

Package ‘ready4class’

September 13, 2020

Title Readyforwhatsnext Tools For Creating And Extending
Classes.

Version 0.0.0.9138

Description ready4class provides classes and methods that are designed to standardise and streamline the process for extending the readyforwhatsnext data synthesis and simulation framework with new classes. This development version of the ready4class package has been made available as part of the process of testing and documenting the package. That means this should be regarded as UNTESTED software, which is provided for free WITHOUT ANY WARRANTY. Importantly, the tools contained in this test release automate a number of tasks which MODIFY THE DIRECTORY STRUCTURE OF YOUR LOCAL MACHINE. While we welcome and appreciate anyone who takes the time to provide us with feedback on this test release, we caution you that you should only test this software if you feel confident you understand what it does and have created a sandpit area in which you can safely undertake testing. If you have any questions, please contact the authors (matthew.hamilton@orygen.org.au).

License GPL-3

URL <https://readyforwhatsnext.github.io/ready4class/>,
<https://github.com/readyforwhatsnext/ready4class>,
<https://readyforwhatsnext.github.io/readyforwhatsnext/>

Encoding UTF-8

LazyData true

Roxygen list(markdown = TRUE)

RoxygenNote 7.1.1

Imports lifecycle,
ready4fun (>= 0.0.0.9216),
devtools,
dplyr,
gtools,
magrittr,
methods,
purrr,
rlang,
stringi,

stringr,
testit,
tibble,
tidyr,
usethis

RdMacros lifecycle
Depends R (>= 2.10)
Remotes readyforwhatsnext/ready4fun

R topics documented:

ready4class-package	2
abbreviations_lup	3
fn_type_lup_tbl	4
is_ready4_class_pt_lup	4
is_ready4_constructor_tbl	5
make_new_ready4_class_pt_lup	5
make_new_ready4_constructor_tbl	6
make_prototype_ready4_class_pt_lup	7
make_prototype_ready4_constructor_tbl	7
prototype_lup	8
ready4_class_pt_lup	8
ready4_constructor_tbl	9
remake_ls_cols	9
remake_ls_cols.ready4_constructor_tbl	10
validate_ready4_class_pt_lup	10
validate_ready4_constructor_tbl	11
write_classes_and_make_lup	11
write_classes_and_make_lup.ready4_constructor_tbl	12

Index	14
--------------	-----------

ready4class-package	<i>ready4class: Readyforwhatsnext Tools For Creating And Extending Classes.</i>
---------------------	---

Description

ready4class provides classes and methods that are designed to standardise and streamline the process for extending the readyforwhatsnext data synthesis and simulation framework with new classes. This development version of the ready4class package has been made available as part of the process of testing and documenting the package. That means this should be regarded as UNTESTED software, which is provided for free WITHOUT ANY WARRANTY. Importantly, the tools contained in this test release automate a number of tasks which MODIFY THE DIRECTORY STRUCTURE OF YOUR LOCAL MACHINE. While we welcome and appreciate anyone who takes the time to provide us with feedback on this test release, we caution you that you should only test this software if you feel confident you understand what it does and have created a sandpit area in which you can safely undertake testing. If you have any questions, please contact the authors (matthew.hamilton@orygen.org.au).

Details

To learn more about ready4class, start with the vignettes: `browseVignettes(package = "ready4class")`

Author(s)

Maintainer: Matthew Hamilton <matthew.hamilton@orygen.org.au> ([ORCID](#))

Authors:

- Glen Wiesner <Glen.Wiesner@vu.edu.au> ([ORCID](#))

Other contributors:

- Orygen [copyright holder, funder]
- VicHealth [funder]
- Victoria University [funder]

See Also

Useful links:

- <https://readyforwhatsnext.github.io/ready4class/>
- <https://github.com/readyforwhatsnext/ready4class>
- <https://readyforwhatsnext.github.io/readyforwhatsnext/>

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

Description

A lookup table for abbreviations commonly used in object names in the ready4classpackage.

Usage

```
abbreviations_lup
```

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 248 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	<i>Function type lookup table</i>
----------------	-----------------------------------

Description

A lookup table to find descriptions for different types of functions used within the ready4class package suite.

