Package ‘act’

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Description The Aligned Corpus Toolkit (act) is designed for linguists that work with time aligned transcription data. It offers functions to import and export various annotation file formats (‘ELAN’ .eaf, ‘EXMARaLDA .exb and ‘Praat’ .TextGrid files), create print transcripts in the style of conversation analysis, search transcripts (span searches across multiple annotations, search in normalized annotations, make concordances etc.), export and re-import search results (.csv and ‘Excel’ .xlsx format), create cuts for the search results (print transcripts, audio/video cuts using 'FFmpeg' and video subtitles in 'Subrib title' .srt format), modify the data in a corpus (search/replace, delete, filter etc.), interact with ‘Praat’ using ‘Praat’-scripts, and exchange data with the ‘rPraat’ package. The package is itself written in R and may be expanded by other users.

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The Aligned Corpus Toolkit (act) is designed for linguists that work with time aligned transcription data. It offers functions to import and export various annotation file formats (‘ELAN’ .eaf, ‘EXMARaLDA’ .exb and ‘Praat’ .TextGrid files), create print transcripts in the style of conversation analysis, search transcripts (span searches across multiple annotations, search in normalized annotations, make concordances etc.), export and re-import search results (.csv and ‘Excel’ .xlsx format), create cuts for the search results (print transcripts, audio/video cuts using ‘FFmpeg’ and video sub titles in ‘Subrib title’ .srt format), modify the data in a corpus (search/replace, delete, filter etc.), interact with ‘Praat’ using ‘Praat’-scripts, and exchange data with the ‘rPraat’ package. The package is itself written in R and may be expanded by other users.
act functions

...

Package options

The package has numerous options that change the internal workings of the package. Please see \texttt{act::options\_show} and the information given there.

Examples

library(act)

# ========= Example data set
# There is an example data set consisting of annotation files and corresponding
# media files.
# While the annotation files are copied to your computer when installing
# the media files are not.
# You can either download the full data set from GitHub or decide to work
# only with the annotation files.

# The example data set (only annotation files) is stored at the following location:
path <- system.file("extdata", "examplecorpus", package="act")

# Since this folder is quite difficult to access, you might consider copying the
# contents of this folder to a more convenient location.
# The following commands will create a new folder called 'examplecorpus' in the
# folder 'path'.
# You will find the data there.
## Not run:
path <- "EXISTING\_FOLDER\_ON\_YOUR\_COMPUTER"
sourcelpath <- system.file("extdata", "examplecorpus", package="act")
if (!dir.exists(path)) {dir.create(path)}
file.copy(sourcelpath, dirname(path), recursive=TRUE)

## End(Not run)

# To download the full data set (including media files) from GitHub
# use the following code.
# In the first line specify an existing folder on your computer.
# The following lines will then download the example data set from GitHub
# and copy them to a sub folder called 'examplecorpus' in the folder 'path'.
# You will find the data there.
## Not run:
path <- "EXISTING\_FOLDER\_ON\_YOUR\_COMPUTER"
path <- "/Users/oliverehmer/Desktop"
sourcelpath <- "https://github.com/oliverehmer/act_examplecorpus/archive/master.zip"
temp <- tempfile()
download.file(sourcelpath, temp)
unzip(zipfile=temp, exdir=path)
path <- file.path(path, "act_examplecorpus-main")

## End(Not run)
# ======= Create a corpus object and load data
# Now that we have the example data accessible, we can create a corpus object.
# The corpus object is a structured collection of all the information that you can
# work with using act.
# It will contain the information of each transcript, links to media files and further
# meta data.

# --- Locate folder with annotation files
# When creating a corpus object you will need to specify where your annotation
# files ("Praat" ".TextGrids" or "ELAN" .eaf) are located.
# We will use the example data, that we have just located in 'path'.
path

# In case that you want to use your own data, you can set the path here:
## Not run:
path <- "EXISTING_FOLDER_ON_YOUR_COMPUTER"
## End(Not run)

# --- Create corpus object and load annotation files
# The following command will create a corpus object, with the name 'examplecorpus'.
exemplecorpus <- act::corpus_new(
pathsAnnotationFiles = path,
pathsMediaFiles = path,
name = "examplecorpus"
)

# The act package assumes, that annotation files and media files have the same base
# name and differ only in the suffix (e.g. 'filename.TextGrid' and 'filename.wav'/
# 'filename.mp4').
# This allows act to automatically link media files to the transcripts.

# --- Information about your corpus
# The following command will give you a summary of the data contained in your corpus object.
exemplecorpus
# More detailed information about the transcripts in your corpus object is available by
# calling the function act::info()
act::info(exemplecorpus)
# If you are working in R studio, a nice way of inspecting this information is the following:
## Not run:
View(act::info(exemplecorpus)$transcripts)
View(act::info(exemplecorpus)$tiers)
## End(Not run)

# ======= all data
# You can also get all data that is in the loaded annotation files in a data frame:
all_annotations <- act::annotations_all(exemplecorpus)
## Not run:
View(all_annotations)
## End(Not run)
# ========== Search
# Let's do some searches in the data.
# Search for the 1. Person Singular Pronoun in Spanish 'yo' in the examplecorpus
mysearch <- act::search_new(x=examplecorpus, pattern="yo")
# Have a look at the result:
mysearch

# Directly view all search results in the viewer
## Not run:
View(mysearch@results)
## End(Not run)

# --- Search original vs. normalized content
# You can either search in the original 'content' of the annotations,
# or you can search in a 'normalized' version of the annotations.
# Let's compare the two modes.
mysearch.norm <- act::search_new(examplecorpus, pattern="yo", searchNormalized=TRUE)
mysearch.org <- act::search_new(examplecorpus, pattern="yo", searchNormalized=FALSE)
# There is a difference in the number of results.
mysearch.norm@results.nr
mysearch.org@results.nr

# The difference is because during in the normalized version, for instance, capital letters
# will be converted to small letters.
# In our case, one annotation in the example corpus contains a "yO" with a
# capital letter:
mysearch <- act::search_new(examplecorpus, pattern="yO", searchNormalized=FALSE)
mysearch@results$hit

# During normalization a range of normalization procedures will be applied, using a
# replacement matrix. This matrix searches and replaces certain patterns, that you want to
# exclude from the normalized content.
# By default, normalization gets rid of all transcription conventions of GAT.
# You may, in addition, also customize the replacement matrix to your own needs/transcription
# conventions.

# --- Search original content vs. full text
# There are two search modes.
# The 'fulltext' mode will will find matches across annotations.
# The 'content' mode will will respect the temporal boundaries of the original annotations.

# Let's define a search pattern with a certain span.
myRegEx <- "\bno\b.1,20p ero"
# This regular expression matches the Spanish word "no" 'no' followed by a "pero" 'but'
# in a distance ranging from 1 to 20 characters.

# The 'content' search mode will not find any hit.
mysearch <- act::search_new(examplecorpus, pattern=myRegEx, searchMode="content")
mysearch@results.nr
# The 'fulltext' search mode will not find two hits that extend over several annotations.
mysearch <- act::search_new(examplecorpus, pattern=myRegEx, searchMode="fulltext")
mysearch@results.nr
cat(mysearch@results$hit[1])
cat(mysearch@results$hit[2])

## annotations_all

<table>
<thead>
<tr>
<th>annotations_all</th>
<th>All annotations in a corpus</th>
</tr>
</thead>
</table>

### Description

Merges annotations from all transcripts in a corpus and returns a data frame.

### Usage

```r
annotations_all(x)
```

### Arguments

- `x` Corpus object.

### Value

Data.frame.

### Examples

```r
library(act)

#Get data frame with all annotations
allannotations <- act::annotations_all(examplecorpus)

#Have a look at the number of annotations
nrow(allannotations)
```
annotations_delete  

Delete annotations

Description
Delete annotations in a corpus object. If only certain transcripts or tiers should be affected set the parameter filterTranscriptNames and filterTierNames. In case that you want to select transcripts and/or tiers by using regular expressions use the function act::search_makefilter first.

Usage

```r
annotations_delete(
  x,
  pattern = "",
  filterTranscriptNames = NULL,
  filterTierNames = NULL
)
```

Arguments

- **x**  
  Corpus object.

- **pattern**  
  Character string; regular expression; all annotations that match this expression will be deleted.

- **filterTranscriptNames**  
  Vector of character strings; names of the transcripts to be included.

- **filterTierNames**  
  Character string; names of the tiers to be included.

Value

Corpus object.

Examples

```r
library(act)
# Set the regular expression which annotations should be deleted.
# In this case: all annotations that contain the letter "a"
myRegEx <- "a"

# Have a look at all annotations in the first transcript
examplecorpus@transcripts[[1]]@annotations$content

# Some of them match to the regular expression
hits <- grep(pattern=myRegEx, x=examplecorpus@transcripts[[1]]@annotations$content)
examplecorpus@transcripts[[1]]@annotations$content[hits]
# Others don’t match the regular expression
```
examplecorpus@transcripts[[1]]@annotations$content[-hits]

# Run the function and delete the annotations that match the regular expression
test <- act::annotations_delete (x=examplecorpus, pattern=myRegEx)

# Compare how many data rows are in the first transcript in
# the example corpus and in the newly created test corpus:
nrow(examplecorpus@transcripts[[1]]@annotations)
nrow(test@transcripts[[1]]@annotations)

# Only the annotations are left, that did not match the regular expression:
test@transcripts[[1]]@annotations$content

---

**annotations_delete_empty**

*Delete empty annotations*

**Description**

Delete empty annotations in a corpus object. If only certain transcripts or tiers should be affected
set the parameter `filterTranscriptNames` and `filterTierNames`. In case that you want to select
transcripts and/or tiers by using regular expressions use the function `act::search_makefilter` first.

**Usage**

```r
annotations_delete_empty(
  x,
  trimBeforeCheck = FALSE,
  filterTranscriptNames = NULL,
  filterTierNames = NULL
)
```

**Arguments**

- `x`: Corpus object.
- `trimBeforeCheck`: Logical; if TRUE leading and trailing spaces will be deleted before checking (as
a consequence record sets that contain only spaces will be deleted, too).
- `filterTranscriptNames`: Vector of character strings; names of the transcripts to be included.
- `filterTierNames`: Character string; names of the tiers to be included.

**Value**

Corpus object.
Examples

library(act)

# In the example corpus are no empty annotations.  
# Empty annotations are deleted by default when annotation files are loaded.  
# So let’s first make an empty annotation.

# Check the first annotation in the first transcript  
examplecorpus@transcripts[[1]]@annotations$content[[1]]

# Empty the contents of this annotation  
examplecorpus@transcripts[[1]]@annotations$content[[1]] <- ""

# Run the function  
test <- act::annotations_delete_empty (x=examplecorpus)

# Compare how many data rows are in the first transcript in  
# the example corpus and in the newly created test corpus:  
nrow(examplecorpus@transcripts[[1]]@annotations)  
nrow(test@transcripts[[1]]@annotations)

annotation_matrix

Search and replace contents of annotations using a matrix

Description

This function performs a search and replace in the contents of an annotation. A simple matrix consisting of two columns will be used. The first column of the matrix needs to contain the search string, the second column the replacement string. The matrix needs to be in CSV format.

Usage

annotation_matrix(x, path_replacementMatrixCSV, filterTranscriptNames = NULL)

Arguments

x Corpus object.
path_replacementMatrixCSV  
Character string; path to replacement matrix (a CSV file).
filterTranscriptNames  
Vector of character strings; names of the transcripts to be included.

Value

Corpus object.
Search, replace and copy the contents of annotations

Description

The function searches within the contents of annotations and replaces the search hits. In addition the search hit may be copied to another tier. In case that there is NO overlapping annotation in the destination tier a new annotation will be created (based on the time values of the original annotation). In case that there is an overlapping annotation in the destination tier, the search result will be added at the end.

Usage

```r
annotations_replace_copy(
  x, 
  pattern, 
)```
replacement = NULL,
destTier = NULL,
addDestTierIfMissing = TRUE,
filterTranscriptNames = NULL,
filterTierNames = NULL,
collapseString = " | "
)

Arguments

x Corpus object.
pattern Character string; search pattern as regular expression.
replacement Character string; replacement.
destTier Character string; name of the tier to which the hit should be copied (if no copying is intended set to NA).
addDestTierIfMissing Logical; if TRUE the destination tier will be added if missing in the transcript object, if FALSE an error will be raised if the destination tier is missing.
filterTranscriptNames Vector of character strings; names of the transcripts to be included.
filterTierNames Character string; names of the tiers to be included.
collapseString Character string; will be used to collapse multiple search results into one string.

Details

If only certain transcripts or tiers should be affected set the parameter filterTranscriptNames and filterTierNames. In case that you want to select transcripts and/or tiers by using regular expressions use the function act::search_makefilter first.

Value

Corpus object.

Examples

library(act)

# Have a look at the first transcript in the examplecorpus:
printtranscript <- act::export_printtranscript(examplecorpus@transcripts[[1]])
cat(printtranscript)
# In line 01 there is the word "UN".

# Replace this word by "XXX" in the entire corpus
test <- act::annotations_replace_copy(x=examplecorpus,
  pattern="\bUN\b",
  replacement="XXX")

# Have a look at the first transcript in the corpus object test:

printtranscript <- act::export_printtranscript(test@transcripts[[1]])
cat(printtranscript)
# In line 01 there is the word "XXX".
corpus-class

corpus-class <- act::export_printtranscript(test@transcripts[[1]])
cat(printtranscript)
# In line 01 there is now "XXX" instead of "UN"

# Insert a tier called "newTier" into all transcripts in the corpus:
for (t in examplecorpus@transcripts) {
  sortVector <- c(t@tiers$name, "newTier")
  examplecorpus <- act::tiers_sort(x=examplecorpus,
        sortVector=sortVector,
        filterTranscriptNames=t@name,
        addMissingTiers=TRUE)
}
# Check that the first transcript now contains the newTier
examplecorpus@transcripts[[1]]@tiers

# Now replace "UN" by "YYY" in the entire corpus and
# copy the search hit to "newTier".
test <- act::annotations_replace_copy(x=examplecorpus,
        pattern="\bUN\b",
        replacement="YYY",
        destTier = "newTier")

# Have a look again at the first transcript in the corpus object test.
printtranscript <- act::export_printtranscript(test@transcripts[[1]])
cat(printtranscript)
# In line 01 you see that "UN" has been replaced by "YYY.
# In line 02 you see that it has been copied to the tier "newTier".

# If you only want to copy a search hit but not replace it in the original
# leave replacement="", which is the default

test <- act::annotations_replace_copy(x=examplecorpus,
        pattern="\bUN\b",
        destTier = "newTier")

printtranscript <- act::export_printtranscript(test@transcripts[[1]])
cat(printtranscript)
# In line 01 you see that "UN" has been maintained.
# In line 02 you see that "UN" it has been copied to the tier "newTier".

---

corpus-class                     Corpus object

Description

This is the main object the act package uses. It collects the annotations and meta data from loaded annotation files.

Details

Some of the slots are defined by the user. Some slots report results, such as @import.results and @history and . Other slots are settings and are used when performing functions on the corpus object. To change the normalization matrix use x@normalization.matrix <- act::matrix_load(path="...")
corpus_export

Slots

name Character string; Name of the corpus.

transcripts List of transcript objects; Each annotation file that has been load is stored in this list as a transcript object.

paths.annotation.files Vector of character strings; Path(s) to one or several folders where your annotation files are located.

paths.media.files Vector of character strings; Path(s) to one or several folders where your media files are located.

normalization.matrix Data.frame; Replacement matrix used for normalizing the annotations.

import.skip.double.files Logical; if TRUE files with the same names will be skipped (only one of them will be loaded), if FALSE transcripts will be renamed to make the names unique.

import.names.include Vector of character strings; Only files matching this regular expression will be imported into the corpus.

import.names.exclude Vector of character strings; Files matching this regular expression will be skipped and not imported into the corpus.

import.names.modify List; Options how to modify the names of the transcript objects when they are added to the corpus. These options are useful, for instance, if your annotation files contain character sequences that you do not want to include into the transcript name in the corpus (e.g. if you regularly add a date to the file name of your annotations files as 'myFile_2020-09-21.TextGrid').

import.results Data.frame; information about the import of the annotation files.

history List; History of modifications made by any of the package functions to the corpus.

Examples

library(act)

examplecorpus

corpus_export  Export transcripts of a corpus

Description

Exports all (or some) transcript objects in a corpus object to different annotation file formats. If only some transcripts or tiers should be affected set the parameter filterTranscriptNames and filterTierNames. In case that you want to select transcripts and/or tiers by using regular expressions use the function act::search_makefilter first.
corpus_export

Usage

corpus_export(
  x,
  outputFolder,
  filterTranscriptNames = NULL,
  filterTierNames = NULL,
  formats = c("eaf", "exb", "srt", "textgrid", "printtranscript"),
  createMediaLinks = TRUE,
  createOutputfolder = TRUE,
  l = NULL
)

Arguments

x  Corpus object.
outputFolder  Character string; path to a folder where the transcription files will be saved. By
default the folder will be created recursively if it does not exist.
filterTranscriptNames  Vector of character strings; names of transcripts to be included. If left unspeci-
fied, all transcripts will be exported.
filterTierNames  Vector of character strings; names of tiers to be included. If left unspecified, all
tiers will be exported.
formats  Vector with one or more character strings; output formats, accepted values:
'eaf', 'exb', 'srt', 'textgrid', 'printtranscript'. If left unspecified, all supported
formats will be exported.
createMediaLinks  Logical; if TRUE media links will be created (affects only 'eaf' and 'exb' files).
createOutputfolder  Logical; if TRUE the output folder will be created recursively in case that it does
not exist.
l  Layout object. layout of print transcripts (affects only 'printtranscript' files).

See Also

export_eaf, export_textgrid, import_textgrid

Examples

library(act)

# Set destination folder
outputFolder <- tempdir()

# It makes more sense, however, to you define a folder
# that is easier to access on your computer
## Not run:
outputFolder <- "PATH_TO_AN_EMPTY_FOLDER_ON_YOUR_COMPUTER"
corpus_import

Import annotation files into corpus object

Description

Scans all path specified in if x@paths.annotation.files for annotation files. Supported file formats will be loaded as transcript objects into the corpus object. All previously loaded transcript objects will be deleted.

Usage

corpus_import(x, createFullText = TRUE, assignMedia = TRUE)

Arguments

x  Corpus object.
createFullText Logical; if TRUE full text will be created.
assignMedia Logical; if TRUE the folder(s) specified in @paths.media.files of your corpus object will be scanned for media.

Details

If assignMedia=TRUE the paths defined in x@paths.media.files will be scanned for media files. Based on their file names the media files and annotations files will be matched. Only the the file types set in options()$act.fileformats.audio and options()$act.fileformats.video will be recognized. You can modify these options to recognize other media types.

See @import.results of the corpus object to check the results of importing the files. To get a detailed overview of the corpus object use act::info(x), for a summary use act::info_summarized(x).

Value

Corpus object.

See Also

corpus_new, examplecorpus

Examples

library(act)

# The example files that come with the act library are located here:
path <- system.file("extdata", "examplecorpus", package="act")

# This is the examplecorpus object that comes with the library
examplecorpus

# Make sure that the input folder of the example corpus object is set correctly
examplecorpus@paths.annotation.files <- path
examplecorpus@paths.media.files <- path

# Load annotation files into the corpus object (again)
examplecorpus <- act::corpus_import(x=examplecorpus)

# Creating the full texts may take a long time.
# If you do NOT want to create the full texts immediately use the following command:
examplecorpus <- act::corpus_import(x=examplecorpus, createFullText=FALSE)
**Description**

Create a new corpus object and loads annotation files. Currently 'ELAN' .eaf, 'EXMARaLDA .exb and 'Praat' .TextGrid files are supported.

The parameter `pathsAnnotationFiles` defines where the annotation files are located. If `skipDoubleFiles=TRUE` duplicated files will be skipped, otherwise they will be renamed. If `importFiles=TRUE` the corpus object will be created but files will not be loaded. To load the files then call `corpus_import`.

**Usage**

