	GetVK()	14
6.2.3.4	loadState(File f)	14
6.2.3.5	main(String[] args)	15
6.2.3.6	saveState(File f)	16
6.3	main.Mixer Class Reference	17
6.3.1	Constructor & Destructor Documentation	17
6.3.1.1	Mixer(Main m)	17
6.3.2	Member Function Documentation	17
6.3.2.1	ToggleRecording()	17
6.3.2.2	update()	18
6.4	main.Note Class Reference	19
6.4.1	Detailed Description	19
6.4.2	Constructor & Destructor Documentation	19
6.4.2.1	Note(String name, int oct)	19
6.4.3	Member Function Documentation	20
6.4.3.1	compareTo(Object o)	20
6.4.3.2	equals(Object o)	20
6.5	main.NoteListener Interface Reference	21
6.5.1	Detailed Description	22
6.5.2	Member Function Documentation	22
6.5.2.1	onNotePress(Note n)	22
6.5.2.2	onNoteRelease(Note n)	22
6.6	main.OSC Class Reference	23
6.6.1	Detailed Description	24
6.6.2	Member Function Documentation	24
6.6.2.1	CircFadeOut(double cet)	24
6.6.2.2	GetAmp()	24
6.6.2.3	GetDecr()	24

6.6.2.4	GetFout()	25
6.6.2.5	GetMode()	25
6.6.2.6	LinearFadeOut(double cet)	25
6.6.2.7	onNotePress(Note n)	25
6.6.2.8	onNoteRelease(Note n)	26
6.6.2.9	ReadAudio(AudioFormat af)	26
6.6.2.10	RootFadeOut(double cet)	26
6.6.2.11	saw(double x)	26
6.6.2.12	setAmp(double samp)	27
6.6.2.13	SetDecr(int sd)	28
6.6.2.14	SetFOutTime(double sft)	28
6.6.2.15	SetMode(int sm)	28
6.6.2.16	square(double x)	28
6.6.2.17	SquFadeOut(double cet)	29
6.6.2.18	triangle(double x)	29
6.7	gui.OscGUI Class Reference	30
6.7.1	Constructor & Destructor Documentation	30
6.7.1.1	OscGUI(OSC so)	30
6.7.2	Member Function Documentation	30
6.7.2.1	actionPerformed(ActionEvent e)	31
6.7.2.2	changedUpdate(DocumentEvent e)	31
6.7.2.3	insertUpdate(DocumentEvent e)	31
6.7.2.4	removeUpdate(DocumentEvent e)	32
6.7.2.5	UpdateFromOSC()	32
6.8	main.VirtualKeyboard Class Reference	32
6.8.1	Detailed Description	33
6.8.2	Member Function Documentation	33
6.8.2.1	keyPressed(KeyEvent e)	33
6.8.2.2	keyReleased(KeyEvent e)	33
6.8.2.3	keyTyped(KeyEvent e)	33
6.8.2.4	SetActive(boolean set)	33
7	File Documentation	35
7.1	src/gui/OscGUI.java File Reference	35
7.2	src/main/AudioOutput.java File Reference	35
7.3	src/main/Main.java File Reference	35
7.4	src/main/Mixer.java File Reference	36
7.5	src/main/Note.java File Reference	36
7.6	src/main/NoteListener.java File Reference	36
7.7	src/main/OSC.java File Reference	36
7.8	src/main/VirtualKeyboard.java File Reference	36

Chapter 1

Namespace Index

1.1 Packages

Here are the packages with brief descriptions (if available):

gui	9
main	9

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

main.AudioOutput	11
main.OSC	23
Comparable	
main.Note	19
main.Mixer	17
main.NoteListener	21
main.OSC	23
main.VirtualKeyboard	32
ActionListener	
gui.OscGUI	30
DocumentListener	
gui.OscGUI	30
JFrame	
main.Main	12
JPanel	
gui.OscGUI	30
Serializable	
main.OSC	23

Chapter 3

Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

main.AudioOutput	11
main.Main	12
main.Mixer	17
main.Note	19
main.NoteListener	21
main.OSC	23
gui.OscGUI	30
main.VirtualKeyboard	32

Chapter 4

File Index

4.1 File List

Here is a list of all files with brief descriptions:

src/gui/ OscGUI.java	35
src/main/ AudioOutput.java	35
src/main/ Main.java	35
src/main/ Mixer.java	36
src/main/ Note.java	36
src/main/ NoteListener.java	36
src/main/ OSC.java	36
src/main/ VirtualKeyboard.java	36

