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,

2 R topics documented:

```
stringr,
testit,
tibble,
tidyr,
usethis

RdMacros lifecycle
Depends R (>= 2.10)

Remotes readyforwhatsnext/ready4fun
```

R topics documented:

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ready4class-package

ready4class: Readyforwhatsnext Tools For Creating And Extending Classes.

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")

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- Victoria University [funder]

See Also

Useful links:

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

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abbreviations_lup

Common abbreviations lookup table

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/

add_class

Add class

Description

add_class() is an Add Class generic that adds information about a class.

Usage

```
add_class(x, ...)
```

Arguments

x An object

... Additional arguments

```
add_class.ready4_class_pt_lup
```

Add class method applied to readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE.

Description

add_class.ready4_class_pt_lup() is an Add Class method that adds information about a class. This method is implemented for the readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE. The function returns Instance (a readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE).

Usage

```
## $3 method for class 'ready4_class_pt_lup'
add_class(
    X,
    row_idx_1L_int,
    make_tb,
    dev_pkg_ns_1L_chr,
    name_pfx_1L_chr,
    output_dir_1L_chr,
    file_exists_cdn_1L_chr,
    nss_to_ignore_chr = NA_character_,
    req_pkgs_chr = NA_character_,
    class_in_cache_cdn_1L_chr = "stop",
    abbreviations_lup = NULL
)
```

Arguments

```
An instance of readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP
                  TABLE
row_idx_1L_int Row index (an integer vector of length one)
make_tb
                  Make (a tibble)
dev_pkg_ns_1L_chr
                  Development package namespace (a character vector of length one)
name_pfx_1L_chr
                  Name prefix (a character vector of length one)
output_dir_1L_chr
                  Output directory (a character vector of length one)
file_exists_cdn_1L_chr
                  File exists condition (a character vector of length one)
nss_to_ignore_chr
                  Namespaces to ignore (a character vector), Default: 'NA'
                  Req packages (a character vector), Default: 'NA'
req_pkgs_chr
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
```

fn_type_lup_tb

Value

Instance (a readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE)

fn_type_lup_tb

Function type lookup table

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/

get_class_fl_nms

Get class file names

Description

get_class_fl_nms() 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 class file names. Function argument class_names_chr specifies the where to look for the required object. The function returns Class file names (a character vector).

Usage

```
get_class_fl_nms(class_names_chr, s3_1L_lgl = T, output_dir_1L_chr = NA)
```

Arguments

Value

Class file names (a character vector)

get_class_ns

Get class namespace

Description

get_class_ns() 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 class namespace. Function argument prototype_lup specifies the where to look for the required object. The function returns Class namespace (a character vector of length one).

Usage

```
get_class_ns(prototype_lup, class_nm_1L_chr)
```

Arguments

Value

Class namespace (a character vector of length one)

```
get_nms_of_clss_to_inc
```

Get names of classes to include

Description

get_nms_of_clss_to_inc() 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 names of classes to include. Function argument parent_cls_nm_1L_chr specifies the where to look for the required object. The function returns Names of classes to include (a character vector).

get_nms_of_curr_gnrcs

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Usage

```
get_nms_of_clss_to_inc(
  parent_cls_nm_1L_chr,
  parent_ns_ls,
  base_set_of_clss_to_inc_chr = NULL
)
```

Arguments

```
parent_cls_nm_1L_chr
Parent class name (a character vector of length one)

parent_ns_ls Parent namespace (a list)

base_set_of_clss_to_inc_chr
Base set of classes to include (a character vector), Default: NULL
```

Value

Names of classes to include (a character vector)

```
get_nms_of_curr_gnrcs Get names of current generics
```

Description

get_nms_of_curr_gnrcs() 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 names of current generics. Function argument req_pkgs_chr specifies the where to look for the required object. The function returns Names of current generics (a list).

Usage

```
get_nms_of_curr_gnrcs(req_pkgs_chr, generic_1L_chr)
```

Arguments

```
req_pkgs_chr Req packages (a character vector)
generic_1L_chr Generic (a character vector of length one)
```

Value

Names of current generics (a list)

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get_parent_cls_ns

Get parent class namespace

Description

get_parent_cls_ns() 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 parent class namespace. Function argument prototype_lup specifies the where to look for the required object. The function is called for its side effects and does not return a value.

Usage

```
{\tt get\_parent\_cls\_ns(prototype\_lup,\ parent\_cls\_nm\_1L\_chr,\ dev\_pkg\_ns\_1L\_chr)}
```

Arguments

Value

Parent class (a namespace)

```
get_parent_cls_pts
```

Get parent class prototypes

Description

get_parent_cls_pts() 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 parent class prototypes. Function argument parent_cls_nm_1L_chr specifies the where to look for the required object. The function returns Parent class prototypes (a character vector).