```r
corpus_new(  
  pathsAnnotationFiles,  
  pathsMediaFiles = NULL,  
  name = "New Corpus",  
  importFiles = TRUE,  
  skipDoubleFiles = TRUE,  
  createFullText = TRUE,  
  assignMedia = TRUE,  
  pathNormalizationMatrix = NULL,  
  namesInclude = character(),  
  namesExclude = character(),  
  namesSearchPatterns = character(),  
  namesSearchReplacements = character(),  
  namesToUpperCase = FALSE,  
  namesToLowerCase = FALSE,  
  namesTrim = TRUE,  
  namesDefaultForEmptyNames = "no_name"
)
```

**Arguments**

- `pathsAnnotationFiles`: Vector of character strings; paths to annotations files or folders that contain annotation files.
- `pathsMediaFiles`: Vector of character strings; paths to media files or folders that contain media files.
- `name`: Character string; name of the corpus to be created.
- `importFiles`: Logical; if TRUE annotation files will be imported immediately when the function is called, if FALSE corpus object will be created without importing the annotation files.
- `skipDoubleFiles`: Logical; if TRUE transcripts with the same names will be skipped (only one of them will be added), if FALSE transcripts will be renamed to make the names unique.
- `createFullText`: Logical; if TRUE full text will be created.
- `assignMedia`: Logical; if TRUE the folder(s) specified in `@paths.media.files` of your corpus object will be scanned for media.
pathNormalizationMatrix
Character string; path to the replacement matrix used for normalizing the annotations; if argument left open, the default normalization matrix of the package will be used.

namesInclude
Vector of character strings; Only files matching this regular expression will be imported into the corpus.

namesExclude
Vector of character strings; Files matching this regular expression will be skipped and not imported into the corpus.

namesSearchPatterns
Vector of character strings; Search pattern as regular expression. Leave empty for no search-replace in the names.

namesSearchReplacements
Vector of character strings; Replacements for search. Leave empty for no search-replace in the names.

namesToUpperCase
Logical; Convert transcript names all to upper case.

namesToLowerCase
Logical; Convert transcript names all to lower case.

namesTrim
Logical; Remove leading and trailing spaces in names.

namesDefaultForEmptyNames
Character string; Default value for empty transcript names (e.g., resulting from search-replace operations)

Details
The parameter pathsMediaFiles defines where the corresponding media files are located. If assignMedia=TRUE the paths defined in x@paths.media.files will be scanned for media files and will be matched to the transcript object based on their names. Only the the file types set in options()$act.fileformats.audio and options()$act.fileformats.video will be recognized. You can modify these options to recognize other media types.

See import.results of the corpus object to check the results of importing the files. To get a detailed overview of the corpus object use act::info(x), for a summary use act::info_summarized(x).

Value
Corpus object.

See Also
corpus_import, examplecorpus

Examples
library(act)
# The example files that come with the act library are located here:
path <- system.file("extdata", "examplecorpus", package="act")
The example corpus comes without media files. It is recommended to download a full example corpus also including the media files. You can use the following commands.

```r
## Not run:
path <- "EXISTING_FOLDER_ON_YOUR_COMPUTER/examplecorpus"
temp <- tempfile()
download.file(options()$act.examplecorpusURL, temp)
unzip(zipfile=temp, exdir=path)
## End(Not run)
```

The following command creates a new corpus object

```r
mycorpus <- act::corpus_new(name = "mycorpus",
pathsAnnotationFiles = path,
pathsMediaFiles = path)
```

`mycorpus`

---

**examplecorpus**

*Example corpus for the act package*

**Description**

Example corpus with data loaded from the example annotations files that come with the package

**Usage**

```r
data(examplecorpus)
```

**Format**

An object of class "corpus"

**Details**

You can download the corresponding media files from www.oliverehmer.de in the section "Digital Humanities". Alternatively you can use the download commands in the example section.

**Source**

See Also

.corpus_new, corpus_import

Examples

library(act)

# Summary of the data in the corpus
examplecorpus

# Summary of the data in the second transcripts in the corpus
examplecorpus@transcripts[[2]]

## Not run:
# Download example corpus with media files
destinationpath <- "/EXISTING_FOLDER_ON_YOUR_COMPUTER/examplecorpus"
temp <- tempfile()
download.file(options()$act.examplecorpusURL, temp)
unzip(zipfile=temp, exdir=destinationpath)

## End(Not run)

export_eaf

Export a transcript object to a 'ELAN' .eaf file

Description

Advice: In most situations it is more convenient to use act::corpus_export for exporting annotation files.

Usage

export_eaf(
  t,
  outputPath = NULL,
  filterTierNames = NULL,
  filterSectionStartsec = NULL,
  filterSectionEndsec = NULL,
  createMediaLinks = TRUE
)

Arguments

t
  Transcript object; transcript to be exported.

outputPath
  Character string; path where .eaf file will be saved.

filterTierNames
  Vector of character strings; names of tiers to be included. If left unspecified, all tiers will be exported.
filterSectionStartsec
  Double; start of selection in seconds.

filterSectionEndsec
  Double; end of selection in seconds.

cREATEmedialinks
  Logical; if TRUE media links will be created.

Details

The .eaf file will be written to the file specified in outputPath. If outputPath is left empty, the function will return the contents of the .eaf itself.

Value

Contents of the .eaf file (only if outputPath is left empty)

See Also

corpus_export, export_exb, export_printtranscript, export_rpraat, export_srt, export_textgrid

Examples

library(act)

# Get the transcript you want to export
t <- examplecorpus@transcripts[[1]]

# Create temporary file path
path <- tempfile(pattern = t@name, tmpdir = tempdir(), fileext = ".eaf")

# It makes more sense, however, to you define a destination folder # that is easier to access on your computer
## Not run:
path <- file.path("PATH_TO_AN_EXISTING_FOLDER_ON_YOUR_COMPUTER",
paste(t@name, ".eaf", sep=""))

## End(Not run)

# Export WITH media links
act::export_eaf(t=t, outputPath=path)

# Export WITHOUT media links
act::export_eaf(t=t, outputPath=path, createMediaLinks = FALSE)
Export a transcript object to a 'EXMARaLDA' .exb file

Description

Advice: In most situations it is more convenient to use act::corpus_export for exporting annotation files.

Usage

```r
eexport_exb(
  t,
  outputPath = NULL,
  filterTierNames = NULL,
  filterSectionStartsec = NULL,
  filterSectionEndsec = NULL,
  createMediaLinks = TRUE
)
```

Arguments

t Transcript object; transcript to be exported.
outputPath Character string; path where .exb file will be saved.
filterTierNames Vector of character strings; names of tiers to be included. If left unspecified, all tiers will be exported.
filterSectionStartsec Double; start of selection in seconds.
filterSectionEndsec Double; end of selection in seconds.
createMediaLinks Logical; if TRUE media links will be created.

Details

The .exb file will be written to the file specified in outputPath. If outputPath is left empty, the function will return the contents of the .exb itself.

Value

Contents of the .exb file (only if outputPath is left empty)

See Also
corpus_export, export_eaf, export_printtranscript, export_rpraat, export_srt, export_textgrid
Examples

library(act)

# Get the transcript you want to export
t <- examplecorpus@transcripts[[1]]

# Create temporary file path
path <- tempfile(pattern = t@name, tmpdir = tempdir(), fileext = "exb")

# It makes more sense, however, to you define a destination folder
# that is easier to access on your computer
## Not run:
path <- file.path("PATH_TO_AN_EXISTING_FOLDER_ON_YOUR_COMPUTER",
paste(t@name, ".exb", sep=""))

## End(Not run)

# Export WITH media links
act::export_exb(t=t, outputPath=path)

# Export WITHOUT media links
act::export_exb(t=t, outputPath=path, createMediaLinks = FALSE)

export_printtranscript

Export a transcript object to a print transcript

Description

If you want to modify the layout of the print transcripts, create a new layout object with mylayout
<- methods::new("layout"), modify the settings and pass it as argument l. In the layout object
you may also set additional filters to include/exclude tiers matching regular expressions.

Usage

export_printtranscript(
  t,
  l = NULL,
  outputPath = NULL,
  filterTierNames = NULL,
  filterSectionStartsec = NULL,
  filterSectionEndsec = NULL,
  insert_arrow_annotationID = "",
  header_heading = "",
  header_firstinfo = "",
  collapse = TRUE
)
export_printtranscript

Arguments

- **t**: Transcript object.
- **l**: Layout object.
- **outputPath**: Character string; path where to save the transcript.
- **filterTierNames**: Vector of character strings; names of tiers to be included. If left unspecified, all tiers will be exported.
- **filterSectionStartsec**: Double; start of selection in seconds.
- **filterSectionEndsec**: Double; end of selection in seconds.
- **insert_arrow_annotationID**: Integer; ID of the annotation in front of which the arrow will be placed.
- **header_heading**: Character string; text that will be used as heading.
- **header_firstinfo**: Character string; text that will used as first information in the header.
- **collapse**: Logical; if FALSE a vector will be created, each element corresponding to one annotation. If TRUE a single string will be created, collapsed by linebreaks `\n`.

Value

Character string; transcript as text.

See Also

corpus_export, export_eaf, export_exb, export_rpraat, export_srt, export_textgrid

Examples

```r
library(act)

# Get a transcript
t <- examplecorpus@transcripts[[1]]

# Create print transcript
printtranscript <- act::export_printtranscript (t=t)

# Display on screen
cat(printtranscript)
```
export_rpraat  

Export a transcript object to a 'rPraat' TextGrid object

Description

Advice: In most situations it is more convenient to use act::corpus_export for exporting annotation files.

Usage

```r
export_rpraat(
  t,
  filterTierNames = NULL,
  filterSectionStartsec = NULL,
  filterSectionEndsec = NULL
)
```

Arguments

- `t`  
  Transcript object; transcript to be converted.
- `filterTierNames`  
  Vector of character strings; names of tiers to be included. If left unspecified, all tiers will be exported.
- `filterSectionStartsec`  
  Double; start of selection in seconds.
- `filterSectionEndsec`  
  Double; end of selection in seconds.

Details

This function is to create compatibility with the rPraat package. It converts an act transcript to a rPraat TextGrid object.

Credits: Thanks to Tomáš Bořil, the author of the rPraat package, for commenting on the exchange functions.

Value

rPraat TextGrid object

See Also

import_rpraat, corpus_export, export_eaf, export_exb, export_printtranscript, export_srt, export_textgrid
Examples

library(act)

# Convert
rpraat.tg <- act::export_rpraat(t=examplecorpus@transcripts[[1]])

# Now you can use the object in the rPraat package.
# For instance you can plot the TextGrid
## Not run:
rPraat::tg.plot(rpraat.tg)
## End(Not run)

export_srt

Export a transcript object to a .srt subtitle file

Description

Advice: In most situations it is more convenient to use act::corpus_export for exporting annotation files.

Usage

export_srt(
  t,
  outputPath = NULL,
  filterTierNames = NULL,
  filterSectionStartsec = NULL,
  filterSectionEndsec = NULL,
  speaker.show = TRUE,
  speaker.width = 3,
  speaker.ending = "::"
)

Arguments

t Transcript object; transcript to be saved.
outputPath Character string; path where .srt will be saved.
filterTierNames Vector of character strings; names of tiers to be included. If left unspecified, all tiers will be exported.
filterSectionStartsec Double; start of selection in seconds.
filterSectionEndsec Double; end of selection in seconds.
speaker.show Logical; if TRUE name of speaker will be shown before the content of the annotation.
speaker.width  Integer; width of speaker abbreviation, -1 for full name without shortening.
speaker.ending Character string; string that is added at the end of the speaker name.

Details
Creates a ‘Subrip title’ .srt subtitle file. It will be written to the file specified in outputPath. If outputPath is left empty, the function will return the contents of the .srt itself.

Value
Contents of the .srt file (only if outputPath is left empty)

See Also
corpus_export, export_eaf, export_exb, export_printtranscript, export_rpraat, export_textgrid

Examples

library(act)

# Get the transcript you want to export
t <- examplecorpus@transcripts[[1]]

# Create temporary file path
path <- tempfile(pattern = t@name, tmpdir = tempdir(),
                   fileext = ".srt")

# It makes more sense, however, to you define a destination folder
# that is easier to access on your computer:
## Not run:
path <- file.path("PATH_TO_AN_EXISTING_FOLDER_ON_YOUR_COMPUTER",
                  paste(t@name, ".srt", sep=""))
## End(Not run)

# Export
act::export_srt(t=t, outputPath=path)

export_textgrid  Export a transcript object to a 'Praat' .TextGrid file

Description
Advice: In most situations it is more convenient to use act::corpus_export for exporting annotation files.
Usage

```r
export_textgrid(
  t,
  outputPath = NULL,
  filterTierNames = NULL,
  filterSectionStartsec = NULL,
  filterSectionEndsec = NULL
)
```

Arguments

- `t` Transcript object; transcript to be saved.
- `outputPath` Character string; path where .TextGrid will be saved.
- `filterTierNames` Vector of character strings; names of tiers to be included. If left unspecified, all tiers will be exported.
- `filterSectionStartsec` Double; start of selection in seconds.
- `filterSectionEndsec` Double; end of selection in seconds.

Details

The .TextGrid file will be written to the file specified in `outputPath`. If `outputPath` is left empty, the function will return the contents of the .TextGrid itself.

Value

Contents of the .TextGrid file (only if `outputPath` is left empty)

See Also

corpus_export, export_eaf, export_exb, export_printtranscript, export_rpraat, export_srt

Examples

```r
library(act)

# Get the transcript you want to export
m <- examplecorpus@transcripts[[1]]

# Create temporary file path
path <- tempfile(pattern = m@name, tmpdir = tempdir(),
                 fileext = ".TextGrid")

# It makes more sense, however, to you define a destination folder
# that is easier to access on your computer:
## Not run:
path <- file.path("PATH_TO_AN_EXISTING_FOLDER_ON_YOUR_COMPUTER",
```
helper_format_time

Formats time as HH:MM:SS,mmm

Description

Formats time as HH:MM:SS,mmm

Usage

helper_format_time(
  t,
  digits = 1,
  addHrsMinSec = FALSE,
  addTimeInSeconds = FALSE
)

Arguments

  t        Double; time in seconds.
  digits   Integer; number of digits.
  addHrsMinSec Logical; if TRUE 'hrs' 'min' 'sec' will be used instead of ':'.
  addTimeInSeconds Logical; if TRUE time value in seconds will be shown, too.

Value

Character string.

Examples

library(act)

helper_format_time(12734.232345)
helper_format_time(2734.232345)
helper_format_time(34.232345)
helper_format_time(0.232345)

helper_format_time(12734.232345, addHrsMinSec=TRUE)
helper_format_time(2734.232345, addHrsMinSec=TRUE)
helper_tiers_merge_tables

Helper: Merge tier tables

Description

Merges several the tier tables into one tier table.

Usage

helper_tiers_merge_tables(...)

Arguments

... accepts different kinds of objects; transcript objects, lists of transcript objects (as in @transcripts of a corpus object) and tier tables (as in @tiers of a transcript object).

Details

NOTE: To actually modify the tiers in a transcript object or a corpus object corpus use the functions of the package, e.g. act::transcripts_merge. This function is only a helper function and for people that like experiments. If tiers with the same name are of different types ("IntervalTier", "TextTier") an error will be raised. In that case can use, for example, "act::tier_convert()" to change the tier types.
**helper_tiers_new_table**

**Value**

Data.frame

**See Also**

helper_tiers_sort_table, helper_tiers_merge_tables, tiers_convert, tiers_rename, tiers_sort, transcripts_merge

**Examples**

