

Package ‘ready4fun’

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Title Readyforwhatsnext Function Authoring And Documentation Tools

Version 0.0.0.9088

Description ready4fun is a collection of functions for authoring code libraries of functions and datasets for use in mental health simulations developed within the readyforwhatsnext ecosystem.

Depends R (>= 3.5.1)

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LazyData true

VignetteBuilder knitr

RoxygenNote 7.1.1

Imports Hmisc,
devtools,
dplyr,
magrittr,
methods,
purrr,
readxl,
rlang,
sinew,
stats,
stringi,
stringr,
testit,
tibble,
usethis

Suggests knitr,
rmarkdown

R topics documented:

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ready4fun-package	<i>ready4fun: Readyforwhatsnext Function Authoring And Documentation Tools</i>
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Description

ready4fun is a collection of functions for authoring code libraries of functions and datasets for use in mental health simulations developed within the readyforwhatsnext ecosystem.

Details

To learn more about ready4fun, start with the vignettes: ‘browseVignettes(package = "ready4fun")’

Second section

Some text.

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- VicHealth [funder]
- Victoria University [funder]

abbreviations_lup	<i>Common abbreviations lookup table</i>
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Description

A lookup table for abbreviations commonly used in object names in the ready4funpackage.

Usage

```
abbreviations_lup
```

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 173 rows and 3 columns.

Details

A tibble

short_name_chr Short name (a character vector)

long_name_chr Long name (a character vector)

plural_lgl Plural (a logical vector)

Source

<https://readyforwhatsnext.github.io/readyforwhatsnext/>

close_open_sinks	<i>Close open sinks</i>
------------------	-------------------------

Description

`close_open_sinks()` is a Close function that closes specified connections. Specifically, this function implements an algorithm to close open sinks. The function is called for its side effects and does not return a value.

Usage

```
close_open_sinks()
```

fn_type_lup_tb	<i>Function type lookup table</i>
----------------	-----------------------------------

Description

A lookup table to find descriptions for different types of functions used within the ready4funpackage suite.

Usage

```
fn_type_lup_tb
```

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 16 rows and 4 columns.

Details

A tibble

fn_type_nm_chr Function type name (a character vector)

fn_type_desc_chr Function type description (a character vector)

first_arg_desc_chr First argument description (a character vector)

second_arg_desc_chr Second argument description (a character vector)

Source

<https://readyforwhatsnext.github.io/readyforwhatsnext/>

force_req_pkg_install	<i>Force req package install</i>
-----------------------	----------------------------------

Description

`force_req_pkg_install()` is a Force function that checks if a specified local or global environmental condition is met and if not, updates the specified environment to comply with the condition. Specifically, this function implements an algorithm to force req a package install. The function is called for its side effects and does not return a value.

Usage

```
force_req_pkg_install(package_nm_chr)
```

Arguments

package_nm_chr Package name (a character vector of length 1)

get_from_lup_obj	<i>Get from lookup table object</i>
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Description

get_from_lup_obj() is a Get function that retrieves a pre-existing data object from memory, local file system or online repository. Specifically, this function implements an algorithm to get from a lookup table object. Function argument data_lookup_tb specifies the where to look for the required object. The function returns return object (an output object of multiple potential types).

Usage

```
get_from_lup_obj(
  data_lookup_tb,
  match_value_xx,
  match_var_nm_chr,
  target_var_nm_chr,
  evaluate_lgl = TRUE
)
```

Arguments

data_lookup_tb Data lookup (a tibble)
 match_value_xx Match value (an output object of multiple potential types)
 match_var_nm_chr
 Match var name (a character vector of length 1)
 target_var_nm_chr
 Target var name (a character vector of length 1)
 evaluate_lgl Evaluate (a logical vector of length 1), Default: TRUE

Value

Return object (an output object of multiple potential types)

import_xls_sheets_ls	<i>Import Excel workbook sheets</i>
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Description

import_xls_sheets_ls() is an Import function that reads a data object in its native format and converts it to an R object. Specifically, this function implements an algorithm to an import Excel workbook sheets. The function returns a tibble list (a list of tibbles).

Usage

```
import_xls_sheets_ls(range_chr, sheet_names_chr_vec, path_chr)
```

Arguments

range_chr Range (a character vector of length 1)
 sheet_names_chr_vec Sheet names (a character vector)
 path_chr Path (a character vector of length 1)

Value

Tibble list (a list of tibbles)

make_abbr_lup_tb	<i>Make abbreviation lookup table</i>
------------------	---------------------------------------

Description

make_abbr_lup_tb() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make an abbreviation lookup table. The function is called for its side effects and does not return a value.