Chapter 5

Namespace Documentation

5.1 Package gui

Classes

- class [OscGUI](#)

5.2 Package main

Classes

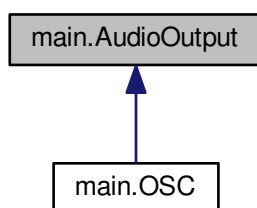
- interface [AudioOutput](#)
- class [Main](#)
- class [Mixer](#)
- class [Note](#)
- interface [NoteListener](#)
- class [OSC](#)
- class [VirtualKeyboard](#)

Chapter 6

Class Documentation

6.1 main.AudioOutput Interface Reference

Inheritance diagram for main.AudioOutput:



Public Member Functions

- byte[] [ReadAudio](#) (AudioFormat af)

6.1.1 Detailed Description

Interface a hanforrásokhoz.

Author

felruogo

6.1.2 Member Function Documentation

6.1.2.1 byte [] main.AudioOutput.ReadAudio (AudioFormat af)

Generál egy időrésnyi mintát.

Parameters

<i>af</i>	Hangformátum a generáláshoz.
-----------	------------------------------

Returns

A minta.

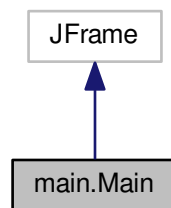
Implemented in [main.OSC](#).

The documentation for this interface was generated from the following file:

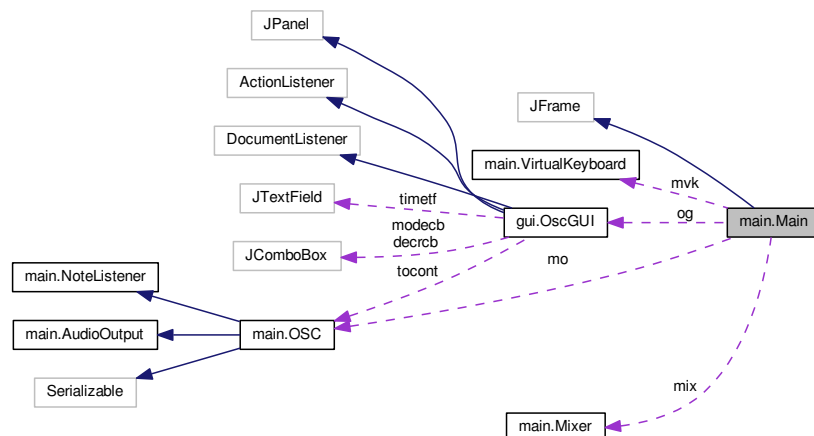
- [src/main/AudioOutput.java](#)

6.2 main.Main Class Reference

Inheritance diagram for main.Main:



Collaboration diagram for main.Main:



Public Member Functions

- void [saveState](#) (File f)
- void [loadState](#) (File f)
- void [buildGUI](#) ()
- [Main](#) ()
- [VirtualKeyboard](#) GetVK ()
- [OSC](#) GetOSC ()

Static Public Member Functions

- static void [main](#) (String[] args)

6.2.1 Detailed Description

A főablak osztálya.

Author

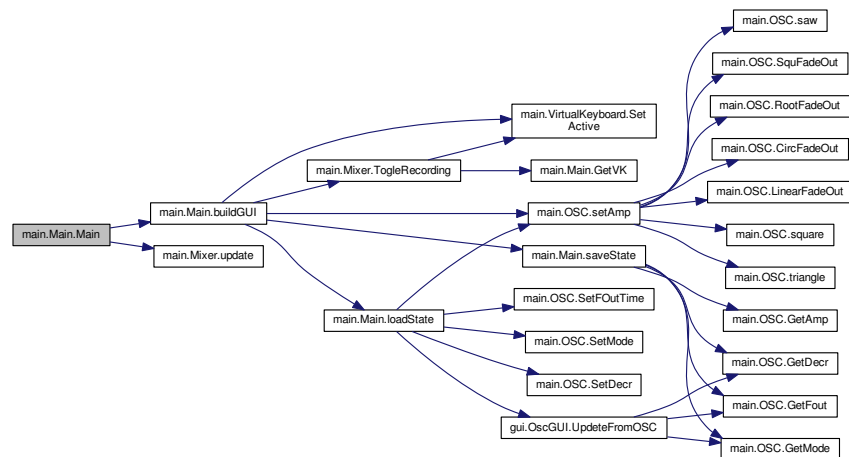
felrugo

6.2.2 Constructor & Destructor Documentation

6.2.2.1 main.Main.Main ()

Konstruktor.