```r
library(act)

# --- Create two tier tables from scratch
tierTable1 <- act::helper_tiers_new_table(c("a","b","c","d"),
c("IntervalTier","TextTier","IntervalTier","TextTier"))

tierTable2 <- act::helper_tiers_new_table(c("a","b","x","y"),
c("IntervalTier","TextTier","IntervalTier","TextTier"))

tierTable3 <- act::helper_tiers_merge_tables(tierTable1,tierTable2)
tierTable3
```

---

**helper_tiers_new_table**

*Helper: Create a tier table*

**Description**

Creates a new tier table as necessary in @tiers of a transcript object.

**Usage**

```r
helper_tiers_new_table(tierNames, tierTypes = NULL, tierPositions = NULL)
```

**Arguments**

- **tierNames**: Vector of character strings; names of the tiers.
- **tierTypes**: Vector of character strings; types of the tiers. Allowed values: "IntervalTier", "TextTier". Needs to have the same length as 'tierNames'.
- **tierPositions**: Vector of integer values; Sort order of the tiers. Needs to have the same length as 'tierNames'.

**Details**

NOTE: To actually modify the tiers in a transcript object or a corpus object corpus use the functions of the package. This function is only a helper function and for people that like experiments.
Value
Data.frame

See Also
helper_tiers_sort_table, helper_tiers_merge_tables, tiers_convert, tiers_rename, tiers_sort

Examples

library(act)

# --- Create a tier table from scratch
tierTable <- act::helper_tiers_new_table(c("a","b","c", "d"),
c("IntervalTier", "TextTier","IntervalTier","TextTier"))
tierTable

helper_tiers_sort_table

Helper: Sort a tier table

Description
NOTE: To actually reorder the tiers in a transcript object or a corpus object corpus use act::tiers_sort. This function is only a helper function and for people that like experiments.

Usage

helper_tiers_sort_table(
  tierTable,
  sortVector,
  addMissingTiers = TRUE,
  deleteTiersThatAreNotInTheSortVector = FALSE
)

Arguments

tierTable      Data frame; tiers as specified and necessary in @tiers of a transcript object.

sortVector     Vector of character strings; regular expressions to match the tier names. The order within the vector presents the new order of the tiers. Use "\*" (=two backslashes and a star) to indicate where tiers that are not present in the sort vector but in the transcript should be inserted.

addMissingTiers Logical; if TRUE all tiers that are given in `sortVector` but are missing in `tierTable` will be added.

deleteTiersThatAreNotInTheSortVector Logical; if TRUE tiers that are not matched by the regular expressions in `sortVector` will be deleted. Otherwise the will be inserted at the end of the table or at the position defined by "\*" in `sortVector`.
Details

Sort a tier table by a predefined vector of regular expression strings. Tiers that are missing in the table but are present in the sort vector may be inserted. Tiers that are present in the table but not in the sort vector may be deleted or inserted. These tiers will be inserted by default at the end of the table. You may also use a element "\*" in 'sortVector' to define the position where they should be placed.

Value

Data.frame

See Also

tiers_sort, helper_tiers_new_table, helper_tiers_merge_tables

Examples

# This function applies to the tier tables that are necessary in \code{@tiers} of a transcript. # object. For clarity, we will create such a table from scratch.

library(act)

# --- Create a tier table from scratch
tierTable <- helper_tiers_new_table(c("a","b","c", "d"),
c("IntervalTier", "TextTier","IntervalTier","TextTier"))

# --- Create a vector, defining the new order of the tiers.
sortVector <- c("c","a","d","b")

# Sort the table
tierTable.1 <- act::helper_tiers_sort_table(tierTable=tierTable, sortVector=sortVector)
tierTable.1

# --- Create a vector, in which the tier "c" is missing.
sortVector <- c("a","b","d")

# Sort the table, the missing tier will be inserted at the end.
tierTable.1 <- act::helper_tiers_sort_table(tierTable=tierTable, sortVector=sortVector)
tierTable.1

# --- Create a vector, in which the tier "c" is missing, # but define the place, where missing tiers will be inserted by "\*" sortVector <- c("a","\*","b","d")

# Sort the table. The missing tier "c" will be inserted in second place.
tierTable.2 <- act::helper_tiers_sort_table(tierTable=tierTable, sortVector=sortVector)
tierTable.2

# Sort the table, but delete tiers that are missing in the sort vector # Note: If 'deleteTiersThatAreNotInTheSortVector=TRUE' tiers that are missing in the # will be deleted, even if the 'sortVector' contains a "\*".
helper_transcriptNames_get

Helper: Get names of all transcripts in a corpus

Description

Gets the names of all transcript objects in a corpus object based from the @name attribute of each transcript.

Usage

helper_transcriptNames_get(x)

Arguments

x Corpus object

Value

List

Examples

library(act)

act::helper_transcriptNames_get(examplecorpus)
helper_transcriptNames_make

*Helper: Makes valid names for all transcripts in a corpus*

### Description

Makes valid names for all transcript objects in a corpus object based on the names passed in `transcriptNames` parameter. In particular, the functions also corrects names, which have to be non-empty and unique. The following options are performed in the mentioned order.

### Usage

```r
helper_transcriptNames_make(
  transcriptNames,
  searchPatterns = character(),
  searchReplacements = character(),
  toUpperCase = FALSE,
  toLowerCase = FALSE,
  trim = FALSE,
  defaultForEmptyNames = "no_name"
)
```

### Arguments

- **transcriptNames**
  Vector of character strings; Names of the transcripts to validate.

- **searchPatterns**
  Vector of character strings; Search pattern as regular expression. Leave empty for no search-replace in the names.

- **searchReplacements**
  Vector of character strings; Replacements for search. Leave empty for no search-replace in the names.

- **toUpperCase**
  Logical; Convert transcript names all to upper case.

- **toLowerCase**
  Logical; Convert transcript names all to lower case.

- **trim**
  Logical; Remove leading and trailing spaces in names.

- **defaultForEmptyNames**
  Character string; Default value for empty transcript names (e.g., resulting from search-replace operations)

### Value

List
Examples

library(act)

# make some names with an empty value "" and a duplivate "d"
transcriptNames <- c("a", "b", "", "d", "d")
act::helper_transcriptNames_make(transcriptNames)

helper_transcriptNames_set

Helper: Set names of all transcripts in a corpus

Description

Sets the names of all transcript objects in a corpus object both in the names of the list x@transcripts and in the slot @name of each transcript.

Usage

helper_transcriptNames_set(x, transcriptNames)

Arguments

x Corpus object
transcriptNames Vector of character strings; new names.

Value

List

Examples

library(act)

# get current names of the transcripts
names.old <- act::helper_transcriptNames_get(examplecorpus)

# rename giving numbers as names
names.test <- as.character(seq(1:length(names.old)))
test <- act::helper_transcriptNames_set(examplecorpus, names.test)

# create an error: empty name
## Not run:
names.test <- names.old
names.test[2] <- ""
test <- act::helper_transcriptNames_set(examplecorpus, names.test)
import

## End(Not run)

# create an error: double names
## Not run:
names.test <- names.old
test <- act::helper_transcriptNames_set(examplecorpus, names.test)
## End(Not run)

---

import  

**Import a single annotation file**

**Description**

Advice: In most situations it is more convenient to use `act::corpus_new`, `act::corpus_import` for importing annotation files.

**Usage**

```r
import(..., transcriptName = NULL)
```

**Arguments**

- `...` file path, contents of an annotation file or rPraat object; see description above.
- `transcriptName` Character string: name of the transcript, if this parameter is set, the default name of the transcript will be changed.

**Details**

Imports the contents of an annotation file and returns a transcript object.

The input to this function in the parameter `...` may either be (1) the path to an annotation file (Currently 'ELAN' .eaf, 'EXMARaLDA .exb and 'Praat' .TextGrid files), (2) the contents of an annotation file obtained from the `@file.content` or by reading the contents of the files directly with `readLines()` or (3) a rPraat TextGrid object.

Only the first input to `...` will be processed

**Value**

Transcript object.

**See Also**

`corpus_import`, `corpus_new`, `import_eaf`, `import_exb`, `import_rpraat`, `import_textgrid`
Examples

```r
library(act)

# To import an annotation file of your choice:
## Not run:
path <- "PATH_TO_AN_EXISTING_FILE_ON_YOUR_COMPUTER"
## End(Not run)

# Path to a .TextGrid file that you want to read
filePath <- system.file("extdata", "examplecorpus", "GAT",
"ARG_I_PAR_Beto.TextGrid", package="act")
t <- act::import(filePath=filePath)
t

# Path to an .eaf file that you want to read
filePath <- system.file("extdata", "examplecorpus", "SYNC",
"SYNC_rotar_y_flexionar.eaf", package="act")
t <- act::import(filePath=filePath)
t

# Content of a .TextGrid file, e.g. as stored in `@file.content`
# of a transcript object.
fileContent <- examplecorpus@transcripts[['ARG_I_CHI_Santi']]@file.content
t <- act::import(fileContent=fileContent)
t

# Content of an .eaf file, e.g. as stored in `@file.content`
# of a transcript object.
fileContent <- examplecorpus@transcripts[['SYNC_rotar_y_flexionar']]@file.content
t <- act::import(fileContent=fileContent)
t
```

---

import_eaf

**Import a single 'ELAN' '.eaf' file**

Description

Advice: In most situations it is more convenient to use `act::corpus_new`, `act::corpus_import` for importing annotation files.

Imports the contents of a 'ELAN' .eaf file and returns a transcript object. The input to this function is either the path to an .eaf file or the contents of a .eaf file obtained from the `@file.content` of an existing transcript object by `readLines()`. If you pass 'fileContent' you need to pass 'transcript-Name' as parameter, too.

Usage

```r
import_eaf(filePath = NULL, fileContent = NULL, transcriptName = NULL)
```
import_eaf

Arguments

- `filePath` Character string; input path of a single 'ELAN' .eaf file.
- `fileContent` Vector of character strings; contents of an 'ELAN' .eaf file read by `readLines()`.
- `transcriptName` Character string; name of the transcript.

Details

Please note:

- 'ELAN' offers a variety of tier types, some including dependencies from other tiers. Therefore not all annotations do actually have a time value. Missing values will be detected in the superordinate tier or will be interpolated. You will not be able to recognize interpolated values in the annotations.
- Please also note that dependencies between tiers in your .eaf file are not reflected in the transcript object within the act package.

Value

Transcript object.

See Also

corpus_import, corpus_new, import, import_exb, import_rpraat, import_textgrid

Examples

```r
library(act)

# Path to an .eaf file that you want to read
path <- system.file("extdata", "examplecorpus", "SYNC", "SYNC_rotar_y_flexionar.eaf", package="act")

# To import a .eaf file of your choice:
## Not run:
path <- "PATH_TO_AN_EXISTING_EAF_ON_YOUR_COMPUTER"
## End(Not run)

t <- act::import_eaf(filePath=path)
t

# Content of an .eaf file (already read by `readLines()`),
# e.g. from an existing transcript object:
mycontent <- examplecorpus@transcripts[['SYNC_rotar_y_flexionar']]@file.content
t <- act::import_eaf(fileContent=mycontent, transcriptName="test")
t
```
import_exb

Import a single 'EXMARaLDA'.exb file

Description

Advice: In most situations it is more convenient to use act::corpus_new, act::corpus_import for importing annotation files.

Usage

import_exb(filePath = NULL, fileContent = NULL, transcriptName = NULL)

Arguments

filePath    Character string; input path of a single 'EXMARaLDA'.exb file.
fileContent Vector of character strings; contents of a 'EXMARaLDA'.exb file.
transcriptName Character string; name of the transcript.

Details

Imports the contents of a 'EXMARaLDA'.exb file and returns a transcript object. The source is either the path to a .exb file or the contents of a .exb file obtained from the @file.content of an existing transcript object. If you pass 'fileContent' you need to pass 'transcriptName' as parameter, too.

Please note:

- 'EXMARaLDA' allows for empty time slots without a time values. Missing values will be interpolated during the import. You will not be able to recognize interpolated values in the data.
- Meta data for tiers (such as the display name etc.) will not be imported.
- Media files are referenced not by their path but only as file names in .exb files. The names will be imported but will not work as paths in act.

Value

Transcript object.

See Also

corpus_import, corpus_new, import, import_eaf, import_rpraat, import_textgrid
Examples

library(act)

## Not run:
# To import a .TextGrid file of your choice:
filePath <- "PATH_TO_AN_EXISTING_TEXTGRID_ON_YOUR_COMPUTER"

t <- act::import_exb(filePath=filePath)
t
## End(Not run)

import_rpraat
Import a single 'rPraat' TextGrid object

Description

This function is to create compatibility with the rPraat package. It converts a 'rPraat' TextGrid object into an act transcript object.

Usage

import_rpraat(rPraatTextGrid, transcriptName = NULL)

Arguments

rPraatTextGrid  List; rPraat TextGrid object.
transcriptName  Character string; name of the transcript.

Details

Please note:

- Time values of annotations in TextGrids may be below 0 seconds. Negative time values will be recognized correctly in the first place. When exporting transcript object to other formats like 'ELAN' .eaf, 'EXMARaLDA' .exb etc. annotations that are completely before 0 sec will be deleted, annotations that start before but end after 0 sec will be truncated. Please see also the function act::transcripts_cure_single.

- TextGrids and contained tiers may start and end at different times. These times do not need to match each other. The act package does not support start and end times of TextGrids and tiers and will. The default start of a TextGrid will be 0 seconds or the lowest value in case that annotations start below 0 seconds.

Credits: Thanks to Tomáš Bořil, the author of the rPraat package, for commenting on the exchange functions.
import_textgrid

Value

Transcript object.

See Also

corpus_import, corpus_new, import, import_eaf, import_exb, import_textgrid
export_rpraat, import, import_textgrid, import_eaf

Examples

library(act)

# Path to the .TextGrid file that you want to read
path <- system.file("extdata", "examplecorpus", "GAT", "ARG_I_PAR_Beto.TextGrid", package="act")

# To import a .TextGrid file of your choice:
## Not run:
path <- "PATH_TO_AN_EXISTING_TEXTGRID_ON_YOUR_COMPUTER"
## End(Not run)

# Make sure to have rPraat installed before you try the following
## Not run:
# Read TextGrid file with rPraat
rPraat.tg <- rPraat::tg.read(path)

# Convert to an act transcript
t <- act::import_rpraat(rPraat.tg)

# Change the name and add it to the examplecorpus
t@name <-"rpraat"
newcorpus <- act::transcripts_add(examplecorpus, t)

# Have a look
newcorpus@transcripts["rpraat"]

# Alternatively, you can use the general import function
t <- act::import(rPraat.tg)

## End(Not run)

import_textgrid

Import a single 'Praat' .TextGrid file

Description

Advice: In most situations it is more convenient to use act::corpus_new, act::corpus_import for importing annotation files.
import_textgrid

Usage

import_textgrid(filePath = NULL, fileContent = NULL, transcriptName = NULL)

Arguments

filePath Character string; input path of a single 'Praat' .TextGrid file.
fileContent Vector of character strings; contents of a 'Praat' .TextGrid file read with readLines().
transcriptName Character string; name of the transcript.

Details

Imports the contents of a 'Praat' .TextGrid file and returns a transcript object. The source is either
the path to a .TextGrid file or the contents of a .TextGrid file obtained from the @file.content of
an existing transcript object by readLines(). If you pass 'fileContent' you need to pass 'transcript-
Name' as parameter, too.

Please note:

• Time values of annotations in TextGrids may be below 0 seconds. Negative time values will
be recognized correctly in the first place. When exporting transcript object to other formats like
'ELAN' .eaf, 'EXMARaLDA' .exb ect. annotations that are completely before 0 sec will be
deleted, annotations that start before but end after 0 sec will be truncated. Please see also the
function act::transcripts_cure_single.

• TextGrids and contained tiers may start and end at different times. These times do not need
to match each other. The act package does not support start and end times of TextGrids and
tiers and will. The default start of a TextGrid will be 0 seconds or the lowest value in case that
annotations start below 0 seconds.

Value

Transcript object.

See Also

corpus_import, corpus_new, import, import_eaf, import_exb, import_rpraat

Examples

library(act)

# Path to the .TextGrid file that you want to read
path <- system.file("extdata", "examplecorpus", "GAT",
"ARG_I_PAR_Beto.TextGrid", package="act")

# To import a .TextGrid file of your choice:
## Not run:
path <- "PATH_TO_AN_EXISTING_TEXTGRID_ON_YOUR_COMPUTER"

## End(Not run)
t <- act::import_textgrid(filePath=path)

# Content of a .TextGrid (already read by \code{readLines}),
# e.g. from an existing transcript object:
mycontent <- examplecorpus@transcripts[[1]]@file.content
t <- act::import_textgrid(fileContent=mycontent, transcriptName="test")

table

### Information about corpus and transcript objects

#### Description

Gives detailed information about the contents of a corpus object or a transcript object that is passed as parameter to the function. In the case that you want to pass a transcript object form a corpus object, make sure that you access the transcript using double [[]] brackets.

#### Usage

\f[ info(...) \]

#### Arguments

... object; either a corpus or a transcript object.

#### Details

To get summarized information about the transcript and corpus objects use \f[ act::info_summarized ]\.

#### Value

List.

#### See Also

\f[ info_summarized ]\.

#### Examples

library(act)

act::info(examplecorpus)

act::info(examplecorpus@transcripts[[1]])
info_summarized

Summarized information about corpus and transcript objects

Description

Gives summarized information about the contents of a corpus object or a transcript object that is passed as parameter to the function. In the case that you want to pass a transcript object form a corpus object, make sure that you access the transcript using double [[]] brackets.

Usage

info_summarized(...)  

Arguments

...  
object; either a corpus or a transcript object.

Details

To get more detailed information about the tiers in a corpus object use act::info.

Value

List.

See Also

info

Examples

library(act)

act::info_summarized(examplecorpus)

act::info_summarized(examplecorpus@transcripts[[1]])
**layout-class**

*Layout object, defining the layout of print transcripts*

**Description**

You can create a new layout object with `methods::new("layout")`. This will give you a new layout object with the default settings used by `act`. If you want to modify the layout of the print transcripts, create a new layout object with `mylayout <- methods::new("layout")`, modify the values in the `@slots` and pass it as argument `l` to the respective functions.

**Slots**

- **name** Character string; Name of the layout.
- **filter.tier.includeRegEx** Character string; as regular expression, tiers matching the expression will be included in the print transcript.
- **filter.tier.excludeRegEx** Character string; as regular expression, tiers matching the expression will be excluded from the print transcript.
- **transcript.width** Integer; width of transcript, -1 for no line wrapping.
- **speaker.width** Integer; width of speaker abbreviation, -1 for full name without shortening.
- **speaker.ending** Character string; string that is added at the end of the speaker name.
- **spacesbefore** Integer; number of spaces inserted before line number.
- **additionalline1.insert** Logical; if TRUE an additional dummy line will be inserted after each annotation line, the text is defined in `.additionalline1.text`.
- **additionalline1.text** Character string; Content of additional dummy line 1.
- **additionalline1.indent** Logical; if TRUE the content of the dummy line 1 will be indented to begin where the content of the annotations start.
- **additionalline2.insert** Logical; if TRUE an additional dummy line will be inserted after each annotation line, the text is defined in `.additionalline2.text`.
- **additionalline2.text** Character string; Content of additional dummy line 2.
- **additionalline2.indent** Logical; if TRUE the content of the dummy line 2 will be indented to begin where the content of the annotations start.
- **brackets.tryToAlign** Logical; if TRUE act will try to align brackets [ ] for parallel speaking (Attention: experimental function; results may not satisfy).
- **pauseTierRegEx** Character string; regular expression to identify pause tier for auto formatting pauses.
- **header.insert** Logical; if TRUE a transcript header is inserted.
- **header.heading.fromColumnName** Character string; is only used when transcripts are made based on a search results; defines from which column of a search results table the heading is taken (if `object@.header.insert==TRUE`)
- **header.firstInfo.fromColumnName** Character string; is only used when transcripts are made based on a search results; defines from which column of a search results table the first info is taken (if `object@.header.insert==TRUE`)
arrow.insert Logical; is only used when transcripts are made based on a search results; if TRUE an arrow will be inserted, highlighting the transcript line containing the search hit.

arrow.shape Character string; shape of the arrow.

---

**matrix_load**

*Load replacement matrix*

**Description**

This function is only for checking how the normalization matrix will be loaded internally.

**Usage**

