# Package 'ready4fun'

September 8, 2020

Title Readyforwhatsnext Function Authoring And Documentation

Tools

<b>Version</b> 0.0.0.9146
<b>Description</b> 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.
License FALSE
Encoding UTF-8
LazyData true
<b>Roxygen</b> list(markdown = TRUE)
RoxygenNote 7.1.1
<b>Depends</b> R (>= $2.10$ )
Imports methods,  Hmisc, devtools, dplyr, magrittr, purrr, readxl, rlang, sinew, stats, stringi, stringr, testit, tibble, tools, usethis, xfun
R topics documented:
ready4fun-package

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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")

# Author(s)

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abbreviations\_lup

Common abbreviations lookup table

# 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 198 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/

fn\_type\_lup\_tb

Function type lookup table

#### **Description**

A lookup table to find descriptions for different types of functions used within the ready4fun package suite.

# Usage

```
fn_type_lup_tb
```

# **Format**

An object of class tbl\_df (inherits from tbl, data.frame) with 16 rows and 6 columns.

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#### **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)
is_generic_lgl Is generic (a logical vector)
is_method_lgl Is method (a logical vector)
```

#### Source

https://readyforwhatsnext.github.io/readyforwhatsnext/

get\_from\_lup\_obj

Get from lookup table object

#### **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 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_1L_chr,
  target_var_nm_1L_chr,
  evaluate_lg1 = TRUE
)
```

# Arguments

#### Value

Return object (an output object of multiple potential types)

import\_xls\_sheets 5

import\_xls\_sheets

Import Excel workbook sheets

#### **Description**

import\_xls\_sheets() 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 import excel workbook sheets. The function returns Tibble list (a list of tibbles).

# Usage

```
import_xls_sheets(range_1L_chr, sheet_names_chr, path_1L_chr)
```

#### **Arguments**

```
range_1L_chr Range (a character vector of length one)
sheet_names_chr
Sheet names (a character vector)
path_1L_chr Path (a character vector of length one)
```

#### Value

Tibble list (a list of tibbles)

# Description

make\_dmt\_for\_all\_fns() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make documentation for all functions. The function returns All functions documentation (a tibble).

# Usage

```
make_dmt_for_all_fns(
  paths_ls = make_fn_nms(),
  undocumented_fns_dir_chr = make_undmtd_fns_dir_chr(),
  custom_dmt_ls = list(details_ls = NULL, inc_for_main_user_lgl_ls =
    list(force_true_chr = NA_character_, force_false_chr = NA_character_), args_ls_ls =
    NULL),
  fn_type_lup_tb,
  abbreviations_lup = NULL
)
```

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#### **Arguments**

#### Value

All functions documentation (a tibble)

make\_fn\_dmt\_tbl

Make function documentation table

#### **Description**

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

# Usage

```
make_fn_dmt_tbl(
  fns_path_chr,
  fns_dir_chr = make_undmtd_fns_dir_chr(),
  pkg_nm_1L_chr,
  custom_dmt_ls = list(title_ls = NULL, desc_ls = NULL, details_ls = NULL,
    inc_for_main_user_lgl_ls = NULL, output_ls = NULL, example_ls = NULL, args_ls_ls =
    NULL),
  append_1L_lgl = T,
  fn_type_lup_tb = NULL,
  abbreviations_lup = NULL,
  object_type_lup = NULL,
  test_for_write_R_warning_fn = NULL
)
```

```
fns_path_chr Functions path (a character vector)

fns_dir_chr Functions directory (a character vector), Default: make_undmtd_fns_dir_chr()

pkg_nm_1L_chr Package name (a character vector of length one)

custom_dmt_1s Custom documentation (a list), Default: list(title_ls = NULL, desc_ls = NULL, details_ls = NULL, inc_for_main_user_lgl_ls = NULL, output_ls = NULL, example_ls = NULL, args_ls_ls = NULL)

append_1L_lgl Append (a logical vector of length one), Default: T
```

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#### Value

Function documentation table (a tibble)

make\_fn\_type\_lup

Make function type

# **Description**

make\_fn\_type\_lup() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make function type lookup table. The function returns Function type lookup table (a tibble).