Usage

```
get_parent_cls_pts(parent_cls_nm_1L_chr, parent_ns_ls, slot_names_chr)
```

Arguments

```
parent_cls_nm_1L_chr
Parent class name (a character vector of length one)

parent_ns_ls Parent namespace (a list)

slot_names_chr Slot names (a character vector)
```

Value

Parent class prototypes (a character vector)

get_parent_cls_pt_fn 11

```
get_parent_cls_pt_fn Get parent class prototype
```

Description

get_parent_cls_pt_fn() 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 parent class prototype function. Function argument parent_cls_nm_1L_chr specifies the where to look for the required object. The function returns Parent class prototype function (a character vector).

Usage

```
get_parent_cls_pt_fn(parent_cls_nm_1L_chr, prototype_lup)
```

Arguments

Value

Parent class prototype function (a character vector)

Description

get_parent_cls_slot_nms() 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 parent class slot names. Function argument parent_cls_nm_1L_chr specifies the where to look for the required object. The function returns Parent class slot names (a character vector).

Usage

```
get_parent_cls_slot_nms(parent_cls_nm_1L_chr, parent_ns_ls)
```

Arguments

```
parent_cls_nm_1L_chr
Parent class name (a character vector of length one)
parent_ns_ls Parent namespace (a list)
```

Value

Parent class slot names (a character vector)

```
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

Х

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
```

Is readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

Description

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

Usage

```
is_ready4_constructor_tbl(x)
```

Arguments

Χ

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_alg_to_gen_ref_to_cls
```

Make algorithm to generate reference to class

Description

make_alg_to_gen_ref_to_cls() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make algorithm to generate reference to class. The function returns Algorithm to generate reference to class (a character vector of length one).

Usage

```
make_alg_to_gen_ref_to_cls(class_nm_1L_chr, pkg_nm_1L_chr = ".GlobalEnv")
```

Arguments

```
class_nm_1L_chr
Class name (a character vector of length one)

pkg_nm_1L_chr
Package name (a character vector of length one), Default: '.GlobalEnv'
```

Value

Algorithm to generate reference to class (a character vector of length one)

```
make_alg_to_get_pt_val
```

Make algorithm to get prototype value

Description

make_alg_to_get_pt_val() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make algorithm to get prototype value. The function returns Algorithm to get prototype value (a character vector of length one).

Usage

```
make_alg_to_get_pt_val(
  pt_ns_1L_chr = "",
  fn_to_call_1L_chr = "",
  default_val_1L_chr = "",
  attached_nss_chr = c("base")
)
```

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Arguments

Value

Algorithm to get prototype value (a character vector of length one)

Description

make_alg_to_set_gnrc() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make algorithm to set generic. The function returns Algorithm to set generic (a character vector of length one).

Usage

```
make_alg_to_set_gnrc(
  name_1L_chr,
  args_chr = c("x"),
  signature_1L_chr = NA_character_,
  where_1L_chr = NA_character_)
```

Arguments

```
name_1L_chr Name (a character vector of length one)

args_chr Arguments (a character vector), Default: c("x")

signature_1L_chr

Signature (a character vector of length one), Default: 'NA'

where_1L_chr Where (a character vector of length one), Default: 'NA'
```

Value

Algorithm to set generic (a character vector of length one)

make_alg_to_set_mthd 15

```
{\tt make\_alg\_to\_set\_mthd} \quad \textit{Make algorithm to set method}
```

Description

make_alg_to_set_mthd() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make algorithm to set method. The function returns Algorithm to set method (a character vector of length one).

Usage

```
make_alg_to_set_mthd(
  name_1L_chr,
  class_nm_1L_chr,
  fn,
  pkg_nm_1L_chr = NA_character_,
  where_1L_chr = NA_character_)
```

Arguments

```
name_1L_chr Name (a character vector of length one)

class_nm_1L_chr

Class name (a character vector of length one)

fn Function (a function)

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

where_1L_chr Where (a character vector of length one), Default: 'NA'
```

Value

Algorithm to set method (a character vector of length one)

```
make_alg_to_set_old_clss

Make algorithm to set old classes
```

Description

make_alg_to_set_old_clss() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make algorithm to set old classes. The function returns Algorithm to set old classes (a character vector of length one).

Usage

```
make_alg_to_set_old_clss(type_chr, prototype_lup)
```

Arguments

```
type_chr Type (a character vector)
prototype_lup Prototype (a lookup table)
```

Value

Algorithm to set old classes (a character vector of length one)

```
make_alg_to_set_validity_of_r4_cls

Make algorithm to set validity of readyforwhatsnext S4 class
```

Description

make_alg_to_set_validity_of_r4_cls() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make algorithm to set validity of readyforwhatsnext s4 class. The function returns Algorithm to set validity of readyforwhatsnext S4 class (a character vector of length one).

Usage