```r
matrix_load(path = NULL, myFileEncoding = "UTF-8")
```

**Arguments**

- `path` Character string; path to the replacement matrix (a CSV file). If argument is left open, the default replacement matrix of the package will be returned.
- `myFileEncoding` Character string; encoding of the file.

**Value**

Data.frame

**Examples**

```r
library(act)

# An example replacement matrix comes with the package.
pay = system.file("extdata","normalization","normalizationMatrix.csv", package="act")

# Load the matrix
mymatrix <- act::matrix_load(path)

# Have a look at the matrix
colnames(mymatrix)
mymatrix

#the original path of the matrix is stored in the attributes
attr(mymatrix, 'path')
```
matrix_save

Save replacement matrix

Usage

    matrix_save(replacementMatrix, path, myFileEncoding = "UTF-8")

Arguments

    replacementMatrix
        Data frame; replacement matrix.

    path
        Character string; path where the matrix will be saved.

    myFileEncoding
        Character string; encoding of the file.

Value

    nothing

Examples

    library(act)

    # An example replacement matrix comes with the package.
    path <- system.file("extdata", "normalization", "normalizationMatrix.csv", package="act")

    # Load the matrix
    mymatrix <- act::matrix_load(path)

    # ' # Create temporary file path
    path <- tempfile(pattern = "mymatrix", tmpdir=tempdir(), fileext = ".csv")

    # It makes more sense, however, to you define a destination folder
    # that is easier to access on your computer:
    ## Not run:
    path <- file.path("PATH_TO_AN_EXISTING_FOLDER_ON_YOUR_COMPUTER", "mymatrix.csv")
    ## End(Not run)

    # Save the matrix
    act::matrix_save(mymatrix, path=path)
Assign media file links to transcript objects

Description

Searches for media files in folders and assigns the links to transcript objects in a corpus. The function uses the name of the transcript to find the media files, e.g. the function assumes that the annotation files have the same name as the media files, except from the suffix/the file type.

Usage

```r
media_assign(
  x,
  searchPaths = NULL,
  searchInSubfolders = TRUE,
  filterFile = "",
  transcriptNames = NULL,
  deleteExistingMedia = TRUE,
  onlyUniqueFiles = TRUE
)
```

Arguments

- `x` Corpus object.
- `searchPaths` Vector of character strings; paths where media files should be searched; if path is not defined, the paths given in `x@paths.media.files` will be used).
- `searchInSubfolders` Logical; if FALSE only the main level of the directory will be scanned for media, if TRUE sub folders will be scanned for media, too.
- `filterFile` Character string; Regular expression of files to look for.
- `transcriptNames` Vector of character strings; Names of the transcripts for which you want to search media files; leave empty if you want to search media for all transcripts in the corpus object.
- `deleteExistingMedia` Logical; if TRUE existing media links will be deleted, if FALSE existing media links will be preserved and new links will be added.
- `onlyUniqueFiles` Logical; if TRUE media files with the same name (in different locations) will only be added once; if FALSE all media files found will be added, irrespective of possible doublets.

Details

Only the file types set in `options()$act.fileformats.audio` and `options()$act.fileformats.video` will be recognized. You can modify these options to recognize other media types.
**media_delete**

Delete media files links from transcript objects

**Description**

Delete media files links from transcript objects

**Usage**

```r
media_delete(x, transcriptNames = NULL)
```

**Arguments**

- `x` Corpus object.
- `transcriptNames` Vector of character strings; Names of the transcripts for which you want to search media files; leave empty if you want to search media for all transcripts in the corpus object.

**Value**

Corpus object.

**See Also**

`media_assign`, `media_getPathToExistingFile`


**Examples**

```r
library(act)

eexamplecorpus <- act::media_delete(examplecorpus)
```

---

**media_getPathToExistingFile**

*Gets the path of a media file for a transcript*

**Description**

Gets the path of a media file for a transcript

**Usage**

```r
media_getPathToExistingFile(
  t,
  filterMediaFile = c(".*\.(mp4|mov)", ".*\.(aiff|aif|wav)", ".*\.(mp3)
)
)
```

**Arguments**

- `t` transcript object; transcript for which you want to get the media path.
- `filterMediaFile` Vector of character strings; Each element of the vector is a regular expression. Expressions will be checked consecutively. The first match with an existing media file will be used for playing. The default checking order is video > uncompressed audio > compressed audio.

**Value**

Character string; path to a media file, or NULL if no existing media file has been found.

**See Also**

`media_assign`, `media_delete`

**Examples**

```r
library(act)

# Please be aware that that the example corpus that comes with the package
# does NOT contain media files. Please download the entire example corpus
# with media files if you want to use this function reasonably.

# You can access the media files linked to a transcript directly using
# the object properties.
```
options_delete  

delete all options set by the package from R options

Description

delete all options set by the package from R options

Usage

options_delete()

Examples

library(act)
act::options_delete()

options_reset  

Reset options to default values

Description

Reset options to default values

Usage

options_reset()

Examples

library(act)
act::options_reset()
Description

The package has numerous options that change the internal workings of the package.

Usage

options.show()

Details

There are several options that change the way the package works. They are set globally.

- Use `options(name.of.option = value)` to set an option.
- Use `options()[name.of.option]` to get the current value of an option.
- Use `act::options.reset` to set all options to the default value.
- Use `act::options.delete` to clean up and delete all option settings.

The package uses the following options.

Program

- `act.examplecorpusURL` character strings; where to download example media files.
- `act.updateX` Logical; If TRUE the original corpus object ‘x’ passed passed to the search functions search_new and search_run will also be updated, in case that during the search fulltexts are created or the normalization is performed.
- `act.showprogress` logical; if TRUE a progress bar will be shown during (possibly) time consuming operations.

Paths

- `act.path.praat` Character string; path to the ‘Praat’ executable on your computer. Only necessary if you use the functions to remote control Praat using Praat scripts.
- `act.path.sendpraat` Character string; path to the ‘sendpraat’ executable on your computer. Only necessary if you use the functions to remote control Praat using Praat scripts.
- `act.path.elan` Character string; path to the ‘ELAN’ executable on your computer. Only necessary if you want to open search results in ELAN.

File formats

- `act.fileformats.video` Vector of character strings; Suffixes of video files that will be identified; default is ‘c(“mp4”, “mov”).
- `act.fileformats.audio` Vector of character strings; Suffixes of audio files that will be identified; default is ‘c(“wav”, “aif”, “mp3”).

FFMPEG commands and options
• **act.ffmpeg.command** Character string; 'FFmpeg' command that is used for cutting video files.

• **act.ffmpeg.command.fastVideoPositioning** Character string; 'FFmpeg' command that is used for cutting video files using the 'FFmpeg' option 'fast video positioning'. This is considerably faster when working with long video files.

• **act.ffmpeg.command.audio** Character string; 'FFmpeg' command that is used for cutting/generating uncompressed audio files.

• **act.ffmpeg.exportchannels.fromColumnName** Character string; Name of the column in the data frame `s@results` from information, which audio channel to export, will be taken.

**Import annotation files**

• **act.import.readEmptyIntervals** Logical; if TRUE empty intervals in your annotation files will be read, if FALSE empty intervals will be skipped.

• **act.import.scanSubfolders** Logical; if TRUE sub folders will also be scanned for annotation files; if FALSE only the main level of the folders specified in `paths.annotation.files` of your corpus object will be scanned.

• **act.import.storeFileContentInTranscript** if TRUE the contents of the original annotation file will be stored in `transcript@file.content`. Set to FALSE if you want to keep your corpus object small.

**Export**

• **act.export.foldergrouping1.fromColumnName** Character string; Name of sub folders that will be created in the folder of the search result, level 1.

• **act.export.foldergrouping2.fromColumnName** Character string; Name of sub folders that will be created in the folder of the search result, level 2.

• **act.export.filename.fromColumnName** Character string; Name of the column from which the file names for exported files will be taken.

**Miscellaneous**

• **act.separator_between_intervals** Character; Single character that is used for separating intervals when creating the full text.

• **act.separator_between_tiers** Character; Single character that is used for separating tiers when creating the full text.

• **act.separator_between_words** Character string; regular expression with alternatives that count as separators between words. Used for preparing the concordance.

• **act.wordCountRegEx** Character string; regular expression that is used to count words.

**Value**

Nothing.
Examples

```r
library(act)
## Not run:
act::options_show()
## End(Not run)
```

search-class

Search object

Description

This object defines the properties of a search in act. It also contains the results of this search in a specific corpus, if the search has already been run. (Note that you can also create a search without running it immediately). A search object can be run on different corpora.

Some of the slots are defined by the user. Other slots are [READ ONLY], which means that they can be accessed by the user but should not be changed. They contain values that are filled when you execute functions on the object.

Slots

name Character string; name of the search. Will be used, for example, as name of the subfolder when creating media cuts.

pattern Character string; search pattern as a regular expression.

search.mode Character string; defines if the original contents of the annotations should be searched or if the full texts should be searched. Slot takes the following values: `content`, `fulltext` (=default, includes both full text modes), `fulltext.byTime`, `fulltext.byTier`.

search.normalized logical. if `TRUE` the normalized annotations will be used for searching.

resultid.prefix Character string; search results will be numbered consecutively; This character string will be placed before the consecutive numbers.

resultid.start Integer; search results will be numbered consecutively; This is the start number of the identifiers.

filter.transcript.names Vector of character strings; names of transcripts to include in the search. If the value is `character()` or `""` filter will be ignored.

filter.transcript.includeRegEx Character string; Regular expression that defines which transcripts should be INcluded in the search (matching the name of the transcript).

filter.transcript.excludeRegEx Character string; Regular expression that defines which transcripts should be EXcluded in the search (matching the name of the transcript).

filter.tier.names Vector of character strings; names of tiers to include in the search. If the value is `character()` or `""` filter will be ignored.

filter.tier.includeRegEx Character string; Regular expression that defines which tiers should be INcluded in the search (matching the name of the tier).
filter.tier.excludeRegEx   Character string; Regular expression that defines which tiers should be EXcluded in the search (matching the name of the tier).

filter.section.startsec   Double; Time value in seconds, limiting the search to a certain time span in each transcript, defining the start of the search window.

filter.section.endsec   Double; Time value in seconds, limiting the search to a certain time span in each transcript, defining the end of the search window.

concordance.make   Logical; If a concordance should be created when the search is run.

concordance.width   Integer; number of characters to include in the concordance.

cuts.span.beforesec   Double; Seconds how much the cuts (media and print transcripts) should start before the start of the search hit.

cuts.span.aftersec   Double; Seconds how much the cuts (media and print transcripts) should end after the end of the search hit.

cuts.column.srt   Character string; name of destination column in the search results data frame where the srt subtitles will be inserted; column will be created if not present in data frame; set to "" for no insertion.

cuts.column.printtranscript   Character string; name of destination column in the search results data frame where the print transcripts will be inserted; column will be created if not present in data frame; set to "" for no insertion.

cuts.printtranscripts   Character string; [READ ONLY] All print transcripts for the search results (if generated previously)

cuts.cutlist.mac   Character string; [READ ONLY] ‘FFmpeg’ cut list for use on a Mac, to cut the media files for the search results.

cuts.cutlist.win   Character string; [READ ONLY] ‘FFmpeg’ cut list for use on Windows, to cut the media files for the search results.

results   Data.frame; Results of the search.

results.nr   Integer; [READ ONLY] Number of search results.

results.tiers.nr   Integer; [READ ONLY] Number of tiers over which the search results are distributed.

results.transcripts.nr   Integer; [READ ONLY] Number of transcripts over which the search results are distributed.

x.name   Character string; [READ ONLY] name of the corpus object on which the search has been run.

Examples

library(act)

# Search for the 1. Person Singular Pronoun in Spanish.
mysearch <- act::search_new(examplecorpus, pattern= "yo")
mysearch

# Search in normalized content vs. original content
mysearch.norm <- act::search_new(examplecorpus, pattern= "yo", searchNormalized=TRUE)
mysearch.org <- act::search_new(examplecorpus, pattern= "yo", searchNormalized=FALSE)
mysearch.norm@results.nr
mysearch.org@results.nr
# The difference is because during normalization capital letters will be converted to small letters. One annotation in the example corpus contains a "yo" with a capital letter:
mysearch <- act::search_new(examplecorpus, pattern="yO", searchNormalized=FALSE)
mysearch@results$hit

# Search in full text vs. original content.
# Full text search will find matches across annotations.
# Let’s define a regular expression with a certain span.
# Search for the word "no" ‘no’ followed by a "pero" 'but'
# in a distance ranging from 1 to 20 characters.
myRegEx <- "\\bno\\b.\{1,20\}pero"
mysearch <- act::search_new(examplecorpus, pattern=myRegEx, searchMode="fulltext")
mysearch
mysearch@results$hit

---

```
search_concordance      Make concordance for search results

Description

Make concordance for search results

Usage

search_concordance(x, s, searchNormalized = TRUE)

Arguments

x  Corpus object.
s  Search object.
searchNormalized  Logical; if TRUE function will search in the normalized content, if FALSE function will search in the original content.

Value

Search object.