# Usage

```
make_fn_type_lup(
  fn_type_nm_chr = character(0),
  fn_type_desc_chr = character(0),
  first_arg_desc_chr = character(0),
  second_arg_desc_chr = character(0),
  is_generic_lgl = logical(0),
  is_method_lgl = logical(0)
)
```

# Arguments

```
fn_type_nm_chr Function type name (a character vector), Default: character(0)

fn_type_desc_chr
Function type description (a character vector), Default: character(0)

first_arg_desc_chr
First argument description (a character vector), Default: character(0)

second_arg_desc_chr
Second argument description (a character vector), Default: character(0)

is_generic_lgl Is generic (a logical vector), Default: logical(0)

is_method_lgl Is method (a logical vector), Default: logical(0)
```

#### Value

Function type lookup table (a tibble)

make\_lines\_for\_fn\_dmt Make lines for function documentation

## **Description**

make\_lines\_for\_fn\_dmt() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make lines for function documentation. The function is called for its side effects and does not return a value.

# Usage

```
make_lines_for_fn_dmt(
  fn_name_1L_chr,
  fn_type_1L_chr,
  fn = NULL,
  fn_desc_1L_chr = NA_character_,
  fn_out_type_1L_chr = NA_character_,
  fn_title_1L_chr = NA_character_,
  example_1L_1gl = F,
  export_1L_lgl = T,
  class_name_1L_chr = "",
  details_1L_chr = "DETAILS",
  args_ls = NULL,
  import_chr = NA_character_,
  doc_in_class_1L_lgl = F,
  abbreviations_lup = NULL,
  object\_type\_lup = NULL
)
```

```
fn_name_1L_chr Function name (a character vector of length one)
fn_type_1L_chr Function type (a character vector of length one)
                  Function (a function), Default: NULL
fn_desc_1L_chr Function description (a character vector of length one), Default: 'NA'
fn_out_type_1L_chr
                  Function out type (a character vector of length one), Default: 'NA'
fn_title_1L_chr
                  Function title (a character vector of length one), Default: 'NA'
example_1L_lgl Example (a logical vector of length one), Default: F
export_1L_1g1 Export (a logical vector of length one), Default: T
class_name_1L_chr
                  Class name (a character vector of length one), Default: "
details_1L_chr Details (a character vector of length one), Default: 'DETAILS'
                  Arguments (a list), Default: NULL
args_ls
import_chr
                  Import (a character vector), Default: 'NA'
doc_in_class_1L_lgl
                  Document in class (a logical vector of length one), Default: F
```

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```
abbreviations_lup
Abbreviations (a lookup table), Default: NULL
object_type_lup
Object type (a lookup table), Default: NULL
```

object\_type\_lup

Object abbreviations lookup table

#### **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 109 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 functions. Function argument fns\_dir\_1L\_chr specifies the path to object. The function returns Functions path (a character vector).

# Usage

```
read_fns(fns_dir_1L_chr = "data-raw/fns/")
```

#### **Arguments**

fns\_dir\_1L\_chr Functions directory (a character vector of length one), Default: 'data-raw/fns/'

#### Value

Functions path (a character vector)

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```
rowbind_all_tbs_in_r4_obj
```

Rowbind all tibbles in readyforwhatsnext S4 object

#### **Description**

rowbind\_all\_tbs\_in\_r4\_obj() is a Rowbind function that performs custom rowbind operations on table objects. Specifically, this function implements an algorithm to rowbind all tibbles in readyforwhatsnext s4 object. The function returns Tibbles (a readyforwhatsnext S4).

#### Usage

```
rowbind_all_tbs_in_r4_obj(tbs_r4, second_tbs_r4, r4_name_1L_chr)
```

# **Arguments**

```
tbs_r4 Tibbles (a readyforwhatsnext S4)
second_tbs_r4 Second tibbles (a readyforwhatsnext S4)
r4_name_1L_chr Readyforwhatsnext S4 name (a character vector of length one)
```