Usage

```
make_abbr_lup_tb(
  short_name_chr_vec = NA_character_,
  long_name_chr_vec = NA_character_,
  no_plural_chr_vec = NA_character_,
  custom_plural_ls = NULL,
  overwrite_lgl = T,
  url_chr,
  pkg_nm_chr
)
```

Arguments

short_name_chr_vec Short name (a character vector), Default: 'NA'
 long_name_chr_vec Long name (a character vector), Default: 'NA'
 no_plural_chr_vec No plural (a character vector), Default: 'NA'
 custom_plural_ls Custom plural (a list), Default: NULL
 overwrite_lgl Overwrite (a logical vector of length 1), Default: T
 url_chr Url (a character vector of length 1)
 pkg_nm_chr Package name (a character vector of length 1)

make_and_doc_fn_type_R

Make and document function type

Description

make_and_doc_fn_type_R() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make and a document function type R. The function is called for its side effects and does not return a value. **WARNING:** This function writes R scripts to your local environment. Make sure to only use if you want this behaviour

Usage

```
make_and_doc_fn_type_R(
  fn_type_lup_tb = make_fn_type_lup_tb(),
  overwrite_lgl = T,
  pkg_nm_chr,
  url_chr = url_chr
)
```

Arguments

fn_type_lup_tb Function type lookup table (a tibble), Default: make_fn_type_lup_tb()
 overwrite_lgl Overwrite (a logical vector of length 1), Default: T
 pkg_nm_chr Package name (a character vector of length 1)
 url_chr Url (a character vector of length 1), Default: url_chr

make_fn_dmt_tbl_tb

Make function documentation table

Description

make_fn_dmt_tbl_tb() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make a function documentation a table. The function returns a function documentation table (a tibble).

Usage

```
make_fn_dmt_tbl_tb(
  fns_path_chr_vec,
  fns_dir_chr,
  pkg_nm_chr,
  custom_dmt_ls = list(title_ls = NULL, desc_ls = NULL, details_ls = NULL, export_ls =
    NULL, output_ls = NULL, example_ls = NULL, args_ls_ls = NULL),
  append_lgl = T
)
```

Arguments

<code>fns_path_chr_vec</code>	Functions path (a character vector)
<code>fns_dir_chr</code>	Functions directory (a character vector of length 1)
<code>pkg_nm_chr</code>	Package name (a character vector of length 1)
<code>custom_dmt_ls</code>	Custom documentation (a list), Default: <code>list(title_ls = NULL, desc_ls = NULL, details_ls = NULL, export_ls = NULL, output_ls = NULL, example_ls = NULL, args_ls_ls = NULL)</code>
<code>append_lgl</code>	Append (a logical vector of length 1), Default: <code>T</code>

Value

Function documentation table (a tibble)

<code>object_type_lup</code>	<i>Object abbreviations lookup table</i>
------------------------------	--

Description

A lookup table to identify R object types from an abbreviation that can be used as object name suffices.

Usage

```
object_type_lup
```

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 100 rows and 3 columns.

Details

A tibble

short_name_chr Short name (a character vector)

long_name_chr Long name (a character vector)

plural_lgl Plural (a logical vector)

Source

<https://readyforwhatsnext.github.io/readyforwhatsnext/>

read_fns

*Read functions***Description**

read_fns() is a Read function that reads an R script into memory. Specifically, this function implements an algorithm to read a functions. Function argument fns_dir_chr specifies the path to object. The function returns a functions path (a character vector).

Usage

```
read_fns(fns_dir_chr = "data-raw/fns/")
```

Arguments

fns_dir_chr Functions directory (a character vector of length 1), Default: 'data-raw/fns/'

Value

Functions path (a character vector)

rowbind_all_tbs_in_r4_obj_r4

*Rowbind all tibbles in readyforwhatsnext S4 object***Description**

rowbind_all_tbs_in_r4_obj_r4() is a Rowbind function that performs custom rowbind operations on table objects. Specifically, this function implements an algorithm to rowbind all a tibbles in a readyforwhatsnext S4 object. The function returns a tibbles (a readyforwhatsnext s4).