Examples

library(act)

# Search for the 1. Person Singular Pronoun in Spanish
# Search without creating the concordance immediately.
# This is for example useful if you are working with a large corpus, since
# making the concordance may take a while.
mysearch <- act::search_new(examplecorpus, pattern="yo", concordanceMake=FALSE)
```
mysearch@results[1,]

# The results do not contain the concordance, it is only 15 columns
ncol(mysearch@results)

# Make the concordance
mysearch.new <- act::search_concordance(x=examplecorpus, s=mysearch)
ncol(mysearch.new@results)

---

**search_cuts**

Create print transcripts, media cutlists and srt subtitles for all search results

**Description**

This function will call the following functions:

- `act_cuts_printtranscript` to create print transcripts,
- `act::cuts_media` to create FFmpeg cutlist to make media snippets,
- `act::search_cuts_srt()` to create .srt subtitles, for all search results.

For a detailed description including examples please refer to the documentation of the individual functions. They also offer some more parameters than this function. If you want to use those, call the functions individually.

**Usage**

```r
search_cuts(
  x,
  s,
  cutSpanBeforesec = NULL,
  cutSpanAftersec = NULL,
  l = NULL,
  outputFolder = NULL
)
```

**Arguments**

- **x** Corpus object.
- **s** Search object.
- **cutSpanBeforesec** Double; Start the cut some seconds before the hit to include some context; the default NULL will take the value as set in @cuts.span.beforesec of the search object.
cutSpanAftersec

Double; End the cut some seconds before the hit to include some context; the default NULL will take the value as set in @cuts.span.beforesec of the search object.

outputFolder

Character string; if parameter is not set, the print transcripts will only be inserted in s@results; if the path to a existing folder is given transcripts will be saved in '.txt' format.

Value

Search object;

Examples

library(act)

# IMPORTANT: In the example corpus all transcripts are assigned media links.
# The actual media files are, however, not included in when installing the package due to size limitations of CRAN.
# But you may download the media files separately.
# Please see the section 'examplecorpus' for instructions.
# --> You will need the media files to execute the following example code.

## Not run:
# Search
mysearch <- act::search_new(examplecorpus, pattern="yo")

# Create print transcripts, media cutlists and .srt subtitles
# for all search results
test <- act::search_cuts(x=examplecorpus, s=mysearch)

# Display all print transcripts on screen from @cuts.printtranscripts
cat(test@cuts.printtranscripts)

# Display cutlist on screen from @cuts.cutlist.mac
cat(test@cuts.cutlist.mac)

# Display .srt subtitles
cat(test@results[, mysearch@cuts.column.srt])

## End(Not run)
Description

This function creates FFmpeg commands to cut media files for each search results. If you want to execute the commands (and cut the media files) you need to have FFmpeg installed on you computer. To install FFmpeg you can follow the instructions given in the vignette 'installation-ffmpeg'. Show the vignette with `vignette("installation-ffmpeg")`.

Usage

```r
search_cuts_media(
  x,
  s,
  cutSpanBeforesec = NULL,
  cutSpanAftersec = NULL,
  outputFolder = NULL,
  filterMediaInclude = "",
  fastVideoPostioning = TRUE,
  videoCodecCopy = FALSE,
  audioCutsAsMP3 = FALSE,
  Panning = NULL,
  filename.append.medianame = FALSE,
  filename.append.separator = "__"
)
```

Arguments

- **x**: Corpus object; Please note: all media paths for a transcript need to be given as a list in the corpus object in `corpus@transcripts[[ ]]@media.path`. You can use the respective media functions.
- **s**: Search object.
- **cutSpanBeforesec**: Double; Start the cut some seconds before the hit to include some context; the default NULL will take the value as set in @cuts.span.beforesec of the search object.
- **cutSpanAftersec**: Double; End the cut some seconds before the hit to include some context; the default NULL will take the value as set in @cuts.span.beforesec of the search object.
- **outputFolder**: Character string; path to folder where files will be written.
- **filterMediaInclude**: Character string; regular expression to match only some of the media files in corpus@transcripts[[ ]]@media.path.
- **fastVideoPostioning**: Logical; If TRUE the FFmpeg command will be using the parameter fast video positioning as specified in `options()$act.ffmpeg.command.fastVideoPostioning`.
- **videoCodecCopy**: Logical; if TRUE FFmpeg will use the option `codec copy` for videos.
- **audioCutsAsMP3**: Logical; If TRUE audio cuts will be exported as `.mp3` files, using `options()$act.ffmpeg.command.audioCutsAsMP3`.
- **Panning**: Logical; If TRUE audio cuts will be exported as `.mp3` files, using `options()$act.ffmpeg.command.audioCutsAsMP3`.
Panning

Integer; 0=leave audio as is (ch1&ch2), 1=only channel 1 (ch1), 2=only channel 2 (ch2), 3=both channels separated (ch1&ch2), 4=all three versions (ch1&ch2, ch1, ch2). This setting will override the option made in `act.ffmpeg.exportchannels.fromColumnName`.

filename.append.medianame

Logical; if TRUE the file name of the original media file will be appended to the snippet(s).

filename.append.separator

Character string; characters that separate the result id and the media file name.

Details

Cut lists

The commands are collected in cut lists. The cut lists will be stored in different ways:

- A cut list for for ALL search results will be stored in `s@cuts.cutlist.mac` to be used on MacOS and `s@cuts.cutlist.win` to be used on Windows.
- Individual cut lists for EACH search result will be stored in additional columns in the data frame `s@results`. The cut lists that can be executed in the Terminal (Apple) or the Command Line Interface (Windows).

Input media files

The function will use all files in `corpus@transcripts[[ ]]@media.path`. Therefore you will need to set the options `filterMediaInclude` filtering for which input media files you want to create the cuts. The filter is a regular expression, e.g. `\.(wav|aif)` for `.wav` and `.aif` audio files or `\.(mp4)` for `.mp4` video files.

Output format

The output format is predefined by in the options:

- `act.ffmpeg.command` defines the basic FFmpeg command
- `act.ffmpeg.command.fastVideoPostioning` defines the FFmpeg command to be used with large video files.

The default is to generate mp4 video cuts. You can also use the following commands to change the output format:

MP4 video cuts with original video quality:

- `options(act.ffmpeg.command = 'ffmpeg -i "INFILEPATH" -ss TIMESTART -t TIMEDURATION OPTIONS -y "OUTFILEPATH.mp4" -hide_banner')`
- `options(act.ffmpeg.command.fastVideoPostioning = 'ffmpeg -ss TIMESTARTMINUS10SECONDS -i "INFILEPATH" -ss 10.000 -t TIMEDURATION OPTIONS -y "OUTFILEPATH.mp4" -hide_banner')`

MP4 video cuts with reduced video quality:

- `options(act.ffmpeg.command = 'ffmpeg -i "INFILEPATH" -ss TIMESTART -t TIMEDURATION OPTIONS -vf scale=1920:-1 -b:v 1M -b:a 192k -y "OUTFILEPATH.mp4" -hide_banner')`
- `options(act.ffmpeg.command.fastVideoPostioning = 'ffmpeg -ss TIMESTARTMINUS10SECONDS -i "INFILEPATH" -ss 10.000 -t TIMEDURATION OPTIONS -vf scale=1920:-1 -b:v 6M -b:a 192k -y "OUTFILEPATH.mp4" -hide_banner')`
**WAV audio cuts:**

- `options(act.ffmpeg.command = 'ffmpeg -i "INFILEPATH" -ss TIMESTART -t TIMEDURATION OPTIONS -y "OUTFILEPATH.wav" -hide_banner')`
- `options(act.ffmpeg.command = 'ffmpeg -i "INFILEPATH" -ss TIMESTART -t TIMEDURATION OPTIONS -y "OUTFILEPATH.mp3" -hide_banner')`

**Advanced options**

You can adjust the FFmpeg commands according to your needs. The following options define the FFmpeg command that will be used by the package. The command needs to contain place holders which will be replaced by the actual values in the package. If you want to define your own ffmpeg command, please make sure to use the following placeholders:

- `INFILEPATH` path to the input media file.
- `OUTFILEPATH` path where the output media file will be saved
- `OPTIONS` FFmpeg options that will be applied additionally, in particular fast video positioning.
- `TIMESTART` time in seconds where to begin the cutting
- `TIMESTARTMINUS10SECONDS` time in seconds where to begin the cutting, in case that fast video positioning is being used.
- `TIMEDURATION` duration of cuts.

**Value**

Search object: cut lists will be stored in `s@cuts.cutlist.mac` and `s@cuts.cutlist.win`.

**Examples**

```r
library(act)

# IMPORTANT: In the example corpus all transcripts are assigned media links.  
# The actual media files are, however, not included in when installing the package  
# due to size limitations of CRAN.  
# But you may download the media files separately.  
# Please see the section 'examplecorpus' for instructions.  
# --> You will need the media files to execute the following example code.

## Not run:
# Search
mysearch <- act::search_new(examplecorpus, pattern="yo")

# Create cut lists
mysearch <- act::search_cuts_media (x=examplecorpus, s=mysearch)

# Check results for Mac:
# Get entire cut list for Mac and display on screen,  
# so you can copy&paste this into the Terminal
mycutlist <- mysearch@cuts.cutlist.mac
cat(mycutlist)
# Cut list for first search result
mycutlist <- mysearch@results$cuts.cutlist.mac[[1]]
```
search_cuts_printtranscript

Create print transcripts for all search results

Description
Print transcripts in the style of conversation analysis will be created for each search result. The transcripts will be inserted into the column defined in \texttt{s@cuts.column.printtranscript}. All transcripts will be stored in \texttt{s@cuts.printtranscripts}.

Usage

\begin{verbatim}
search_cuts_printtranscript(
  x,  
  s,  
  cutSpanBeforesec = NULL,  
  cutSpanAftersec = NULL,  
  l = NULL,  
  outputFolder = NULL
)
\end{verbatim}

Arguments

\begin{itemize}
  \item \texttt{x} \hspace{1cm} Corpus object.
  \item \texttt{s} \hspace{1cm} Search object.
  \item \texttt{cutSpanBeforesec} \hspace{1cm} Double; Start the cut some seconds before the hit to include some context; the default NULL will take the value as set in \texttt{@cuts.span.beforesec} of the search object.
  \item \texttt{cutSpanAftersec} \hspace{1cm} Double; End the cut some seconds before the hit to include some context; the default NULL will take the value as set in \texttt{@cuts.span.beforesec} of the search object.
\end{itemize}
**search_cuts_srt**

Create .srt subtitles for all search results

### Description

Subtitles in 'Subrrib Title' .srt format will be created for each search result. The subtitles will be inserted into the column defined in `s@cuts.column.srt`.

### 1

<table>
<thead>
<tr>
<th>outputFolder</th>
<th>Layout object.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Character string; if parameter is not set, the print transcripts will only be inserted in <code>s@results</code>; if the path to a existing folder is given transcripts will be saved in <code>.txt</code> format.</td>
<td></td>
</tr>
</tbody>
</table>

### Details

If you want to modify the layout of the print transcripts, create a new layout object with `mylayout <- methods::new("layout")`, modify the settings and pass it as argument `l`.

### Value

Search object;

### Examples

```r
library(act)

# Search
mysearch <- act::search_new(examplecorpus, pattern="yo")

# Create print transcripts for all search results
test <- act::search_cuts_printtranscript (x=examplecorpus, s=mysearch)

# Display all print transcripts on screen from @cuts.printtranscripts
cat(test@cuts.printtranscripts)

# Display all print transcripts from results data frame
cat(test@results[,mysearch@cuts.column.printtranscript])

# Only single print transcript from results data frame
cat(test@results[1,mysearch@cuts.column.printtranscript])

# Create print transcript snippets including 1 sec before and 5 sec after
mysearch@cuts.span.beforesec = 1
mysearch@cuts.span.aftersec = 5

test <- act::search_cuts_printtranscript (x=examplecorpus, s=mysearch)

# Display all transcript snippets on screen
cat(test@results[,mysearch@cuts.column.printtranscript])
```
search_cuts_srt

Usage

search_cuts_srt(
  x,
  s,
  cutSpanBeforesec = NULL,
  cutSpanAftersec = NULL,
  outputFolder = NULL,
  speaker.show = TRUE,
  speaker.width = 3,
  speaker.ending = ":"
)

Arguments

x  Corpus object.

s  Search object.

cutSpanBeforesec  Double; Start the cut some seconds before the hit to include some context; the default NULL will take the value as set in @cuts.span.beforesec of the search object.

cutSpanAftersec  Double; End the cut some seconds before the hit to include some context; the default NULL will take the value as set in @cuts.span.beforesec of the search object.

outputFolder  Character string; if parameter is not set, the srt subtitles will only be inserted in s@results; if the path to a existing folder is given, transcripts will be saved in `.srt` format.

speaker.show  Logical; if TRUE name of speaker will be shown before the content of the annotation.

speaker.width  Integer; width of speaker abbreviation, -1 for full name without shortening.

speaker.ending  Character string; string that is added at the end of the speaker name.

Details

Span
If you want to extend the cut before or after each search result, you can modify @cuts.span.beforesec and @cuts.span.aftersec in your search object. If you want to modify the layout of the print transcripts, create a new layout object with mylayout <- methods::new("layout"), modify the settings and pass it as argument l.

Value

Search object;
search_makefilter

search_makefilter

Examples

library(act)

# Search
mysearch <- act::search_new(examplecorpus, pattern="yo")

# Create srt subtitles for all search results
test <- act::search_cuts_srt (x=examplecorpus, s=mysearch)

# Display srt subtitle of first three results
cat(test@results[1:3, mysearch@cuts.column.srt])

# Create srt subtitle including 1 sec before and 5 sec after
mysearch@cuts.span.beforesec = 1
mysearch@cuts.span.aftersec = 5

test <- act::search_cuts_srt (x=examplecorpus,
s=mysearch)

# Display srt subtitle of first results
cat(test@results[1,mysearch@cuts.column.srt])

search_makefilter

Makes a filter for transcript and tier names

Description

Search a corpus object and return the names of all transcripts and tiers that match the given parameters. You can define parameters to include and/or exclude transcripts and tiers based on their names. All parameters passed to the function will be combined.

Usage

search_makefilter(
  x,
  filterTranscriptNames = NULL,
  filterTranscriptIncludeRegEx = NULL,
  filterTranscriptExcludeRegEx = NULL,
  filterTierNames = NULL,
  filterTierIncludeRegEx = NULL,
  filterTierExcludeRegEx = NULL
)

Arguments

x
  Corpus object.

filterTranscriptNames
  Vector of character strings; Names of the transcripts that you want to include; to include all transcripts in the corpus object leave parameter empty or set to character(0) or "".
filterTranscriptIncludeRegEx
Character string; as regular expression, include transcripts matching the expression.

filterTranscriptExcludeRegEx
Character string; as regular expression, exclude transcripts matching the expression.

filterTierNames
Vector of character strings; Names of the tiers that you want to include; to include all tiers in the corpus object leave parameter empty or set to character() or "".

filterTierIncludeRegEx
Character string; as regular expression, include tiers matching the expression.

filterTierExcludeRegEx
Character string; as regular expression, exclude tiers matching the expression.

Details
This functions is useful if you want to use functions of the package such as transcripts_update_normalization, transcripts_update_fulltexts, corpus_export and limit them to only some of the transcripts.

Value
List of character vectors. $filterTranscriptNames contains all transcript names in the corpus matching the expressions, $filterTierNames contains all tier names in the corpus matching the expressions.

See Also
search_new, search_run, search_sub

Examples
library(act)

# Search all transcripts that have "ARG" (ignoring case sensitivity) in their name
myfilter <- act::search_makefilter(x=examplecorpus, filterTranscriptIncludeRegEx="(?i)arg")
myfilter$transcript.names

# Search all transcripts that don't have "ARG" in their name
myfilter <- act::search_makefilter(x=examplecorpus, filterTranscriptExcludeRegEx="ARG")
myfilter$transcript.names

# Search all tiers that have an "A" or an "a" in their name
myfilter <- act::search_makefilter(x=examplecorpus, filterTierIncludeRegEx="(?i)A")
myfilter$tier.names

# Search all tiers that have a capital "A" in their name
myfilter <- act::search_makefilter(x=examplecorpus, filterTierIncludeRegEx="A")
myfilter$tier.names

# In which transcripts do these tiers occur?
myfilter$transcript.names

# Let's check the first of the transcripts, if this is really the case...
examplecorpus@transcripts[[myfilter$transcript.names[1]]]@tiers

---

**search_new**  
*Create a new search*

**Description**

Creates a new search object and runs the search in a corpus object. Only 'x' and 'pattern' are obligatory. The other arguments can be left to their default values.

**Usage**