Usage

```
fn_type_lup_tb
```

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 23 rows and 6 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)

is_generic_lgl Is generic (a logical vector)

is_method_lgl Is method (a logical vector)

Source

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

is_ready4_class_pt_lup

Is readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE

Description

Check whether an object is a valid instance of the readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE

Usage

```
is_ready4_class_pt_lup(x)
```

Arguments

x	An object of any type
---	-----------------------

Details

Readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE class of metadata of prototype classes.

Value

A logical value, TRUE if a valid instance of the readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE

is_ready4_constructor_tbl	<i>Is readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE</i>
---------------------------	--

Description

Check whether an object is a valid instance of the readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

Usage

is_ready4_constructor_tbl(x)

Arguments

x An object of any type

Details

Readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE of metadata required to make new classes.

Value

A logical value, TRUE if a valid instance of the readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

make_new_ready4_class_pt_lup	<i>Make new readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE</i>
------------------------------	---

Description

Create a new unvalidated instance of the readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE

Usage

make_new_ready4_class_pt_lup(x)

Arguments

x A prototype for the readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE

Details

Readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE class of metadata of prototype classes.

Value

An unvalidated instance of the readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE

make_new_ready4_constructor_tbl
<i>Make new readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE</i>

Description

Create a new unvalidated instance of the readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

Usage

make_new_ready4_constructor_tbl(x)

Arguments

x A prototype for the readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

Details

Readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE of metadata required to make new classes.

Value

An unvalidated instance of the readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

`make_prototype_ready4_class_pt_lup`*Make prototype readyforwhatsnext S3 class CLASS PROTOTYPE
LOOKUP TABLE*

Description

Create a new prototype for the readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE

Usage

```
make_prototype_ready4_class_pt_lup()
```

Details

Readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE class of metadata of prototype classes.

Value

A prototype for readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE

`make_prototype_ready4_constructor_tbl`*Make prototype readyforwhatsnext S3 class CLASS CONSTRUCTOR
TABLE*

Description

Create a new prototype for the readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

Usage

```
make_prototype_ready4_constructor_tbl()
```

Details

Readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE of metadata required to make new classes.

Value

A prototype for readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

prototype_lup	<i>Class prototype lookup table</i>
---------------	-------------------------------------

Description

Metadata on classes used in readyforwhatsnext suite

Usage

```
prototype_lup
```

Format

An object of class `ready4_class_pt_lup` (inherits from `tbl_df`, `tbl`, `data.frame`) with 7 rows and 6 columns.

Details

A tibble

type_chr Type (a character vector)

val_chr Val (a character vector)

pt_ns_chr Prototype namespace (a character vector)

fn_to_call_chr Function to call (a character vector)

default_val_chr Default val (a character vector)

old_class_lgl Old class (a logical vector)

<code>ready4_class_pt_lup</code>	<i>readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE</i>
----------------------------------	--

Description

Create a new valid instance of the readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE

Usage

```
ready4_class_pt_lup(x = make_prototype_ready4_class_pt_lup())
```

Arguments

<code>x</code>	A prototype for the readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE, Default: <code>make_prototype_ready4_class_pt_lup()</code>
----------------	---

Details

Readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE class of metadata of prototype classes.

Value

A validated instance of the readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE

ready4_constructor_tbl	<i>readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE</i>
------------------------	---

Description

Create a new valid instance of the readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

Usage

ready4_constructor_tbl(x = make_prototype_ready4_constructor_tbl())

Arguments

x A prototype for the readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE, Default: make_prototype_ready4_constructor_tbl()

Details

Readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE of metadata required to make new classes.

Value

A validated instance of the readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

remake_ls_cols	<i>Remake list columns</i>
----------------	----------------------------

Description

remake_ls_cols() is a Remake List Columns generic that remakes list columns.

Usage

remake_ls_cols(x, ...)

Arguments

x An object
... Additional arguments

```
remake_ls_cols.ready4_constructor_tbl
```

Remake list columns method applied to readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE.

Description

remake_ls_cols.ready4_constructor_tbl() is a Remake List Columns method that remakes list columns. This method is implemented for the readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE. The function is called for its side effects and does not return a value.