Here is the call graph for this function:



Here is the caller graph for this function:

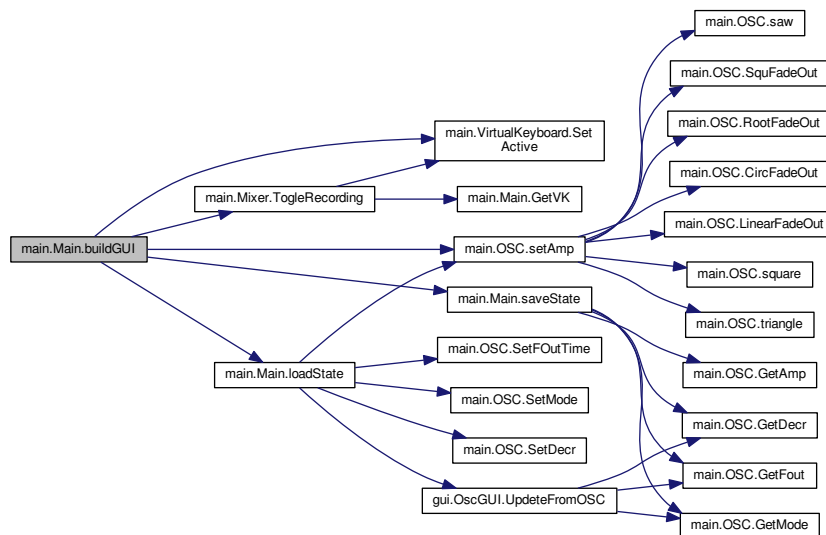


6.2.3 Member Function Documentation

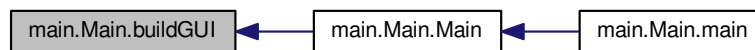
6.2.3.1 void main.Main.buildGUI ()

Megépíti az alkalmazás kezelőfelületét.

Here is the call graph for this function:



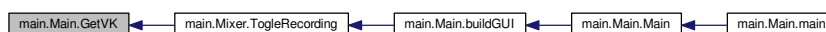
Here is the caller graph for this function:



6.2.3.2 OSC main.Main.GetOSC ()

6.2.3.3 VirtualKeyboard main.Main.GetVK ()

Here is the caller graph for this function:



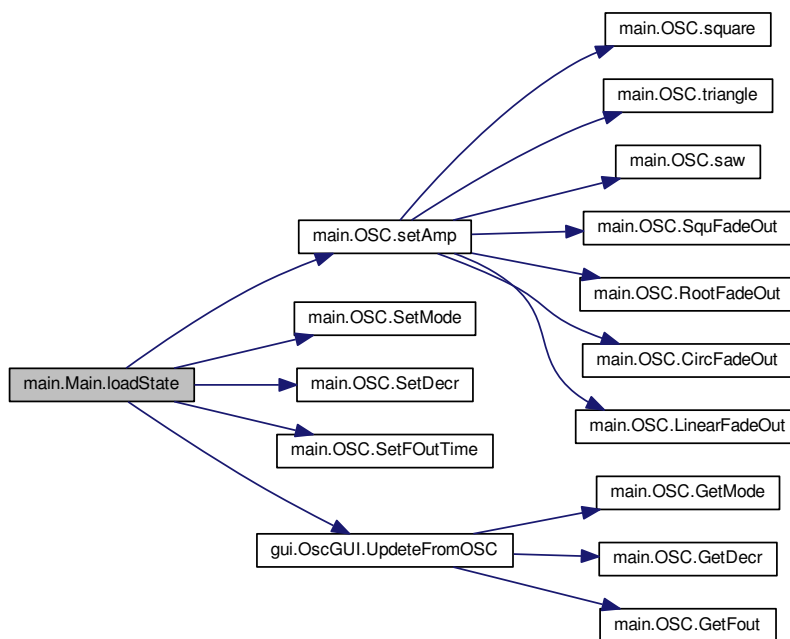
6.2.3.4 void main.Main.loadState (File f)

Betölti az alkalmazás állapotát.