```r
search_new(
  x,  
  pattern,  
  searchMode = c("content", "fulltext", "fulltext.byTime", "fulltext.byTier"),  
  searchNormalized = TRUE,  
  name = "mysearch",  
  resultid.prefix = "result",  
  resultid.start = 1,  
  filterTranscriptNames = NULL,  
  filterTranscriptIncludeRegEx = NULL,  
  filterTranscriptExcludeRegEx = NULL,  
  filterTierNames = NULL,  
  filterTierIncludeRegEx = NULL,  
  filterTierExcludeRegEx = NULL,  
  filterSectionStartsec = NULL,  
  filterSectionEndsec = NULL,  
  concordanceMake = TRUE,  
  concordanceWidth = NULL,  
  cutSpanBeforesec = 0,  
  cutSpanAftersec = 0,  
  runSearch = TRUE  
)
```

**Arguments**

- **x**: Corpus object; basis in which will be searched.
- **pattern**: Character string; search pattern as regular expression.
- **searchMode**: Character string; takes the following values: *content*, *fulltext* (=default, includes both full text modes), *fulltext.byTime*, *fulltext.byTier*.
- **searchNormalized**: Logical; if TRUE function will search in the normalized content, if FALSE function will search in the original content.
name Character string; name of the search. Will be used, for example, as name of the sub folder when creating media cuts.

resultid.prefix Character string; search results will be numbered consecutively; This character string will be placed before the consecutive numbers.

resultid.start Integer; search results will be numbered consecutively; This is the start number of the identifiers.

filterTranscriptNames Vector of character strings; names of transcripts to be included.

filterTranscriptIncludeRegEx Character string; as regular expression, limit search to certain transcripts matching the expression.

filterTranscriptExcludeRegEx Character string; as regular expression, exclude certain transcripts matching the expression.

filterTierNames Vector of character strings; names of tiers to be included.

filterTierIncludeRegEx Character string; as regular expression, limit search to certain tiers matching the expression.

filterTierExcludeRegEx Character string; as regular expression, exclude certain tiers matching the expression.

filterSectionStartsec Double; start time of region for search.

filterSectionEndsec Double; end time of region for search.

concordanceMake Logical; if TRUE concordance will be added to search results.

concordanceWidth Integer; number of characters to the left and right of the search hit in the concordance, the default is 120.

cutSpanBeforesec Double; Start the media and transcript cut some seconds before the hit to include some context, the default is 0.

cutSpanAftersec Double; End the media and transcript cut some seconds before the hit to include some context, the default is 0.

runSearch Logical; if TRUE search will be run in corpus object, if FALSE only the search object will be created.

Value

Search object.
See Also

search_run, search_makefilter, search_sub

Examples

library(act)

# Search for the 1. Person Singular Pronoun in Spanish.
mysearch <- act::search_new(examplecorpus, pattern= "yo")
mysearch
# Search in normalized content vs. original content
mysearch.norm <- act::search_new(examplecorpus, pattern="yo", searchNormalized=TRUE)
mysearch.org <- act::search_new(examplecorpus, pattern="yo", searchNormalized=FALSE)
mysearch.norm@results.$hit
mysearch.org@results.$hit

# The difference is because during normalization capital letters will be converted
to small letters. One annotation in the example corpus contains a "yo" with a capital letter:
mysearch <- act::search_new(examplecorpus, pattern="yO", searchNormalized=FALSE)
mysearch@results$hit

# Search in full text vs. original content.
# Full text search will find matches across annotations.
# Let's define a regular expression with a certain span.
# Search for the word "no" 'no' followed by a "pero" 'but'
# in a distance ranging from 1 to 20 characters.
myRegEx <- "\bno\b.{1,20}pero"
mysearch <- act::search_new(examplecorpus, pattern=myRegEx, searchMode="fulltext")
mysearch
mysearch@results$hit

search_openresult_inelan

Open a search result in 'ELAN'

Description

The function creates an temporary .eaf file and a .psfx file that locates the search hit. These files will then be opened in ELAN. To make this function work you need to have 'ELAN' installed on your computer and tell the act package where ELAN is located. Therefore you need to set the path to the ELAN executable in the option 'act.path.elan' using options(act.path.elan='PATHTOYOURELANEXECUTABLE').

Usage

search_openresult_inelan(
  x,
  s,
search_openresult_inpraat

resultNr,
openOriginalEafFileIfAvailable = FALSE
)

Arguments

x Corpus object.
s Search object.
resultNr Integer; Number of the search result (row in the data frame s@results) to be opened.
openOriginalEafFileIfAvailable Logical; if TRUE the function will check if the original annotation file was an .eaf file and if it still exists in the original location. If so, the function will not create a temporary .eaf file but open the original file. Warning: The original .pfsx file (if it exists) will be overwritten.

Details

WARNING: This function will overwrite existing .psfx files.

Credits: Thanks to Han Sloetjes for feedback on the structure of the temporary .pfsx files. He actually made the code work.

Examples

library(act)

mysearch <- act::search_new(x=examplecorpus, pattern = "yo")

# You can only use this function if you have installed ELAN on our computer.
## Not run:
options(act.path.elan='PATHTOYOURELANEXECUTABLE')
act::search_openresult_inelan(x=examplecorpus, s=mysearch, resultNr=1, TRUE)
## End(Not run)

search_openresult_inpraat

Open a search result in 'Praat'

Description

The function remote controls 'Praat' by using 'sendpraat' and a 'Praat' script. It opens a search result in the 'Praat' TextGrid Editor.
search_openresult_inpraat

Usage

search_openresult_inpraat(
  x,
  s,
  resultNr,
  play = TRUE,
  closeAfterPlaying = FALSE,
  filterMediaFile = c(".*\.(aiff|ai|w|wav)", ".*\..mp3"),
  delayBeforeOpen = 0.5
)

Arguments

x  Corpus object.

s  Search object.

resultNr  Integer; Number of the search result (row in the data frame s@results) to be played.

play  Logical; If TRUE selection will be played.

closeAfterPlaying  Logical; If TRUE TextGrid editor will be closed after playing (Currently non functional!)

filterMediaFile  Vector of character strings; Each element of the vector is a regular expression. Expressions will be checked consecutively. The first match with an existing media file will be used for playing. The default checking order is uncompressed audio > compressed audio.

delayBeforeOpen

Details

To make this function work you need to do two things first:

- Install 'sendpraat' on your computer. To do so follow the instructions in the vignette 'installation-sendpraat'. Show the vignette with vignette("installation-sendpraat").
- Set the path to the 'sendpraat' executable correctly by using 'options(act.path.sendpraat = ...)'.

Examples

library(act)

mysearch <- act::search_new(x=examplecorpus, pattern = "pero")

# You can only use this functions if you have installed and
# located the 'sendpraat' executable properly in the package options.
## Not run:
act::search_openresult_inpraat(x=examplecorpus, s=mysearch, resultNr=1, TRUE, TRUE)
search_openresult_inquicktime

Open a search result in 'Quicktime' (and play it)

Description

The function remote controls 'Quicktime' by using an Apple Script. It opens a search result in 'Quicktime' and plays it.

Usage

```r
search_openresult_inquicktime(
  x,
  s,
  resultNr,
  play = TRUE,
  closeAfterPlaying = FALSE,
  bringQuicktimeToFront = TRUE,
  filterFile = c(".*\.(mp4|mov)", ".*\.(aiff|aif|wav)", ".*\.(mp3")
)
```

Arguments

- `x` Corpus object.
- `s` Search object.
- `resultNr` Integer; Number of the search result (row in the data frame `s@results`) to be played.
- `play` Logical; If `TRUE` selection will be played.
- `closeAfterPlaying` Logical; if `TRUE` the Quicktime player will be closed after playing the cuts.
- `bringQuicktimeToFront` Logical; if `TRUE` the Quicktime player will be activated and placed before all other windows.
- `filterFile` Vector of character strings; Each element of the vector is a regular expression. Expressions will be checked consecutively. The first match with an existing media file will be used for playing. The default checking order is video > uncompressed audio > compressed audio.

Details

Note: You need to be on a Mac to use this function.

Span

If you want to extend the cut before or after each search result, you can modify `@cuts.span.beforesec` and `@cuts.span.aftersec` in your search object.
**Value**

Logical; TRUE if media file has been played, or FALSE if not.

**Examples**

```r
library(act)

mysearch <- act::search_new(x=examplecorpus, pattern = "pero")

# You can only use this function if you are on a Mac.
# In addition, you need to have downloaded the example media.
## Not run:
# Assign media files
examplecorpus@paths.media.files <- c("FOLDERWHEREMEDIAFILESARELOCATED")
examplecorpus <- act::media_assign(examplecorpus)

# Play the media for the first search result
act::search_openresult_inquicktime(x=examplecorpus,
  s=mysearch,
  resultNr = 1,
  play=TRUE,
  closeAfterPlaying=TRUE)

# Play all search results after one another.
for (i in 1:nrow(mysearch@results)) {
  print(mysearch@results$content[i])
  act::search_openresult_inquicktime(x=examplecorpus,
    s=mysearch,
    resultNr = i,
    play=TRUE,
    closeAfterPlaying=TRUE)
}
## End(Not run)
```

---

**search_playresults_inquicktime**

*Open all search results in 'Quicktime' and play them*

**Description**

The function remote controls 'Quicktime' by using an Apple Script. It opens consecutively all search results in 'Quicktime' and plays them.

**Usage**

```r
search_playresults_inquicktime(x, s, bringQuicktimeToFront = FALSE)
```
Arguments

- `x` Corpus object.
- `s` Search object.
- `bringQuicktimeToFront` Logical; if TRUE the Quicktime player will be activated and placed before all other windows.

Details

Note: You need to be on a Mac to use this function.

Value

No return value.

Examples

```r
library(act)

mysearch <- act::search_new(x=examplecorpus, pattern = "pero")

# You can only use this function if you are on a Mac.
# In addition, you need to have downloaded the example media files.
## Not run:
# Assign media files
examplecorpus@paths.media.files <- c("FOLDERWHEREMEDIAFILESARELOCATED")
examplecorpus <- act::media_assign(examplecorpus)

# Create print transcripts. This is not necessary.
# But its nice to see them when playing all results.
mysearch <- act::search_cuts_printtranscript (x=examplecorpus, s=mysearch)

# Play all search results
act::search_playresults_inquicktime(x=examplecorpus, s=mysearch)
## End(Not run)
```

Description

Search results from a search object will be saved to an Excel-XLSX or a CSV (comma separated values) file. By default a XLSX file will be saved. If you want to save a CSV file, use `saveAsCSV=TRUE`. Please note:

- The function will `=` signs at the beginning of annotation by `"="`. This is because the content would be interpreted as the beginning of a formula (leading to an error).
- In the case of writing to an excel file, line breaks will be replaced by `"\"l\"`. This is because line breaks will lead to an error.
**Usage**

```r
define search_results_export(
  s,
  path,
  sheetNameXLSX = "data",
  saveAsCSV = FALSE,
  encodingCSV = "UTF-8",
  separatorCSV = ";",
  overwrite = TRUE
)
```

**Arguments**

- **s**: Search object. Search object containing the results you wish to export.
- **path**: Character string; path where file will be saved. Please add the suffix `.csv` or `.xlsx` to the file name.
- **sheetNameXLSX**: Character string, set the name of the excel sheet.
- **saveAsCSV**: Logical; if TRUE results will be saved as CSV file; Logical; if FALSE a XLS file will be saved.
- **encodingCSV**: Character string; text encoding for CSV files.
- **separatorCSV**: Character; single character that is used to separate the columns.
- **overwrite**: Logical; if TRUE existing files will be overwritten.

**Examples**

```r
library(act)

# Search
mysearch <- act::search_new(examplecorpus, pattern="yo")
nrow(mysearch@results)

# Create temporary file path
path <- tempfile(pattern = "searchresults", tmpdir = tempdir(),
  fileext = ".xlsx")

# It makes more sense, however, to you define a destination folder
# that is easier to access on your computer:
## Not run:
path <- tempfile(pattern = "searchresults",
  tmpdir = "PATH_TO_AN_EXISTING_FOLDER_ON_YOUR_COMPUTER",
  fileext = ".xlsx")
## End(Not run)

# Save search results
act::search_results_export(s=mysearch, path=path)

# Do your coding of the search results somewhere outside of act
# ...
```
# Load search results
mysearch.import <- act::search_results_import(path=path)
nrow(mysearch.import@results)

## search_results_import  Import search results

### Description
Search results will be imported from an Excel `.xlsx` file or a comma separated values `.csv` file into a search object.

### Usage

```r
search_results_import(
  path,  
  revertReplacements = TRUE,  
  sheetNameXLSX = "data",  
  encodingCSV = "UTF-8",  
  separatorCSV = ";;"
)
```

### Arguments

- **path**: Character string; path to file from where data will be loaded.
- **revertReplacements**: Logical, when exporting search results from act, `=` at the beginning of lines are replaced by `.=`; and in numbers the decimal separator `.` is replaced by a `,"`. If TRUE, this replacement will be reverted when importing search results.
- **sheetNameXLSX**: Character string, set the name of the excel sheet containing the data.
- **encodingCSV**: Character string; text encoding in the case of CVS files.
- **separatorCSV**: Character; single character that is used to separate the columns in CSV files.

### Value
Search object.

### Examples

```r
library(act)

# Search
mysearch <- act::search_new(examplecorpus, pattern="yo")
nrow(mysearch@results)

# Create temporary file path
```
path <- tempfile(pattern = "searchresults", tmpdir = tempdir(),
fileext = ".xlsx")

# It makes more sense, however, to you define a destination folder
# that is easier to access on your computer:
## Not run:
path <- tempfile(pattern = "searchresults",
tmpdir = "PATH_TO_AN_EXISTING_FOLDER_ON_YOUR_COMPUTER",
fileext = ".xlsx")
## End(Not run)

# Save search results
act::search_results_export(s=mysearch, path=path)

# Do your coding of the search results somewhere outside of act
#

# Load search results
mysearch.import <- act::search_results_import(path=path)

search_run

Run a search

Description

Runs a search, based on an existing search object s, in a corpus object x.

Usage

search_run(x, s)

Arguments

x
Corpus object.

s
Search object.

Value

Search object.

See Also

search_new, search_makefilter, search_sub
Examples

```
library(act)

# Search for the 1. Person Singular Pronoun in Spanish.
# Only create the search object without running the search.
mysearch <- act::search_new(x=examplecorpus, pattern= "yo", runSearch=FALSE)

# Run the search
mysearch <- act::search_run(x=examplecorpus, s=mysearch)
mysearch
mysearch@results$hit

# Search Only in tiers called "A", in any transcript
mysearch@filter.tier.names <-"A"
mysearch@filter.transcript.names <-"
mysearch <- act::search_run(x=examplecorpus, s=mysearch)
cbind(mysearch@results$transcript.name, mysearch@results$ tier.name, mysearch@results$hit)

# Search Only in tiers called "A", only in transcript "ARG_I_PER_Alejo"
mysearch@filter.tier.names <-"A"
mysearch@filter.transcript.names <-"ARG_I_PER_Alejo"
mysearch <- act::search_run(x=examplecorpus, s=mysearch)
cbind(mysearch@results$transcript.name, mysearch@results$ tier.name, mysearch@results$hit)
```

---

**search_searchandopen_inpraat**

*Search corpus and open first result in Praat*

**Description**

The function remote controls 'Praat' by using 'sendpraat' and a 'Praat' script. It first searches your corpus object and uses the first search hit. The corresponding TextGrid will be opened in the 'Praat' TextGrid Editor and the search hit will be displayed.

**Usage**

```
search_searchandopen_inpraat(x, pattern)
```

**Arguments**

- `x` Corpus object.
- `pattern` Character string; search pattern as regular expression.
Details

To make this function work you need to do two things first:

- Install 'sendpraat' on your computer. To do so follow the instructions in the vignette 'installation-sendpraat'. Show the vignette with vignette("installation-sendpraat").
- Set the path to the 'sendpraat' executable correctly by using 'options(act.path.sendpraat = ...)'.

Examples

library(act)

# You can only use this functions if you have installed
# and located the 'sendpraat' executable properly in the package options.
## Not run:
act::search_searchandopen_inpraat(x = examplecorpus, "pero")

## End(Not run)

search_sub(Add a sub search to a prior search

Description

This function starts from the results of a prior search and performs a sub search for a temporal co-occurrence. In the sub search all results from the prior search will be checked. The sub search will check annotations in other tiers that temporally overlap with the original search result. Those annotation will be checked if they match a search pattern. If so, the search hit of the sub search will be added to a new column in the original search results data frame.

Usage

search_sub(  
x,  
s,  
pattern,  
searchMode = c("content", "fulltext", "fulltext.byTime", "fulltext.byTier"),  
searchNormalized = TRUE,  
filterTierIncludeRegEx = "",  
filterTierExcludeRegEx = "",  
destinationColumn = "subsearch",  
deleteLinesWithNoResults = FALSE,  
excludeHitsWithinSameTier = TRUE)
Arguments

- **x**: Corpus object.
- **s**: Search object.
- **pattern**: Character string; search pattern as regular expression.
- **searchMode**: Character string; takes the following values: `content`, `fulltext (=default, includes both full text modes)`, `fulltext.byTime`, `fulltext.byTier`.
- **searchNormalized**: Logical; if `TRUE` function will search in the normalized content, if `FALSE` function will search in the original content.
- **filterTierIncludeRegEx**: Character string; limit search to tiers that match the regular expression.
- **filterTierExcludeRegEx**: Character string; limit search to tiers that match the regular expression.
- **destinationColumn**: Character string; name of column where results of sub search will be stored.
- **deleteLinesWithNoResults**: Logical; if `TRUE` search results will be deleted for which the sub search does not give any results.
- **excludeHitsWithinSameTier**: Logical; if `TRUE` the function will not add hits from the same tier as the original search result; if `FALSE` hits from the same tier as the original search result will be included.

Value

Search object.

See Also

- `search_new`, `search_run`, `search_makefilter`

Examples

```r
library(act)

# Lets search for instances where participants laugh together
# First search for annotations that contain laughter (in original content)
myRegEx <- "(\brie\b|\briendo\b)"
mysearch <- act::search_new(x=examplecorpus,
pattern=myRegEx,
searchNormalized = FALSE)
mysearch$results.nr

# Now perform sub search, also on laughs/laughing
test <- act::search_sub(x=examplecorpus,
s=mysearch,
pattern=myRegEx)
```
search_transcript_content

# Check the co-occurring search hits
test@results$subsearch

search_transcript_content

Search in original content of a single transcript

Description

Search in original content of a single transcript

Usage

search_transcript_content(t, s)

Arguments

t Transcript object; transcript to search in.
s Search object.

Value

Data.frame data frame with search results.

Examples

library(act)

# Search for the 1. Person Singular Pronoun in Spanish.
# Only create the search object without running the search.
mysearch <- act::search_new(x=examplecorpus, pattern= "yo", runSearch=FALSE)

# Run the search

df <- act::search_transcript_content(t=examplecorpus@transcripts[[3]],
s=mysearch)
nrow(df)
### search_transcript_fulltext

**Search in full text of a single transcript**

**Description**

Search in full text of a single transcript

**Usage**