Usage

```
## S3 method for class 'ready4_constructor_tbl'
remake_ls_cols(x)
```

Arguments

x An instance of readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

Value

Instance (a readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE)

```
validate_ready4_class_pt_lup
```

Validate readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE

Description

Validate an instance of the readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE

Usage

```
validate_ready4_class_pt_lup(x)
```

Arguments

x An unvalidated instance of the readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE

Details

Readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE class of metadata of prototype classes.

Value

A prototpe for readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE

 validate_ready4_constructor_tbl

Validate readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

Description

Validate an instance of the readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

Usage

```
validate_ready4_constructor_tbl(x)
```

Arguments

x	An unvalidated instance of the readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE
---	---

Details

Readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE of metadata required to make new classes.

Value

A prototpe for readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

 write_classes_and_make_lup

Write classes and make lookup table

Description

write_classes_and_make_lup() is a Write Classes and Make Lookup Table generic that makes new classes and creates or updates a class prototype lookup table.

Usage

```
write_classes_and_make_lup(x, ...)
```

Arguments

x	An object
...	Additional arguments

```
write_classes_and_make_lup.ready4_constructor_tbl
```

Write classes and make lookup table method applied to readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE.

Description

write_classes_and_make_lup.ready4_constructor_tbl() is a Write Classes and Make Lookup Table method that makes new classes and creates or updates a class prototype lookup table. This method is implemented for the readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE. The function returns Instance (a readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE).

Usage

```
## S3 method for class 'ready4_constructor_tbl'
write_classes_and_make_lup(
  x,
  dev_pkg_ns_1L_chr = ready4fun::get_dev_pkg_nm(),
  name_pfx_1L_chr = paste0(ready4fun::get_dev_pkg_nm(), "_"),
  output_dir_1L_chr = "R",
  delete_cdn_ptrn_chr = NA_character_,
  file_exists_cdn_1L_chr = "overwrite",
  init_class_pt_lup = NULL,
  nss_to_ignore_chr = NA_character_,
  req_pkgs_chr = NA_character_,
  class_in_cache_cdn_1L_chr = "stop",
  abbreviations_lup = NULL
)
```

Arguments

x	An instance of readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE
dev_pkg_ns_1L_chr	Development package namespace (a character vector of length one), Default: ready4fun::get_dev_pkg_nm()
name_pfx_1L_chr	Name prefix (a character vector of length one), Default: paste0(ready4fun::get_dev_pkg_nm(), "_")
output_dir_1L_chr	Output directory (a character vector of length one), Default: 'R'
delete_cdn_ptrn_chr	Delete condition pattern (a character vector), Default: 'NA'
file_exists_cdn_1L_chr	File exists condition (a character vector of length one), Default: 'overwrite'
init_class_pt_lup	Init class prototype (a lookup table), Default: NULL
nss_to_ignore_chr	Namespaces to ignore (a character vector), Default: 'NA'
req_pkgs_chr	Req packages (a character vector), Default: 'NA'

`class_in_cache_cdn_1L_chr`

Class in cache condition (a character vector of length one), Default: 'stop'

`abbreviations_lup`

Abbreviations (a lookup table), Default: NULL

Value

Instance (a readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE)

Index

* datasets

abbreviations_lup, [3](#)

fn_type_lup_tbl, [4](#)

prototype_lup, [8](#)

abbreviations_lup, [3](#)

fn_type_lup_tbl, [4](#)

is_ready4_class_pt_lup, [4](#)

is_ready4_constructor_tbl, [5](#)

make_new_ready4_class_pt_lup, [5](#)

make_new_ready4_constructor_tbl, [6](#)

make_prototype_ready4_class_pt_lup, [7](#)

make_prototype_ready4_constructor_tbl,
[7](#)

prototype_lup, [8](#)

ready4_class_pt_lup, [8](#)

ready4_constructor_tbl, [9](#)

ready4class (ready4class-package), [2](#)

ready4class-package, [2](#)

remake_ls_cols, [9](#)

remake_ls_cols.ready4_constructor_tbl,
[10](#)

validate_ready4_class_pt_lup, [10](#)

validate_ready4_constructor_tbl, [11](#)

write_classes_and_make_lup, [11](#)

write_classes_and_make_lup.ready4_constructor_tbl,
[12](#)