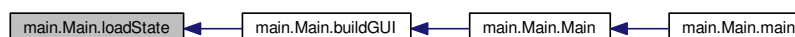
Parameters

<i>f</i>	A betöltéshez használt File.
----------	------------------------------

Here is the call graph for this function:



Here is the caller graph for this function:



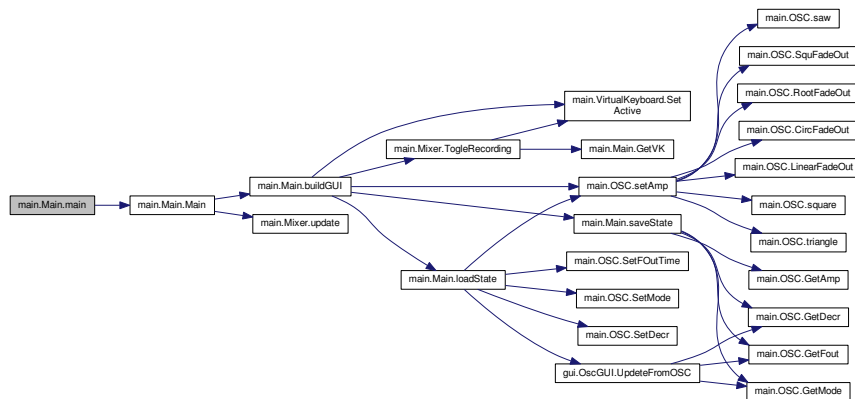
6.2.3.5 static void main.Main.main (String[] args) [static]

A belépési pont.

Parameters

<i>args</i>	Az argumentumok.
-------------	------------------

Here is the call graph for this function:



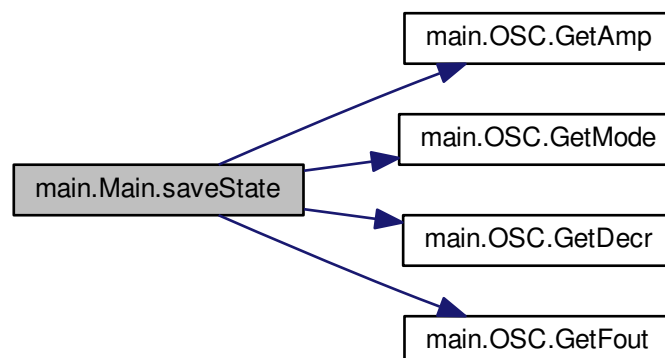
6.2.3.6 void main.Main.saveState (File *f*)

Elmenti az alkalmazás állapotát.

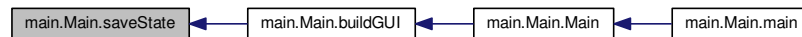
Parameters

<i>f</i>	A mentéshez használt File.
----------	----------------------------

Here is the call graph for this function:



Here is the caller graph for this function:



The documentation for this class was generated from the following file:

- [src/main/Main.java](#)

6.3 main.Mixer Class Reference

Public Member Functions

- [Mixer](#) ([Main](#) m)
- void [ToggleRecording](#) ()
- void [update](#) ()

6.3.1 Constructor & Destructor Documentation

6.3.1.1 main.Mixer.Mixer (Main m)

Konstruktor.

Parameters

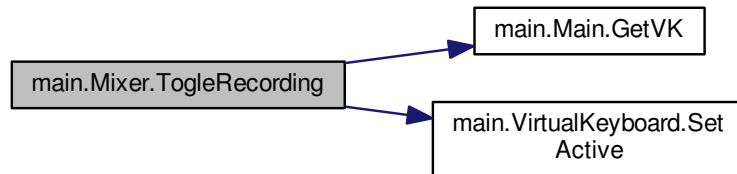
<i>m</i>	A főablak osztályát várja.
----------	----------------------------

6.3.2 Member Function Documentation

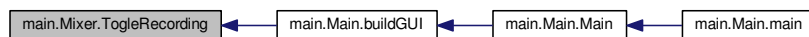
6.3.2.1 void main.Mixer.ToggleRecording ()

Elindítja/megállítja a felvételt.

Here is the call graph for this function:



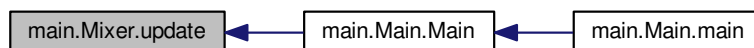
Here is the caller graph for this function:



6.3.2.2 void main.Mixer.update ()

A főciklus, ez felel az ütemezésért.