```r
search_transcript_fulltext(t, s)
```

**Arguments**

- `t` Transcript object; transcript to search in.
- `s` Search object.

**Value**

Data.frame data frame with search results.

**Examples**

```r
library(act)

# Search for the 1. Person Singular Pronoun in Spanish.
# Only create the search object without running the search.
mysearch <- act::search_new(x=examplecorpus, pattern= "yo", runSearch=FALSE)

# Run the search
df <- act::search_transcript_fulltext(t=examplecorpus@transcripts[[3]],
                                      s=mysearch)
nrow(df)
```

---

### tiers_add

**Add tiers**

**Description**

Adds a tiers in all transcript objects of a corpus. If tiers should be added only in certain transcripts, set the parameter `filterTranscriptNames`. In case that you want to select transcripts by using regular expressions use the function `act::search_makefilter` first.
Usage

tiers_add(
  x,
  tierName,
  tierType = c("IntervalTier", "TextTier"),
  absolutePosition = NULL,
  destinationTier = NULL,
  relativePositionToDestinationTier = 0,
  insertOnlyIfDestinationExists = FALSE,
  filterTranscriptNames = NULL,
  skipIfTierAlreadyExists = TRUE
)

Arguments

  x              Corpus object.
  tierName       Character string; names of the tier to be added.
  tierType       Character string; type of the tier to be added.
  absolutePosition       Integer; Absolute position where the tier will be inserted. Value 1 and values below 1 will insert the tier in the first position; To insert the tier at the end, leave ‘absolutePosition’ and ‘destinationTier’ open.
  destinationTier    Character string; insert the tier relative to this tier.
  relativePositionToDestinationTier Integer; position relative to the destination tier; 1=immediately after; 0 and -1=immediately before; bigger numbers are also allowed.
  insertOnlyIfDestinationExists Logical; if TRUE the new tier will only be added if the destination tier ‘destinationTier’ exists in the transcript object. If FALSE the new tier will only be added in any case. If the destination tier ‘destinationTier’ does not exist in the transcript object, the tier will be inserted at the end.
  filterTranscriptNames Vector of character strings; names of the transcripts to be modified. If left open, the tier will be added to all transcripts in the corpus.
  skipIfTierAlreadyExists Logical; if TRUE the new tier will be skipped if a tier with this name already exists in the transcript; if FALSE an error will be raised.

Details

You can either insert the new tier at a specific position (e.g. ‘absolutePosition=1’) or in relation to a existing tier (e.g. destinationTier=’speaker1’). To insert a tier at the end, leave ‘absolutePosition’ and ‘destinationTier’ open.

Results will be reported in @history of the transcript objects.
Value

Corpus object.

See Also

tiers_delete, tiers_rename, tiers_convert, tiers_sort

Examples

library(act)

# --- Add new interval tier.
# Since not position is set it will be inserted in the end, by default.
x <- act::tiers_add(examplecorpus,
tierName="TEST")
# check results
x@history[length(x@history)]
# have a look at the first transcript
x@transcripts[[1]]@tiers
# --> New tier is inserted in the end.

# --- Add new interval tier in position 2
x <- act::tiers_add(examplecorpus,
tierName="TEST",
absolutePosition=2)
# check results
x@history[length(x@history)]
# have a look at the first transcript
x@transcripts[[1]]@tiers
# --> New tier is inserted as second tier.

# --- Add new interval tier at the position of "Entrevistador", only if this tier exists,
# If the destination tier does not exist, the new tier will NOT be inserted.

# Have a look at the first and the second transcript.
examplecorpus@transcripts[[1]]@tiers
# Transcript 1 does contain a tier "Entrevistador" in the first position.
examplecorpus@transcripts[[2]]@tiers
# Transcript 2 does contain a tier "Entrevistador" in the first position.

# Insert new tier
x <- act::tiers_add(examplecorpus,
tierName="TEST",
destinationTier="Entrevistador",
relativePositionToDestinationTier=0,
insertOnlyIfDestinationExists=TRUE)

# Check results
x@history[length(x@history)]
# Have a look at the transcript 1:
# Tier 'TEST' was in first position (e.g. where 'Entrevistador' was before).
**tiers_all**

All tiers in a corpus

---

**Description**

Merges tiers from all transcripts in a corpus object into a data frame.

**Usage**

`tiers_all(x, compact = TRUE)`

**Arguments**

- `x` Corpus object.
- `compact` Logical; if TRUE a condensed overview will be returned, if FALSE a detailed overview will be returned.

**Value**

Data frame

**Examples**

```r
library(act)

#Get data frame with all tiers
```
tiers_convert

alltiers <- act::tiers_all(examplecorpus)
alltiers

# Get data frame with a simplified version
alltiers <- act::tiers_all(examplecorpus, compact=TRUE)
alltiers

---

tiers_convert  Convert tiers

Description

Converts tier types between 'interval' and 'point' tier. Applies to all tiers in all transcript objects of a corpus. If only certain transcripts or tiers should be affected set the parameter filterTranscriptNames.

In case that you want to select transcripts by using regular expressions use the function act::search_makefilter first.

Usage

```r
tiers_convert(
  x,
  intervalToPoint = FALSE,
  pointToInterval = FALSE,
  filterTierNames = NULL,
  filterTranscriptNames = NULL
)
```

Arguments

- **x** Corpus object.
- **intervalToPoint** Logical; if TRUE interval tiers will be converted to point/text tiers.
- **pointToInterval** Logical; if TRUE point/text tiers will be converted to interval tiers.
- **filterTierNames** Vector of character strings; names of the tiers to be included.
- **filterTranscriptNames** Vector of character strings; names of the transcripts to be checked. If left open, all transcripts will be checked

Details

Note: When converting from interval > point tier, the original end times of the annotations will be lost definitely.
Delete tiers

Description

Deletes tiers in all transcript objects of a corpus. If only tiers in certain transcripts should be affected, set the parameter `filterTranscriptNames`. In case that you want to select tiers and/or transcripts by using regular expressions use the function `act::search_makefilter` first. Results will be reported in `@history` of the transcript objects.

Usage

```r
 tiers_delete(x, tierNames, filterTranscriptNames = NULL)
```

Arguments

- `x` Corpus object.
- `tierNames` Character string; names of the tiers to be deleted.
- `filterTranscriptNames` Vector of character strings; names of the transcripts to be modified. If left open, all transcripts will be checked.

Examples

```r
library(act)

# Check the names and types of the existing tiers in the first two transcripts
examlecorpus@transcripts[[1]]@tiers
examplecorpus@transcripts[[2]]@tiers

# Convert interval tiers to point tiers
newcorpus <- act::tiers_convert(examplecorpus, intervalToPoint=TRUE)

# the names and types of the existing tiers
newcorpus@transcripts[[1]]@tiers
newcorpus@transcripts[[2]]@tiers

# Convert point tiers to interval tiers
newcorpus <- act::tiers_convert(newcorpus, pointToInterval=TRUE)

# Note: In this round trip conversion from 'interval > point > interval tier'
# the original end times of the annotations get lost (when converting from interval > point).
```
Value

Corpus object.

See Also

tiers_add, tiers_rename, tiers_convert, tiers_sort, helper_tiers_new_table, helper_tiers_sort_table

Examples

library(act)

# get info about all tiers
all.tiers <- act::info(examplecorpus)$tiers

# tiers 'A' and 'B' occur 6 times in 6 transcripts
all.tiers["A", "tier.count"]
all.tiers["B", "tier.count"]

# delete tiers
tierNames <- c("A", "B")
x<- examplecorpus
x <- act::tiers_delete(examplecorpus, tierNames=tierNames)
x@history[length(x@history)]

# tiers 'A' and 'B' do not occur anymore
act::info(x)$tiers$tier.name

---

tiers_rename  Rename tiers

Description

Rename all tiers in all transcript objects of a corpus. If only certain transcripts should be affected set the parameter filterTranscriptNames. In case that you want to select transcripts by using regular expressions use the function act::search_makefilter first.

Usage

tiers_rename(x, searchPattern, searchReplacement, filterTranscriptNames = NULL)

Arguments

x Corpus object.
searchPattern Character string; search pattern as regular expression.
searchReplacement Character string; replacement string.
filterTranscriptNames Vector of character strings; names of the transcripts to be included.
tiers_sort

Details
The tiers will only be renamed if the resulting names preserve the uniqueness of the tier names. Results will be reported in @history of the transcript objects. Please be aware that this function is not optimized for speed and may take quite a while to run, depending on the size of your corpus object.

Value
Corpus object.

See Also
tiers_add, tiers_convert, tiers_rename, tiers_sort, helper_tiers_new_table, helper_tiers_sort_table

Examples
library(act)

# Check the names of the existing tiers in the first two transcripts
tdata <- examplecorpus@transcripts[[1]]@tiers$name
tdata <- examplecorpus@transcripts[[2]]@tiers$name
x <- act::tiers_rename(examplecorpus, "Entrevistador", "E")
x@transcripts[[1]]@tiers$name
x@transcripts[[2]]@tiers$name

----------------------------------------
tiers_sort Reorder tiers in all transcripts of a corpus

Description
Reorder the positions of tiers in all transcripts of a corpus object. The ordering of the tiers will be done according to a vector of regular expressions defined in 'sortVector'. If only certain transcripts or tiers should be affected set the parameter filterTranscriptNames. In case that you want to select transcripts by using regular expressions use the function act::search_makefilter first.

Usage
tiers_sort(  
  x,  
  sortVector,  
  filterTranscriptNames = NULL,  
  addMissingTiers = FALSE,  
  deleteTiersThatAreNotInTheSortVector = FALSE  
)
Arguments

x           Corpus object.
sortVector  Vector of character strings; regular expressions to match the tier names. The order within the vector presents the new order of the tiers. Use "\*" (=two backslashes and a star) to indicate where tiers that are not present in the sort vector but in the transcript should be inserted.
filterTranscriptNames  Vector of character strings; names of the transcripts to be included.
addMissingTiers Logical; if TRUE all tiers that are given in the 'sortVector' but are missing in the transcripts will be added.
deleteTiersThatAreNotInTheSortVector Logical; if TRUE tiers that are not matched by the regular expressions in 'sortVector' will be deleted. Otherwise they will be inserted at the end of the table or at the position defined by "\*" in 'sortVector'.

Value

Corpus object.

See Also
tiers_add, tiers_convert, tiers_delete, tiers_rename, helper_tiers_new_table, helper_tiers_sort_table

Examples

library(act)

# Check the order of the existing tiers in the first two transcripts
tiers_order <- c(examplecorpus@transcripts[[1]]@tiers$name, examplecorpus@transcripts[[2]]@tiers$name)

# Get tier names to create the sort vector
sortVector <- c(examplecorpus@transcripts[[1]]@tiers$name, examplecorpus@transcripts[[2]]@tiers$name)

# Revert the vector for demonstration.
sortVector <- sortVector[length(sortVector):1]

# This will only reorder the tiers.
examplecorpus <- act::tiers_sort(x=examplecorpus, sortVector=sortVector)

# Check again the order of the tiers
tiers_order <- c(examplecorpus@transcripts[[1]]@tiers$name, examplecorpus@transcripts[[2]]@tiers$name)

# This will reorder the tiers and additionally add tiers that are given in the sort vector but not present in the transcript.
examplecorpus <- act::tiers_sort(x=examplecorpus,
sortVector=sortVector,
addMissingTiers=TRUE)

# Check again the order of the tiers
examplecorpus@transcripts[[1]]@tiers$name[order(examplecorpus@transcripts[[1]]@tiers$position)]
examplecorpus@transcripts[[2]]@tiers$name[order(examplecorpus@transcripts[[2]]@tiers$position)]

# Insert a tier called "newTier" into all transcripts in the corpus:
for (t in examplecorpus@transcripts) {
  sortVector <- c(t@tiers$name, "newTier")
  examplecorpus <- act::tiers_sort(x=examplecorpus,
    sortVector=sortVector,
    filterTranscriptNames=t@name,
    addMissingTiers=TRUE)
}

# Check for example the first transcript: it now contains a tier called "newTier"
examplecorpus@transcripts[[1]]@tiers

# To get more examples and information about sorting see 'helper_tiers_sort_table()'.

---

**transcript-class**  
**transcript object**

**Description**

A transcript object contains the annotations of a loaded annotation file and some meta data. In addition, it contains information that is auto generated by the act package, which is necessary for some functions (e.g. the full text search).

**Details**

Some of the slots are defined by the user. Other slots are [READ ONLY], which means that they can be accessed by the user but should not be changed. They contain values that are filled when you execute functions on the object.

**Slots**

- **name** Character string; [READ ONLY] Name of the transcript, generated from the annotation file name.
- **file.path** Character string; [READ ONLY] Original location of the annotation file.
- **file.encoding** Character string; [READ ONLY] Encoding applied to the file when reading.
- **file.type** Character string; [READ ONLY] Type of the original annotation file/object, e.g. 'eaf' or 'textgrid' for files and 'rpraat' for a rPraat .TextGrid object.
- **file.content** Character string; [READ ONLY] Content of the original annotation file/object.
- **import.result** Character string; [READ ONLY] Information about the success of the import of the annotation file.
transcripts_add

load.message Character string; [READ ONLY] Possibly messages about errors that occurred on importing the annotation file.

length.sec Double; [READ ONLY] Duration of the transcript in seconds.

tiers Data.frame; [READ ONLY] Table with the tiers. To modify the tiers it is highly recommended to use functions of the package to ensure for consistency of the data.

annotations Data.frame; Table with the annotations.

media.path Character string; Path(s) to the media files that correspond to this transcript object.

normalization.systime POSIXct; Time of the last normalization.

fulltext.systime POSIXct; [READ ONLY] Time of the last creation of the full texts.

fulltext.filter.tier.names Vector of character strings; names of tiers that were included in the full text.

fulltext.bytime.orig Character string; [READ ONLY] full text of the transcript based on the ORIGINAL content of the annotations, sorting the annotations by TIME.

fulltext.bytime.norm Character string; [READ ONLY] full text of the transcript based on the NORMALIZED content of the annotations, sorting the annotations by TIME.

fulltext.bytier.orig Character string; [READ ONLY] full text of the transcript based on the ORIGINAL content of the annotations, sorting the annotations first by TIERS and then by time.

fulltext.bytier.norm Character string; [READ ONLY] full text of the transcript based on the NORMALIZED content of the annotations, sorting the annotations first by TIERS and then by time.

modification.systime POSIXct; [READ ONLY] Time of the last modification of the transcript. Modifications after importing the annotation file by applying one/some of the packages function(s). Manual changes of the transcript by the user are not tracked!

history List; [READ ONLY] History of the modifications made to the transcript object.

Examples

library(act)

eexamplecorpus@transcripts[[1]]

transcripts_add

Add transcripts to a corpus

Description

Add a single or multiple transcript objects to a corpus object.
transcripts_add

Usage

transcripts_add(
  x,
  ..., skipDuplicates = FALSE,
  createFullText = TRUE,
  assignMedia = TRUE
)

Arguments

x          Corpus object
...        transcript object, list of transcript objects, corpus object.
skipDuplicates Logical; If FALSE double transcripts will be renamed to make the names unique, if TRUE double transcripts will not be added.
createFullText  Logical; if TRUE full text will be created.
assignMedia    Logical; if TRUE the folder(s) specified in @paths.media.files of your corpus object will be scanned for media.

Details

The name of the transcript objects have to be unique in the act package. The @name attribute of each transcript object will be set as identifier in the list of transcripts in the corpus object. By default, transcripts with non unique names will be renamed. If you prefer to import.skip.double.files, set the parameter skipDuplicates=TRUE. Skipped/renamed transcripts will be reported in

Value

Corpus object

Examples

library(act)

# get one of the already existing transcript in the examplecorpus
newtrans <- examplecorpus@transcripts[[1]]

# add this transcript to the examplecorpus
newcorpus <- act::transcripts_add(examplecorpus, newtrans)

# compare the two corpus objects
length(examplecorpus@transcripts)
length(newcorpus@transcripts)
names(examplecorpus@transcripts)
names(newcorpus@transcripts)
transcripts_cure  Cure all transcript objects in a corpus

Description

Transcript object may contain errors, e.g. because of defect annotation input files or user modifications. This function may cure some of these errors in all transcript objects of a corpus.

- Annotations with reversed times: annotations with endSec lower than startSec will be deleted.
- Overlapping annotations: earlier annotations will end where the next annotation starts.
- Annotations below 0 sec: Annotations that are starting and ending before 0 sec will be deleted; Annotations starting before but ending after 0 sec will be truncated.
- Missing tiers: Tiers that are present in the annotations but missing in the list of tiers in @tiers of the transcript object will be added.

Usage

