
diapason Documentation

Release 0.0.4

The diapason contributors

February 20, 2017

1	What is diapason?	1
2	Contents	3
2.1	diapason library API	3
2.2	Indices and tables	4
	Python Module Index	5

What is diapason?

diapason is a Python package to generate note sounds.

diapason library API

This chapter describes diapason's library API. All diapason classes and functions are defined in sub packages such as *diapason.core*, but for ease of use, the most important ones are also placed in the *diapason* package scope.

diapason.core — diapason core logic

Core diapason code.

`diapason.core.generate_wav` (*frequency, duration, rate=44100*)

Generate a WAV file reproducing a sound at a given frequency.

Parameters `frequency` : float

Frequency, in hertz, of the sound.

duration : float

Duration of the sound.

rate : int

Sample rate.

Returns BytesIO

The in-memory WAV file.

`diapason.core.note_frequency` (*note, sharp=0, flat=0, octave=4, scientific=False*)

Returns the frequency (in hertz) associated to a given note.

All the frequencies are based on the standard concert pitch or standard piano key frequencies, meaning that A4 (using scientific pitch notation) is at 440 hertz.

Parameters `note` : string

Note to calculate the associated frequency from. Valid notes are characters from A to G.

octave : int

Octave position. Middle C and A440 being in the 4th octave.

sharp : int

Return a frequency higher in pitch by *sharp* semitones.

flat : int

Return a frequency lower in pitch by *flat* semitones.

scientific : bool

Use scientific pitch instead: C4 is set to 256 Hz.

Returns float

The frequency (in hertz) associated to the given note.

Indices and tables

- [genindex](#)
- [search](#)

d

`diapason.core`, 3

A

abstract, 1

D

diapason.core (module), 3

G

generate_wav() (in module diapason.core), 3

N

note_frequency() (in module diapason.core), 3