Here is the caller graph for this function:

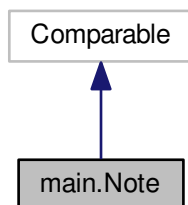


The documentation for this class was generated from the following file:

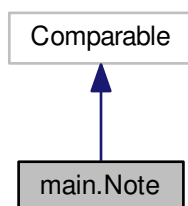
- [src/main/Mixer.java](#)

6.4 main.Note Class Reference

Inheritance diagram for main.Note:



Collaboration diagram for main.Note:



Public Member Functions

- [Note](#) (String name, int oct)
- boolean [equals](#) (Object o)
- int [compareTo](#) (Object o)

6.4.1 Detailed Description

A hangjegyek osztálya

Author

felruogo

6.4.2 Constructor & Destructor Documentation

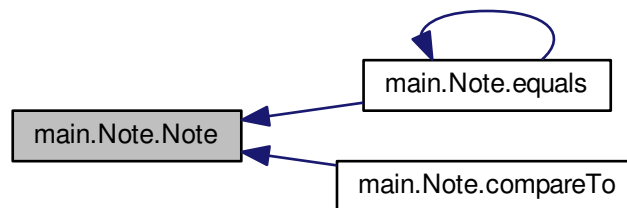
6.4.2.1 main.Note.Note (String name, int oct)

Konstruktor. A hang neve és oktávszáma alapján kiszámolja a frekvenciát.

Parameters

<i>name</i>	A hang neve.
<i>oct</i>	A hang oktávszáma.

Here is the caller graph for this function:



6.4.3 Member Function Documentation

6.4.3.1 `int main.Note.compareTo (Object o)`

Függvény az összehasonlításhoz. A hang akkor nagyobb B-nél, ha A frekvenciája nagyobb a B-énél.

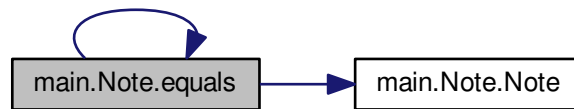
Here is the call graph for this function:



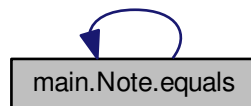
6.4.3.2 `boolean main.Note.equals (Object o)`

Függvény az összehasonlításhoz. Két hang akkor egyenlő, ha a neve és az oktávszáma megegyezik (azaz a frekvenciája).

Here is the call graph for this function:



Here is the caller graph for this function:

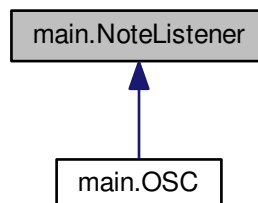


The documentation for this class was generated from the following file:

- [src/main/Note.java](#)

6.5 main.NoteListener Interface Reference

Inheritance diagram for `main.NoteListener`:



Public Member Functions

- void [onNotePress](#) ([Note](#) n)
- void [onNoteRelease](#) ([Note](#) n)

6.5.1 Detailed Description

Interface a leütött hangok elkapásához.

Author

felruogo

6.5.2 Member Function Documentation

6.5.2.1 void main.NoteListener.onNotePress (Note *n*)

Egy hang leütésekor hívódik meg.

Parameters

<i>n</i>	a leütött hang.
----------	-----------------

Implemented in [main.OSC](#).

6.5.2.2 void main.NoteListener.onNoteRelease (Note *n*)

Egy hang felengedésekor hívódik meg.

Parameters

<i>n</i>	A felengedett hang.
----------	---------------------

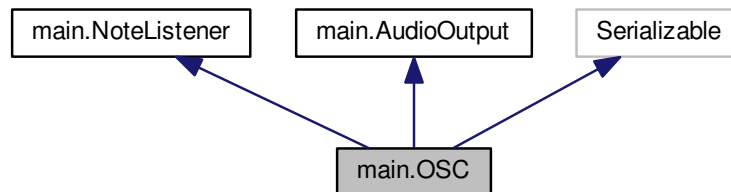
Implemented in [main.OSC](#).

The documentation for this interface was generated from the following file:

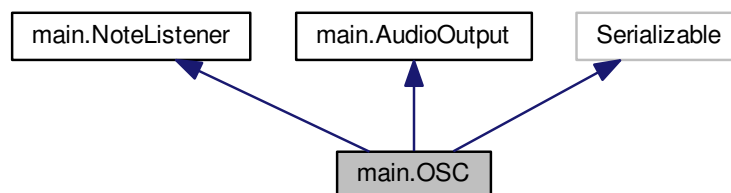
- [src/main/NoteListener.java](#)

6.6 main.OSC Class Reference

Inheritance diagram for main.OSC:



Collaboration diagram for main.OSC:



Public Member Functions

- synchronized void [SetMode](#) (int sm)
- synchronized void [SetDecr](#) (int sd)
- synchronized void [SetFOutTime](#) (double sft)
- double [GetAmp](#) ()
- int [GetMode](#) ()
- int [GetDecr](#) ()
- double [GetFout](#) ()
- double [square](#) (double x)
- double [triangle](#) (double x)
- double [saw](#) (double x)
- double [LinearFadeOut](#) (double cet)
- double [SquFadeOut](#) (double cet)
- double [RootFadeOut](#) (double cet)
- double [CircFadeOut](#) (double cet)
- void [setAmp](#) (double samp)
- synchronized byte[] [ReadAudio](#) (AudioFormat af)
- synchronized void [onNotePress](#) ([Note](#) n)
- synchronized void [onNoteRelease](#) ([Note](#) n)

6.6.1 Detailed Description

Ez az osztály felel a hanghullámok generálásáért.

Author

felruogo

6.6.2 Member Function Documentation

6.6.2.1 double main.OSC.CircFadeOut (double *cet*)

Kör-menti csillapodás

Parameters

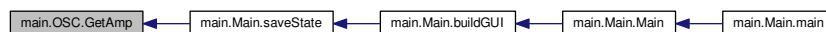
<i>cet</i>	A csillapodási fázisban eltöltött idő
------------	---------------------------------------

Here is the caller graph for this function:



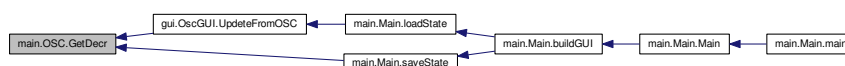
6.6.2.2 double main.OSC.GetAmp ()

Here is the caller graph for this function:



6.6.2.3 int main.OSC.GetDecr ()

Here is the caller graph for this function:



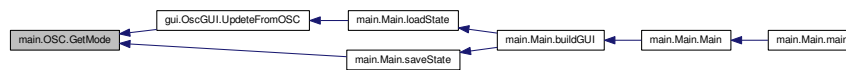
6.6.2.4 double main.OSC.GetFout ()

Here is the caller graph for this function:



6.6.2.5 int main.OSC.GetMode ()

Here is the caller graph for this function:

6.6.2.6 double main.OSC.LinearFadeOut (double *cet*)

Lineáris csillapodás

Parameters

<i>cet</i>	A csillapodási fázisban eltöltött idő
------------	---------------------------------------

Here is the caller graph for this function:

6.6.2.7 synchronized void main.OSC.onNotePress (Note *n*)

Egy hang leütésekor hívódik meg.

Parameters

<i>n</i>	a leütött hang.
----------	-----------------

Implements [main.NoteListener](#).

6.6.2.8 synchronized void main.OSC.onNoteRelease (Note *n*)

Egy hang felengedésekor hívódik meg.

Parameters

<i>n</i>	A felengedett hang.
----------	---------------------

Implements [main.NoteListener](#).

6.6.2.9 synchronized byte [] main.OSC.ReadAudio (AudioFormat *af*)

Generál egy időrésnyi mintát.

Parameters

<i>af</i>	A lejátszó eszköz hangformátuma.
-----------	----------------------------------

Returns

Egy időrésnyi minta.

Implements [main.AudioOutput](#).

6.6.2.10 double main.OSC.RootFadeOut (double *cet*)

Gyökös csillapodás

Parameters

<i>cet</i>	A csillapodási fázisban eltöltött idő
------------	---------------------------------------

Here is the caller graph for this function:



6.6.2.11 double main.OSC.saw (double *x*)