Usage

```
rowbind_all_tbs_in_r4_obj_r4(tbs_r4, second_tbs_r4, r4_name_chr)
```

Arguments

tbs_r4 Tibbles (a readyforwhatsnext S4)

second_tbs_r4 Second tibbles (a readyforwhatsnext S4)

r4_name_chr Readyforwhatsnext S4 name (a character vector of length 1)

Value

Tibbles (a readyforwhatsnext S4)

unload_packages	<i>Unload packages</i>
-----------------	------------------------

Description

unload_packages() is an Unload function that performs a custom detaching of a package from the search path. Specifically, this function implements an algorithm to unload packages. Function argument package_chr_vec specifies the package(s) to be detached from the search path. Argument NA provides the package(s) to be detached from the search path. The function is called for its side effects and does not return a value.

Usage

```
unload_packages(package_chr_vec)
```

Arguments

package_chr_vec
Package (a character vector)

update_ns_chr	<i>Update namespace</i>
---------------	-------------------------

Description

update_ns_chr() is an Update function that edits an object, while preserving core object attributes. Specifically, this function implements an algorithm to update namespace. Function argument package_chr specifies the object to be updated. Argument NA provides the object to be updated. The function returns a package name (a character vector of length 1).

Usage

```
update_ns_chr(package_chr)
```

Arguments

package_chr Package (a character vector of length 1)

Value

Package name (a character vector of length 1)

```
write_all_tbs_in_tbs_r4_to_csvs
```

Write all tibbles in tibbles readyforwhatsnext S4 to csvs

Description

write_all_tbs_in_tbs_r4_to_csvs() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write all a tibbles in a tibbles readyforwhatsnext S4 to csvs. The function is called for its side effects and does not return a value.

Usage

```
write_all_tbs_in_tbs_r4_to_csvs(tbs_r4, r4_name_chr, lup_dir_chr, pfx_chr)
```

Arguments

tbs_r4	Tibbles (a readyforwhatsnext S4)
r4_name_chr	Readyforwhatsnext S4 name (a character vector of length 1)
lup_dir_chr	Lookup table directory (a character vector of length 1)
pfx_chr	Prefix (a character vector of length 1)

```
write_and_doc_ds_R
```

Write and document dataset

Description

write_and_doc_ds_R() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write and a document dataset R. The function is called for its side effects and does not return a value. **WARNING:** This function writes R scripts to your local environment. Make sure to only use if you want this behaviour

Usage

```
write_and_doc_ds_R(
  db,
  overwrite_lgl = T,
  db_chr,
  title_chr,
  desc_chr,
  format_chr = "A tibble",
  url_chr = NA_character_,
  vars_ls = NULL,
  R_dir_chr = "R",
  abbreviations_lup = NULL,
  object_type_lup = NULL
)
```

Arguments

db	PARAM_DESCRIPTION
overwrite_lgl	Overwrite (a logical vector of length 1), Default: T
db_chr	Database (a character vector of length 1)
title_chr	Title (a character vector of length 1)
desc_chr	Description (a character vector of length 1)
format_chr	Format (a character vector of length 1), Default: 'A tibble'
url_chr	Url (a character vector of length 1), Default: 'NA'
vars_ls	Vars (a list), Default: NULL
R_dir_chr	R directory (a character vector of length 1), Default: 'R'
abbreviations_lup	Abbreviations (a lookup table), Default: NULL
object_type_lup	Object type (a lookup table), Default: NULL

write_and_doc_fn_fls_R

Write and document function files

Description

write_and_doc_fn_fls_R() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write and a document function files R. The function is called for its side effects and does not return a value. **WARNING:** This function writes R scripts to your local environment. Make sure to only use if you want this behaviour

Usage

```
write_and_doc_fn_fls_R(
  fns_dmt_tb,
  r_dir_chr = "R",
  path_to_user_dmt_dir_chr = "../.../Documentation/Code/User",
  path_to_dvpr_dmt_dir_chr = "../.../Documentation/Code/Developer"
)
```

Arguments

fns_dmt_tb	Functions documentation (a tibble)
r_dir_chr	R directory (a character vector of length 1), Default: 'R'
path_to_user_dmt_dir_chr	Path to user documentation directory (a character vector of length 1), Default: '../.../Documentation/Code/User'
path_to_dvpr_dmt_dir_chr	Path to developer documentation directory (a character vector of length 1), Default: '../.../Documentation/Code/Developer'

write_fn_dmt	<i>Write function documentation</i>
--------------	-------------------------------------

Description

write_fn_dmt() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write a function documentation. The function is called for its side effects and does not return a value.