#### Value

Tibbles (a readyforwhatsnext S4)

write\_abbr\_lup

Write abbreviation

# Description

write\_abbr\_lup() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write abbreviation lookup table. 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_abbr_lup(
    short_name_chr = NA_character_,
    long_name_chr = NA_character_,
    no_plural_chr = NA_character_,
    custom_plural_ls = NULL,
    overwrite_1L_lgl = T,
    seed_lup = NULL,
    url_1L_chr,
    pkg_nm_1L_chr = get_dev_pkg_nm()
)
```

#### **Arguments**

```
write_all_tbs_in_tbs_r4_to_csvs
```

Write all tibbles in tibbles readyforwhatsnext S4 to comma separated variables files

#### **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 tibbles in tibbles readyforwhatsnext s4 to comma separated variables files. 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_all_tbs_in_tbs_r4_to_csvs(
  tbs_r4,
  r4_name_1L_chr,
  lup_dir_1L_chr,
  pfx_1L_chr
)
```

```
tbs_r4 Tibbles (a readyforwhatsnext S4)
r4_name_1L_chr Readyforwhatsnext S4 name (a character vector of length one)
lup_dir_1L_chr Lookup table directory (a character vector of length one)
pfx_1L_chr Prefix (a character vector of length one)
```

write\_and\_doc\_ds

write\_and\_doc\_ds

Write and document dataset

#### **Description**

write\_and\_doc\_ds() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write and document dataset. 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(
   db,
   overwrite_1L_lgl = T,
   db_1L_chr,
   title_1L_chr,
   desc_1L_chr,
   format_1L_chr = "A tibble",
   url_1L_chr = NA_character_,
   vars_ls = NULL,
   R_dir_1L_chr = "R",
   abbreviations_lup = NULL,
   object_type_lup = NULL
)
```

```
db
                  PARAM_DESCRIPTION
overwrite_1L_lgl
                  Overwrite (a logical vector of length one), Default: T
                  Database (a character vector of length one)
db_1L_chr
title_1L_chr
                  Title (a character vector of length one)
                  Description (a character vector of length one)
desc_1L_chr
                  Format (a character vector of length one), Default: 'A tibble'
format_1L_chr
url_1L_chr
                  Url (a character vector of length one), Default: 'NA'
vars_ls
                  Vars (a list), Default: NULL
R_dir_1L_chr
                  R directory (a character vector of length one), Default: 'R'
abbreviations_lup
                  Abbreviations (a lookup table), Default: NULL
object_type_lup
                  Object type (a lookup table), Default: NULL
```

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```
write_and_doc_fn_fls Write and document function files
```

#### **Description**

write\_and\_doc\_fn\_fls() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write and document function files. 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(
    fns_dmt_tb,
    r_dir_1L_chr = "R",
    path_to_user_dmt_dir_1L_chr = "../../../Documentation/Code/User",
    path_to_dvpr_dmt_dir_1L_chr = "../../../Documentation/Code/Developer",
    make_pdfs_1L_lgl = T,
    dev_pkgs_chr = NA_character_
)
```

#### **Arguments**

```
write\_dmtd\_fn\_type\_lup \\ \textit{Write documented function type}
```

#### **Description**

write\_dmtd\_fn\_type\_lup() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write documented function type lookup table. 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_dmtd_fn_type_lup(
  fn_type_lup_tb = make_fn_type_lup(),
  overwrite_1L_lgl = T,
  pkg_nm_1L_chr = get_dev_pkg_nm(),
  url_1L_chr = url_1L_chr,
  abbreviations_lup = NULL
)
```

#### **Arguments**

```
fn_type_lup_tb Function type lookup table (a tibble), Default: make_fn_type_lup()

overwrite_1L_lgl

Overwrite (a logical vector of length one), Default: T

pkg_nm_1L_chr Package name (a character vector of length one), Default: get_dev_pkg_nm()

url_1L_chr Url (a character vector of length one), Default: url_1L_chr

abbreviations_lup

Abbreviations (a lookup table), Default: NULL
```

```
write_documented_fns Write documented functions
```

# Description

write\_documented\_fns() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write documented functions. 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_documented_fns(tmp_fn_dir_1L_chr, R_dir_1L_chr)
```

```
tmp_fn_dir_1L_chr

Temporary function directory (a character vector of length one)