Fűrészfog jelet generál

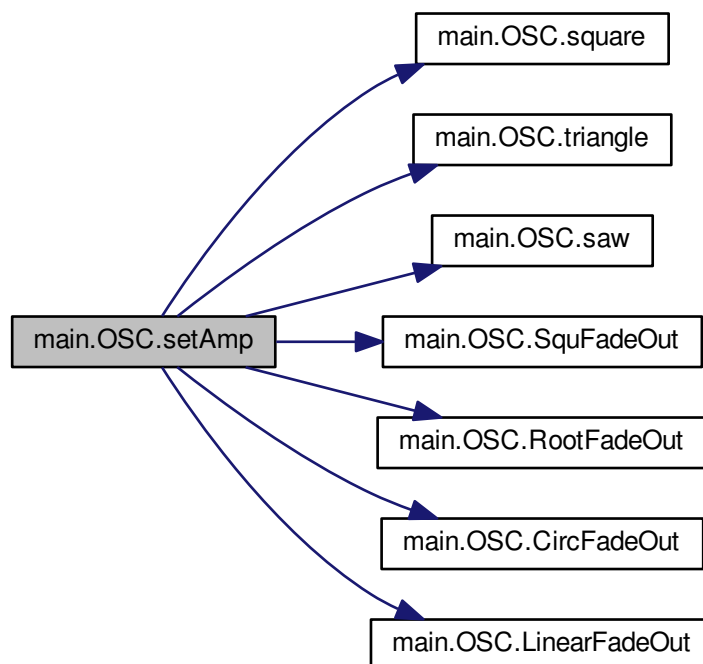
Parameters

<i>x</i>	Fázis (0.0 - 2.0)
----------	-------------------

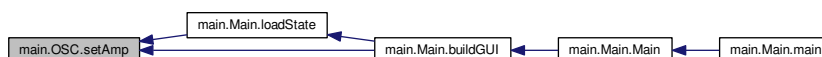
Here is the caller graph for this function:

6.6.2.12 void main.OSC.setAmp (double *samp*)

Here is the call graph for this function:

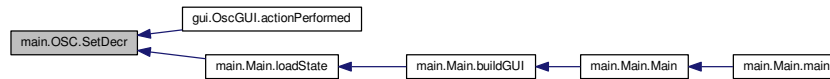


Here is the caller graph for this function:



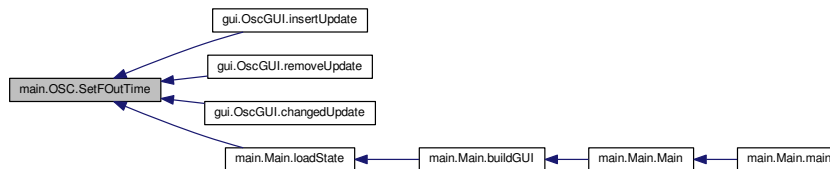
6.6.2.13 synchronized void main.OSC.SetDecr (int *sd*)

Here is the caller graph for this function:



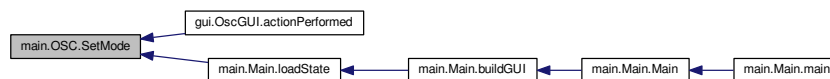
6.6.2.14 synchronized void main.OSC.SetFOutTime (double *sft*)

Here is the caller graph for this function:



6.6.2.15 synchronized void main.OSC.SetMode (int *sm*)

Here is the caller graph for this function:



6.6.2.16 double main.OSC.square (double *x*)

Négyszögjelet generál

Parameters

<i>x</i>	Fázis (0.0 - 2.0)
----------	-------------------

Here is the caller graph for this function:



6.6.2.17 double main.OSC.SquFadeOut (double *cet*)

Négyzetes csillapodás

Parameters

<i>cet</i>	A csillapodási fázisban eltöltött idő
------------	---------------------------------------

Here is the caller graph for this function:



6.6.2.18 double main.OSC.triangle (double *x*)

Háromszög jelet generál

Parameters

<i>x</i>	Fázis (0.0 - 2.0)
----------	-------------------

Here is the caller graph for this function:

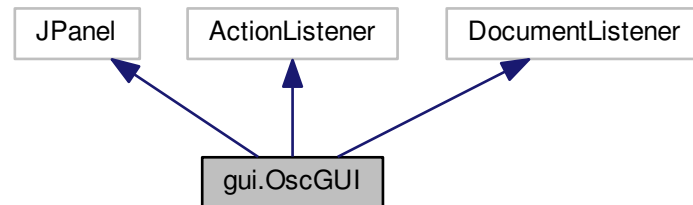


The documentation for this class was generated from the following file:

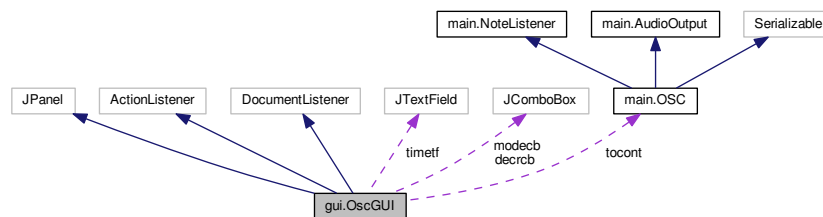
- [src/main/OSC.java](#)

6.7 gui.OscGUI Class Reference

Inheritance diagram for gui.OscGUI:



Collaboration diagram for gui.OscGUI:



Public Member Functions

- [OscGUI](#) ([OSC](#) *so*)
- void [UpdateFromOSC](#) ()
- void [actionPerformed](#) ([ActionEvent](#) *e*)
- void [insertUpdate](#) ([DocumentEvent](#) *e*)
- void [removeUpdate](#) ([DocumentEvent](#) *e*)
- void [changedUpdate](#) ([DocumentEvent](#) *e*)

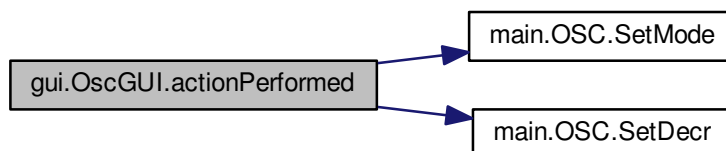
6.7.1 Constructor & Destructor Documentation

6.7.1.1 gui.OscGUI.OscGUI ([OSC](#) *so*)

6.7.2 Member Function Documentation

6.7.2.1 void gui.OscGUI.actionPerformed (*ActionEvent e*)

Here is the call graph for this function:



6.7.2.2 void gui.OscGUI.changedUpdate (*DocumentEvent e*)

Here is the call graph for this function:



6.7.2.3 void gui.OscGUI.insertUpdate (*DocumentEvent e*)

Here is the call graph for this function:



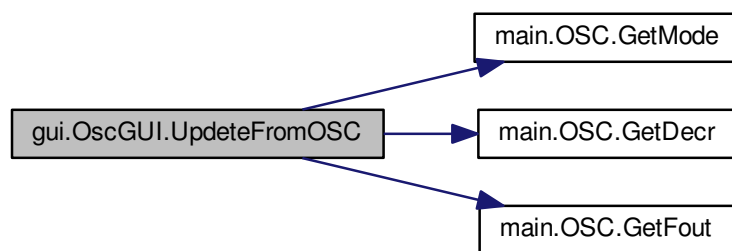
6.7.2.4 void gui.OscGUI.removeUpdate (DocumentEvent e)

Here is the call graph for this function:

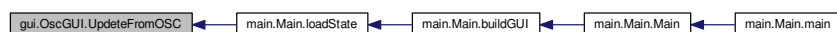


6.7.2.5 void gui.OscGUI.UpdateFromOSC ()

Here is the call graph for this function:



Here is the caller graph for this function:



The documentation for this class was generated from the following file:

- [src/gui/OscGUI.java](#)

6.8 main.VirtualKeyboard Class Reference

Public Member Functions

- void [SetActive](#) (boolean set)
- void [keyTyped](#) (KeyEvent e)
- void [keyPressed](#) (KeyEvent e)
- void [keyReleased](#) (KeyEvent e)

6.8.1 Detailed Description

Osztály a billentyűzet kezeléshez. A billentyűzet bevitelét hangbevitellé alakítja.

Author

felruGo

6.8.2 Member Function Documentation

6.8.2.1 void main.VirtualKeyboard.keyPressed (KeyEvent *e*)

6.8.2.2 void main.VirtualKeyboard.keyReleased (KeyEvent *e*)

6.8.2.3 void main.VirtualKeyboard.keyTyped (KeyEvent *e*)

6.8.2.4 void main.VirtualKeyboard.SetActive (boolean *set*)

Aktiválja a billentyűk elkapását.(alapból aktív)

Parameters

<i>set</i>	A beállítandó érték.
------------	----------------------

Here is the caller graph for this function:



The documentation for this class was generated from the following file:

- [src/main/VirtualKeyboard.java](#)

Chapter 7

File Documentation

7.1 `src/gui/OscGUI.java` File Reference

Classes

- class [gui.OscGUI](#)

Packages

- package [gui](#)

7.2 `src/main/AudioOutput.java` File Reference

Classes

- interface [main.AudioOutput](#)

Packages

- package [main](#)

7.3 `src/main/Main.java` File Reference

Classes

- class [main.Main](#)

Packages

- package [main](#)

7.4 src/main/Mixer.java File Reference

Classes

- class [main.Mixer](#)

Packages

- package [main](#)

7.5 src/main/Note.java File Reference

Classes

- class [main.Note](#)

Packages

- package [main](#)

7.6 src/main/NoteListener.java File Reference

Classes

- interface [main.NoteListener](#)

Packages

- package [main](#)

7.7 src/main/OSC.java File Reference

Classes

- class [main.OSC](#)

Packages

- package [main](#)

7.8 src/main/VirtualKeyboard.java File Reference

Classes

- class [main.VirtualKeyboard](#)

Packages

- package [main](#)