

Package ‘speakr’

January 29, 2024

Type Package

Title A Wrapper for the Phonetic Software 'Praat'

Version 3.2.2

Date 2024-01-29

Description It allows running 'Praat' scripts from R and it provides some wrappers for basic plotting. It also adds support for literate markdown tangling. The package is designed to bring reproducible phonetic research into R.

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URL <https://github.com/stefanocoretta/speakr>

BugReports <https://github.com/stefanocoretta/speakr/issues>

Encoding UTF-8

RoxygenNote 7.3.1

Imports cli, ggplot2, lifecycle, quarto, readr, stringr, tibble

Suggests knitr, rmarkdown

VignetteBuilder knitr

Language en_GB

NeedsCompilation no

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Repository CRAN

Date/Publication 2024-01-29 17:00:02 UTC

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add_lmt	<i>Install the Literate Markdown Tangler extension</i>
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Description

It installs the Quarto extension Literate Markdown Tangler, which provides users with literate programming tools.

Usage

```
add_lmt()
```

Value

Nothing. Used for its side effects.

Examples

```
## Not run:
add_lmt()

## End(Not run)
```

praat_open	<i>Open files with 'Praat'.</i>
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Description

It opens a file or list of files in the 'Praat' GUI.

Usage

```
praat_open(...)
```

Arguments

... A character vector with the path to the file. Include multiple vector arguments to open multiple files.

Value

Nothing. Used for its side effects.

Examples

```
## Not run:
# Open a single file

script <- system.file("extdata", "get-formants.praat", package = "speakr")
praat_open(script)

# Open multiple files

wav <- system.file("extdata", "vowels.wav", package = "speakr")
tg <- system.file("extdata", "vowels.TextGrid", package = "speakr")
praat_open(wav, tg)

## End(Not run)
```

praat_plot

Plot waveform and spectrogram

Description

Plot waveform and spectrogram

Usage

```
praat_plot(
  file,
  wav,
  tg = NULL,
  start = 0,
  end = NULL,
  width = 5,
  format = "png",
  f0 = FALSE,
  f0_min = 0,
  f0_max = 500,
  spec_max = 5000
)
```

Arguments

file	Output file path as a string.
wav	Wav file path as a string.

tg	TextGrid file path as a string. If 'NULL' (the default), a TextGrid is plotted if a TextGrid file with the same name as the wav file is found. No TextGrid is plotted otherwise.
start	Start time of the plotting window in seconds.
end	End time of the plotting window in seconds. If 'NULL' (the default), plot the entire duration.
width	Width of the plot in inches.
format	Output file format ('png' by default, or 'pdf').
f0	Whether to plot f0 ('FALSE' by default).
f0_min	If 'f0 = TRUE', minimum f0 value ('0' by default).
f0_max	If 'f0 = TRUE', maximum f0 value ('500' by default).
spec_max	Maximum frequency for the spectrogram ('5000' by default).

Value

Nothing. It is used for its side effects.

Examples

```
## Not run:
wav <- system.file("extdata", "vowels.wav", package = "speakr")

praat_plot("vowels.png", wav, f0 = TRUE, f0_max = 200, end = 3)

## End(Not run)
```

```
praat_run
```

```
Run a 'Praat' script.
```

Description

It runs a 'Praat' script, with optional arguments passed to the script.

Usage

```
praat_run(script, ..., capture = FALSE)
```

Arguments

script	A character vector containing the script name.
...	List of arguments to be passed to the script.
capture	If set to TRUE, the standard output of the script (for example, from writeInfo) can be saved into a variable in R. If FALSE (the default) the output is logged to the console.

Value

If the 'Praat' script returns standard output this is returned as a character vector. Also, if the script has instructions to create files, these will be created.

Examples

```
## Not run:
script <- system.file("extdata", "get-formants.praat", package = "spekr")

# Run get-formants.praat with argument "Hertz" and log to console.
praat_run(script, "Hertz")

# Run get-formants.praat with arguments and save in R variable.
library(readr)
formants <- praat_run(script, "Hertz", 0.03, capture = TRUE) %>%
  read_csv()

## End(Not run)
```

start_praat

Start 'Praat'.

Description

It opens the 'Praat' GUI.

Usage

```
start_praat()
```

Value

Nothing. Used for its side effects.

Examples

```
## Not run:
# Open Praat GUI.
start_praat()

## End(Not run)
```

use_praat_plot_script *Use Praat plotting script*

Description

This allows the user to save a copy of the Praat plotting script on disk so that they can make changes and customise the plot.

Usage

```
use_praat_plot_script(file, ...)
```

Arguments

file	Path including file name to which the script is copied.
...	Further arguments passed to file.copy .

Value

Nothing. It is used for its side effects.

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