R_dir_1L_chr

R directory (a character vector of length one)
```

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write\_fn\_type\_dirs

Write function type directories

# Description

write\_fn\_type\_dirs() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write function type directories. 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_fn_type_dirs(path_1L_chr = "data-raw")
```

#### **Arguments**

path\_1L\_chr Path (a character vector of length one), Default: 'data-raw'

write\_ns\_imps\_to\_desc Write namespace imports to description

# Description

write\_ns\_imps\_to\_desc() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write namespace imports to description. 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_ns_imps_to_desc(dev_pkgs_chr = NA_character_, incr_ver_1L_lgl = T)
```

```
dev_pkgs_chr Development packages (a character vector), Default: 'NA' incr_ver_1L_1g1

Incr ver (a logical vector of length one), Default: T
```

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write\_pkg

Write package

#### **Description**

write\_pkg() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write package. 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(package_1L_chr, R_dir_1L_chr = "R")
```

#### **Arguments**

```
package_1L_chr Package (a character vector of length one)

R_dir_1L_chr R directory (a character vector of length one), Default: 'R'
```

write\_pkg\_setup\_fls Wri

Write package setup files

#### **Description**

write\_pkg\_setup\_fls() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write package setup files. 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_setup_fls(
  path_to_pkg_rt_1L_chr = ".",
  dev_pkg_nm_1L_chr = get_dev_pkg_nm(),
  make_tmpl_vignette_1L_lgl = F,
  incr_ver_1L_lgl = T,
  delete_contents_of_R_dir = F
)
```

```
path_to_pkg_rt_1L_chr
Path to package root (a character vector of length one), Default: '.'

dev_pkg_nm_1L_chr
Development package name (a character vector of length one), Default: get_dev_pkg_nm()

make_tmpl_vignette_1L_1gl
Make tmpl vignette (a logical vector of length one), Default: F

incr_ver_1L_1gl
Incr ver (a logical vector of length one), Default: T

delete_contents_of_R_dir
PARAM_DESCRIPTION, Default: F
```

write\_pt\_lup\_db

write\_pt\_lup\_db

Write prototype lookup table database

#### **Description**

write\_pt\_lup\_db() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write prototype lookup table database. 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_dir_1L_chr = "R")
```

# Arguments

R\_dir\_1L\_chr R directory (a character vector of length one), Default: 'R'

write\_std\_imp

Write standard import

# Description

write\_std\_imp() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write standard import. 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_dir_1L_chr = "R")
```

#### **Arguments**

R\_dir\_1L\_chr R directory (a character vector of length one), Default: 'R'

```
write_tb_to_csv
```

Write tibble to comma separated variables file

#### **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 tibble to comma separated variables file. 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_tb_to_csv(
   tbs_r4,
   slot_nm_1L_chr,
   r4_name_1L_chr,
   lup_dir_1L_chr,
   pfx_1L_chr
)
```

# **Arguments**

```
tbs_r4 Tibbles (a readyforwhatsnext S4)
slot_nm_1L_chr Slot name (a character vector of length one)
r4_name_1L_chr Readyforwhatsnext S4 name (a character vector of length one)
lup_dir_1L_chr Lookup table directory (a character vector of length one)
pfx_1L_chr Prefix (a character vector of length one)
```

# Description

write\_to\_reset\_pkg\_files() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write to reset package files. 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_to_reset_pkg_files(
  delete_contents_of_1L_chr,
  package_1L_chr = get_dev_pkg_nm(),
  package_dir_1L_chr = getwd(),
  description_ls = NULL,
  keep_version_lgl = T
)
```

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#### **Arguments**

```
delete_contents_of_1L_chr
Delete contents of (a character vector of length one)

package_1L_chr Package (a character vector of length one), Default: get_dev_pkg_nm()

package_dir_1L_chr
Package directory (a character vector of length one), Default: getwd()

description_ls Description (a list), Default: NULL

keep_version_lg1

Keep version (a logical vector), Default: T
```

write\_ws

Write workspace

# Description

write\_ws() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write workspace. 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_ws(path_1L_chr)
```

#### **Arguments**

path\_1L\_chr Path (a character vector of length one)

%>%

Pipe operator

#### **Description**

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

#### **Arguments**

lhs, rhs

An object and a function to apply to it

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