Usage

```
write_fn_dmt(
  fn_name_chr,
  fn_type_chr,
  fn = NULL,
  fn_desc_chr = NA_character_,
  fn_out_type_chr = NA_character_,
  fn_title_chr = NA_character_,
  example_lgl = F,
  export_lgl = T,
  class_name_chr = "",
  details_chr = "DETAILS",
  args_ls = NULL,
  import_chr_vec = NA_character_,
  doc_in_class_lgl = F,
  object_type_lup = NULL
)
```

Arguments

fn_name_chr	Function name (a character vector of length 1)
fn_type_chr	Function type (a character vector of length 1)
fn	Function (a function), Default: NULL
fn_desc_chr	Function description (a character vector of length 1), Default: 'NA'
fn_out_type_chr	Function out type (a character vector of length 1), Default: 'NA'
fn_title_chr	Function title (a character vector of length 1), Default: 'NA'
example_lgl	Example (a logical vector of length 1), Default: F
export_lgl	Export (a logical vector of length 1), Default: T
class_name_chr	Class name (a character vector of length 1), Default: ''
details_chr	Details (a character vector of length 1), Default: 'DETAILS'
args_ls	Arguments (a list), Default: NULL
import_chr_vec	Import (a character vector), Default: 'NA'
doc_in_class_lgl	Document in class (a logical vector of length 1), Default: F
object_type_lup	Object type (a lookup table), Default: NULL

write_nsimps_to_desc	<i>Write namespace imports to description</i>
----------------------	---

Description

write_nsimps_to_desc() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write a namespace imports to a description. The function is called for its side effects and does not return a value.

Usage

```
write_nsimps_to_desc(dev_pkgs_chr_vec = NA_character_)
```

Arguments

dev_pkgs_chr_vec
Dev packages (a character vector), Default: 'NA'

write_pkg_R	<i>Write package</i>
-------------	----------------------

Description

write_pkg_R() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write a package R. The function is called for its side effects and does not return a value. **WARNING:** This function writes R scripts to your local environment. Make sure to only use if you want this behaviour

Usage

```
write_pkg_R(package_chr, R_dir_chr = "R")
```

Arguments

package_chr Package (a character vector of length 1)
R_dir_chr R directory (a character vector of length 1), Default: 'R'

write_pt_lup_db_R	<i>Write prototype lookup table database</i>
-------------------	--

Description

write_pt_lup_db_R() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write a prototype lookup table database R. The function is called for its side effects and does not return a value. **WARNING:** This function writes R scripts to your local environment. Make sure to only use if you want this behaviour

Usage

```
write_pt_lup_db_R(R_dir_chr = "R")
```

Arguments

R_dir_chr	R directory (a character vector of length 1), Default: 'R'
-----------	--

write_std_imp_R	<i>Write standard import</i>
-----------------	------------------------------

Description

write_std_imp_R() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write a standard import R. The function is called for its side effects and does not return a value. **WARNING:** This function writes R scripts to your local environment. Make sure to only use if you want this behaviour

Usage

```
write_std_imp_R(R_dir_chr = "R")
```

Arguments

R_dir_chr	R directory (a character vector of length 1), Default: 'R'
-----------	--

write_tb_to_csv	<i>Write tibble to csv</i>
-----------------	----------------------------

Description

write_tb_to_csv() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write a tibble to csv. The function is called for its side effects and does not return a value.

Usage

```
write_tb_to_csv(tbs_r4, slot_nm_chr, r4_name_chr, lup_dir_chr, pfx_chr)
```

Arguments

tbs_r4	Tibbles (a readyforwhatsnext S4)
slot_nm_chr	Slot name (a character vector of length 1)
r4_name_chr	Readyforwhatsnext S4 name (a character vector of length 1)
lup_dir_chr	Lookup table directory (a character vector of length 1)
pfx_chr	Prefix (a character vector of length 1)

write_ws	<i>Write workspace</i>
----------	------------------------

Description

write_ws() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write a workspace. The function is called for its side effects and does not return a value.

Usage

```
write_ws(path_chr)
```

Arguments

path_chr	Path (a character vector of length 1)
----------	---------------------------------------

%>%	<i>Pipe Implements: https://github.com/sckott/analogsea/issues/32 and https://github.com/rstudio/ggvis/blob/master/R/pipe.R.</i>
-----	--

Description

Pipe Implements: <https://github.com/sckott/analogsea/issues/32> and <https://github.com/rstudio/ggvis/blob/master/R/pipe.R>

Arguments

lhs, rhs	A visualisation and a function to apply to it
----------	---

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