```
transcripts_cure(
  x,
  filterTranscriptNames = NULL,
  annotationsWithReversedTimes = TRUE,
  overlappingAnnotations = TRUE,
  annotationsWithTimesBelowZero = TRUE,
  missingTiers = TRUE,
  showWarning = FALSE
)
```

Arguments

- `x` Corpus object.
- `filterTranscriptNames` Vector of character strings; names of the transcripts to be included.
- `annotationsWithReversedTimes` Logical; If TRUE annotations with reversed times will be deleted.
- `overlappingAnnotations` Logical; If TRUE overlapping annotations will be corrected.
- `annotationsWithTimesBelowZero` Logical; If TRUE annotations before 0 sec will be corrected.
- `missingTiers` Logical; If TRUE tiers missing in @tiers slot of the transcript object will be added.
- `showWarning` Logical; If TRUE a warning notice will be shown upon correction.

Value

Corpus object;
transcripts_cure_single

See Also

transcripts_cure_single

Examples

library(act)

# The example corpus does not contain any errors.
# But let's use the function anyway.
x <- act::transcripts_cure(examplecorpus)
x@history[[length(x@history)]]

# See \code{act::cure_transcript} for actual examples.

transcripts_cure_single

Cure a single transcript

Description

Transcript object may contain errors, e.g. because of defect annotation input files or user modifications. This function may cure some of these errors.

- Annotations with reversed times: annotations with endSec lower than startSec will be deleted.
- Overlapping annotations: earlier annotations will end where the next annotation starts.
- Annotations below 0 sec: Annotations that are starting and ending before 0 sec will be deleted; Annotations starting before but ending after 0 sec will be truncated.
- Missing tiers: Tiers that are present in the annotations but missing in the list of tiers in @tiers of the transcript object will be added.

Usage

transcripts_cure_single(
  t,
  annotationsWithReversedTimes = TRUE,
  overlappingAnnotations = TRUE,
  annotationsWithTimesBelowZero = TRUE,
  missingTiers = TRUE,
  showWarning = FALSE
)
transcripts_cure_single

Arguments

`t` Transcript object.

- `annotationsWithReversedTimes` Logical; If TRUE annotations with reversed times will be deleted.
- `overlappingAnnotations` Logical; If TRUE overlapping annotations will be corrected.
- `annotationsWithTimesBelowZero` Logical; If TRUE annotations before 0 sec will be corrected.
- `missingTiers` Logical; If TRUE tiers missing in @tiers slot of the transcript object will be added.
- `showWarning` Logical; If TRUE a warning notice will be shown upon correction.

Value

Transcript object;

See Also

transcripts_cure

Examples

library(act)

# --- annotationsWithReversedTimes: will be deleted
# get example transcript and reverse the times of an annotation
# --- annotationsWithReversedTimes: will be deleted
# get example transcript and reverse the times of an annotation
t <- examplecorpus@transcripts[[1]]
t@annotations$startSec[1] <- 20
t@annotations$endSec[1] <- 10
t2 <- act::transcripts_cure_single(t)
tail(t2@history, n=1)

# --- annotationsWithTimesBelowZero: will be deleted or start at 0 sec
t <- examplecorpus@transcripts[[1]]
t@annotations$startSec[1] <- -2
t@annotations$endSec[1] <- -1
t2 <- act::transcripts_cure_single(t)
tail(t2@history, n=1)

# --- overlappingAnnotations: will end where the next starts
# get example transcript and reverse the times of an annotation
t <- examplecorpus@transcripts[[1]]
t@annotations$startSec[1] <- -5
t2 <- act::transcripts_cure_single(t)
tail(t2@history, n=1)
transcripts_delete

Delete transcripts from a corpus

Description

Delete transcript objects from a corpus object. You need to name the transcripts to delete directly in the parameter 'transcriptNames'. If you want to delete transcripts based on a search pattern (regular expression) use act::search_sub first.

Usage

transcripts_delete(x, transcriptNames)
transcripts_filter

Description

Filter all transcript objects in a corpus and return the filtered corpus object. It is possible to filter out temporal sections and tiers. In case that you want to select tiers by using regular expressions use the function `act::search_makefilter` first.

Usage

```r
transcripts_filter(
  x, 
  filterTranscriptNames = NULL, 
)```
transcripts_filter

```r
filterOnlyTheseTranscripts = NULL,
filterTierNames = NULL,
filterSectionStartsec = NULL,
filterSectionEndsec = NULL,
preserveTimes = TRUE,
sort = c("none", "tier>startSec", "startSec>tier")
```

**Arguments**

- **x** Corpus object;
- **filterTranscriptNames** Vector of character strings; names of transcripts to remain in the transcripts. If left unspecified, all transcripts will remain in the transcripts.
- **filterOnlyTheseTranscripts** Vector of character strings; names of transcripts to which filters will be applied. If left unspecified, all transcripts will be filtered.
- **filterTierNames** Vector of character strings; names of tiers to remain in the transcripts. If left unspecified, all tiers will remain in the transcripts.
- **filterSectionStartsec** Double, start of selection in seconds.
- **filterSectionEndsec** Double, end of selection in seconds.
- **preserveTimes** Logical; Parameter is used if filterSectionStartsec is set. If TRUE start times will be preserved, if FALSE the selection will start from 0.
- **sort** Logical; Annotations will be sorted: 'none' (=no sorting), 'tier>startSec' (=sort first by tier, then by startSec), 'startSec>tier' (=sort first by startSec, then by tier)

**Value**

Corpus object;

**Examples**

```r
library(act)

# Filter corpus to only contain some tiers
all.tier.names <- unique(act::tiers_all(examplecorpus)$name)
some.tier.names <- all.tier.names[1:10]
x <- act::transcripts_filter(examplecorpus, filterTierNames=some.tier.names)
x@history[[length(x@history)]]
```
transcripts_filter_single

Filter a single transcript

Description

Filter a transcript object and return the filtered transcript object. It is possible to filter out temporal sections and tiers. In case that you want to select tiers by using regular expressions use the function `act::search_makefilter` first.

Usage

```r
transcripts_filter_single(
  t,  
  filterTierNames = NULL, 
  filterSectionStartsec = NULL, 
  filterSectionEndsec = NULL, 
  preserveTimes = TRUE, 
  sort = c("none", "tier>startSec", "startSec>tier")
)
```

Arguments

- **t** Transcript object.
- **filterTierNames** Vector of character strings; names of tiers to be remain in the transcripts. If left unspecified, all tiers will remain in the transcript exported.
- **filterSectionStartsec** Double, start of selection in seconds.
- **filterSectionEndsec** Double, end of selection in seconds.
- **preserveTimes** Logical; Parameter is used if `filterSectionStartsec` is set. If TRUE start times will be preserved, if FALSE the selection will start from 0.
- **sort** Logical; Annotations will be sorted: 'none' (=no sorting), 'tier>startSec' (=sort first by tier, then by startSec), 'startSec>tier' (=sort first by startSec, then by tier)

Value

Transcript object;

Examples

```r
library(act)

# get an example transcript
ttl <- examplecorpus@transcripts[[1]]
```
# --- Filter by tiers
# The example transcript contains two tiers that contain four annotations each.
t1@tiers
table(t1@annotations$tier.name)

# Filter transcript to only contain annotations of the FIRST tier
t2 <- act::transcripts_filter_single(t1, filterTierNames=t1@tiers$name[1])
t2@tiers
table(t2@annotations$tier.name)

# Use act::search_makefilter() first to get the tier names,
# in this case search for tiers with a capital 'I',
# which is the second tier, called 'ISanti'
myfilter <- act::search_makefilter(examplecorpus,
filterTranscriptNames=t2@name,
filterTierIncludeRegEx="I"
)
t2 <- act::transcripts_filter_single(t1, filterTierNames=myfilter$tier.names)
t2@tiers
table(t2@annotations$tier.name)

# --- Filter by time section
# only set start of section (until the end of the transcript)
t2 <- act::transcripts_filter_single(t1, filterSectionStartSec=6)
cbind(t2@annotations$startSec, t2@annotations$endSec)

# only set end of section (from the beginning of the transcript)
t2 <- act::transcripts_filter_single(t1, filterSectionEndSec=8)
cbind(t2@annotations$startSec, t2@annotations$endSec)

# set start and end of section
t2 <- act::transcripts_filter_single(t1, filterSectionStartSec=6, filterSectionEndSec=8)
cbind(t2@annotations$startSec, t2@annotations$endSec)

# set start and end of section, start new times from 0
# preserve end time in second transcript
# (the transcript that will be updated and receives the new data). The other transcripts are the update

---

transcripts_merge Merge several transcripts

Description

Merges several transcript objects in a corpus object. One transcript is the destination transcript (the transcript that will be updated and receives the new data). The other transcripts are the update
transcripts (they contain the data that will replace data in the destination transcript). The update transcripts need to contain a tier in which the update sections are marked with a specific character string.

Usage

```r
transcripts_merge(
  x,
  destinationTranscriptName,
  updateTranscriptNames,
  identifierTier = "update",
  identifierPattern = ".+",
  eraseUpdateSectionsCompletely = TRUE
)
```

Arguments

- `x` Corpus object;
- `destinationTranscriptName` Character strings; name of transcript that will be updated.
- `updateTranscriptNames` Vector of character strings; names of transcripts that contain the updates.
- `identifierTier` Character string; regular expression that identifies the tier in which the sections are marked, that will be inserted into transDestination.
- `identifierPattern` Character string; regular expression that identifies the sections that will be inserted into transDestination.
- `eraseUpdateSectionsCompletely` Logical; if TRUE update sections in destination transcript will be erased completely, if FALSE update sections in the destination tier will not be erased completely but only the tiers that are present in the transUpdates be erased.

Details

You may chose between the following two options:

- The update sections in the destination transcript will first be erased completely and then the updates will be filled in.
- The update sections in the destination transcript will NOT be erased completely. Rather only the contents of tiers will be erased that are also present in the update tiers. e.g. if your destination transcript contains more tiers than the update transcripts, the contents of those tiers will be preserved in the destination tier during the update.

Value

Transcript object
See Also

transcripts_merge2

Examples

library(act)

# We need three transcripts to demonstrate the function `transcripts_merge`:
# - the destination transcript: "update_destination"
# - two transcripts that contain updates: "update_update1" and "update_update2"

Have a look at the annotations in the destination transcript first.
It contains 2 annotations:
examplecorpus@transcripts[["update_destination"]]=@annotations

Have a look at the annotations in the update_update1 transcript, too:
It contains 3 annotations:
examplecorpus@transcripts[["update_update1"]]=@annotations

# Run the function with only one update:
test <- act::transcripts_merge(x=examplecorpus,
destinationTranscriptName="update_destination",
updateTranscriptNames = c("update_update1"))

# Have a look at the annotations in the destination transcript again.
# It now contains 5 annotations:
test@transcripts[["update_destination"]]=@annotations

# Run the function with two transcript objects for updates:
test <- act::transcripts_merge(x=examplecorpus,
destinationTranscriptName="update_destination",
updateTranscriptNames = c("update_update1","update_update2"))

# Have a look at the annotations in the destination transcript again.
# It now contains 8 annotations:
test@transcripts[["update_destination"]]=@annotations

# Compare the transcript in the original and in the modified corpus object.
# The update transcript objects are gone:
act::info_summarized(examplecorpus)$transcript.names
act::info_summarized(test)$transcript.names

# Have a look at the history of the corpus object
test@history
transcripts_merge2

Description
Merges several transcripts. One transcript is the destination transcript (the transcript that will be updated). The other transcripts are the update transcripts and contain the updates. The update transcripts need to contain a tier in which the update sections are marked with a specific character string.

Usage

transcripts_merge2(
    destinationTranscript,
    updateTranscripts,
    identifierTier = "update",
    identifierPattern = ".+",
    eraseUpdateSectionsCompletely = TRUE
)

Arguments

destinationTranscript
  Transcript object; transcript that serves as destination (and will receive the updates).

updateTranscripts
  List of transcript objects; transcript objects that will be inserted into the destination transcripts (entirely or in part).

identifierTier
  Character string; regular expression that identifies the tier in which the sections are marked, that will be inserted into destinationTranscript.

identifierPattern
  Character string; regular expression that identifies the sections that will be inserted into destinationTranscript.

eraseUpdateSectionsCompletely
  Logical; if TRUE update sections in destination transcript will be erased completely, if FALSE update sections in the destination tier will not be erased completely but only the tiers that are present in the updateTranscripts be erased.

Details
You may chose between the following two options:

- The update sections in the destination transcript will first be erased completely and then the updates will be filled in.
- The update sections in the destination transcript will NOT be erased completely. Rather only the contents of tiers will be erased that are also present in the update tiers. E.g. if your destination transcript contains more tiers than the update transcripts, the contents of those tiers will be preserved in the destination tier during the update.

Value
  Transcript object
See Also

transcripts_merge

Examples

library(act)

# We need three transcripts to demonstrate the function transcripts_merge:
# - the destination transcript
destinationTranscript <- examplecorpus@transcripts[["update_destination"]]
# - two transcripts that contain updates
updateTranscripts <- c(examplecorpus@transcripts[["update_update1"]],
                      examplecorpus@transcripts[["update_update2"]])

# Run the function
test <- transcripts_merge2(destinationTranscript, updateTranscripts)

# Save the transcript to a TextGrid file.
# Set the destination file path
path <- tempfile(pattern = "merge_test", tmpdir = tempdir(),
                    fileext = ".TextGrid")

# It makes more sense, however, to you define a destination folder
# that is easier to access on your computer:
## Not run:
path <- file.path("PATH_TO_AN_EXISTING_FOLDER_ON_YOUR_COMPUTER",
                   paste(t@name, ".TextGrid", sep=""))
## End(Not run)

# Export
act::export_textgrid( t=test, outputPath=path)

---

**transcripts_rename**  
Rename transcripts in a corpus

Description

Rename transcript objects in a corpus object. This function changes both the names of the transcripts in the list x@transcripts and in the @name slot of the transcript. The function ensures that each transcript object preserves a unique name.

Usage

transcripts_rename(
  x, 
  newTranscriptNames = NULL, 
  searchPatterns = NULL, 
  searchPath = NULL, 
  validate = TRUE, 
  checkNames = FALSE, 
  checkPath = TRUE, 
  verbose = TRUE, 
  ...)


```r
searchReplacements = NULL,
toUpperCase = FALSE,
toLowerCase = FALSE,
trim = FALSE,
stopIfNotUnique = TRUE
)
```

### Arguments

- **x**
  - Corpus object

- **newTranscriptNames**
  - Vector of character strings; new names for the transcripts. If left open, the current names in the corpus object will be taken as basis.

- **searchPatterns**
  - Character string; Search pattern as regular expression applied to the names of the transcripts.

- **searchReplacements**
  - Character string; String to replace the hits of the search.

- **toUpperCase**
  - Logical; Convert transcript names all to upper case.

- **toLowerCase**
  - Logical; Convert transcript names all to lower case.

- **trim**
  - Logical; Remove leading and trailing spaces in names.

- **stopIfNotUnique**
  - Logical; If TRUE the function will stop if replacement would lead to non-unique names; If FALSE names will be automatically changed to be unique.

### Value

Corpus object

### Examples

```r
library(act)

# get current names
old.names <- names(examplecorpus@transcripts)

# make vector of names with the same length
new.names <- paste("transcript", 1:length(old.names), sep="")

# rename the transcripts
test <- act::transcripts_rename(examplecorpus, newTranscriptNames=new.names)

# check
names(test@transcripts)
test@transcripts[[1]]@name
test@history[length(test@history)]

# convert to lower case
test <- act::transcripts_rename(examplecorpus, toLowerCase=TRUE)
test@history[length(test@history)]
```
# search replace
```
test <- act::transcripts_rename(examplecorpus,
  searchPatterns=c("ARG", "BOL"),
  searchReplacements = c("ARGENTINA", "BOLIVIA")
)
test@history[length(test@history)]
```

# search replace ignoring upper and lower case
```
test <- act::transcripts_rename(examplecorpus,
  searchPatterns=c("(?i)arg", "(?i)bol"),
  searchReplacements = c("ARGENTINA", "BOLIVIA")
)
test@history[length(test@history)]
```

# search replace too much
```
test <- act::transcripts_rename(x=examplecorpus,
  searchPatterns="ARG_I_CHI_Santi",
  searchReplacements = ")"
)
names(test@transcripts)[1]
```

---

**transcripts_update_fulltexts**

_Update full texts_

### Description

Creates/updates the full texts of the transcripts in a corpus. The full text may be created in two different ways:

- The contents of a transcription will be joined consecutively based on the time information.
- The contents of each tier will be joined consecutively, and then the next tier will be joined.

### Usage

```
transcripts_update_fulltexts(
  x,
  searchMode = c("fulltext", "fulltext.bytier", "fulltext.bytime"),
  transcriptNames = NULL,
  tierNames = NULL,
  forceUpdate = FALSE
)
```

### Arguments

- **x**  Corpus object.
transcripts_update_normalization

Normalize transcriptions

Description

Normalizes the contents of transcriptions in a corpus object using a normalization matrix. Function returns a corpus object with normalized transcription and updates the original corpus object passed as argument to x.

Usage

transcripts_update_normalization(
  x,
  path_replacementMatrixCSV = "",
  transcriptNames = NULL,
  forceUpdate = FALSE
)

Arguments

  x  Corpus object.
  path_replacementMatrixCSV  Character string; path to replacement matrix in CSV format. If empty, the default replacement matrix that comes with the package will be used.
transcripts_update_normalization

transcriptNames
Vector of character strings; Names of the transcripts for which you want to search media files; leave empty if you want to search media for all transcripts in the corpus object.

forceUpdate
Logical; If TRUE transcripts will be normalized in any case, if FALSE transcripts will be only normalized if there was a modification to the transcript since the last normalization.

Examples
library(act)

eexamplecorpus <- act::transcripts_update_normalization(x = examplecorpus)
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