```
make_alg_to_set_validity_of_r4_cls(
  class_nm_1L_chr,
  parent_cls_nm_1L_chr,
  slots_of_dif_lnts_chr = NULL,
  allowed_vals_ls = NULL,
  names_must_match_ls = NULL,
  print_validator_1L_lgl = FALSE
)
```

Arguments

```
class_nm_1L_chr
Class name (a character vector of length one)

parent_cls_nm_1L_chr
Parent class name (a character vector of length one)

slots_of_dif_lnts_chr
Slots of different lengths (a character vector), Default: NULL

allowed_vals_ls
Allowed values (a list), Default: NULL

names_must_match_ls
Names must match (a list), Default: NULL

print_validator_1L_lgl
Print validator (a logical vector of length one), Default: FALSE
```

Value

Algorithm to set validity of readyforwhatsnext S4 class (a character vector of length one)

Description

make_alg_to_write_gtr_str_mthds() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make algorithm to write getter setter methods. The function is called for its side effects and does not return a value.

Usage

```
make_alg_to_write_gtr_str_mthds(
   class_nm_1L_chr,
   parent_cls_nm_1L_chr,
   print_gtrs_strs_1L_lgl,
   output_dir_1L_chr,
   nss_to_ignore_chr,
   req_pkgs_chr,
   parent_ns_ls
)
```

Arguments

Value

Algorithm to write getter setter (methods)

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```
make_child_cls_fn_body

Make child class function body
```

Description

make_child_cls_fn_body() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make child class function body. The function returns Child class function body (a character vector of length one).

Usage

```
make_child_cls_fn_body(
   child_ext_fn_1L_chr,
   parent_cls_nm_1L_chr,
   prototype_lup,
   prepend_1L_lgl = T
)
```

Arguments

```
child_ext_fn_1L_chr
Child ext function (a character vector of length one)

parent_cls_nm_1L_chr
Parent class name (a character vector of length one)

prototype_lup Prototype (a lookup table)

prepend_1L_lgl Prepend (a logical vector of length one), Default: T
```

Value

Child class function body (a character vector of length one)

Description

make_class_pts_tb() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make class prototypes tibble. The function returns Class prototypes (a tibble).

Usage

```
make_class_pts_tb(class_mk_ls)
```

Arguments

```
class_mk_ls Class make (a list)
```

Value

Class prototypes (a tibble)

```
make_class_pt_tb_for_r3_and_r4_clss
```

Make class prototype tibble for readyforwhatsnext S3 and readyforwhatsnext S4 classes

Description

make_class_pt_tb_for_r3_and_r4_clss() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make class prototype tibble for readyforwhatsnext s3 and readyforwhatsnext s4 classes. The function returns Class prototype tibble for readyforwhatsnext S3 and readyforwhatsnext S4 classes (a tibble).

Usage

```
make_class_pt_tb_for_r3_and_r4_clss(class_mk_ls)
```

Arguments

```
class_mk_ls Class make (a list)
```

Value

Class prototype tibble for readyforwhatsnext S3 and readyforwhatsnext S4 classes (a tibble)

make_dmt_inc_tag

Make documentation include tag

Description

make_dmt_inc_tag() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make documentation include tag. The function returns Documentation include tag (a character vector of length one).

Usage

```
make_dmt_inc_tag(class_names_chr, s3_1L_lgl = T)
```

Arguments

```
class_names_chr
```

Class names (a character vector)

s3_1L_1g1 S3 (a logical vector of length one), Default: T

Value

Documentation include tag (a character vector of length one)

```
make_fn_pt_to_check_r3_cls_inhtc

Make function prototype to check readyforwhatsnext S3 class inheritance
```

Description

make_fn_pt_to_check_r3_cls_inhtc() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make function prototype to check readyforwhatsnext s3 class inheritance. The function is called for its side effects and does not return a value.

Usage

```
make_fn_pt_to_check_r3_cls_inhtc(class_nm_1L_chr, s3_validator_ls)
```

Arguments

```
class_nm_1L_chr
Class name (a character vector of length one)
s3_validator_ls
S3 validator (a list)
```

Value

Function prototype to check readyforwhatsnext S3 class (an inheritance)

```
make_fn_pt_to_make_r3_cls_pt
```

Make function prototype to make readyforwhatsnext S3 class prototype

Description

make_fn_pt_to_make_r3_cls_pt() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make function prototype to make readyforwhatsnext s3 class prototype. The function is called for its side effects and does not return a value.

Usage

```
make_fn_pt_to_make_r3_cls_pt(
   type_1L_chr,
   pt_ns_1L_chr,
   vals_ls,
   ordered_1L_lgl,
   class_nm_1L_chr,
   parent_cls_nm_1L_chr,
   prototype_lup
)
```

Arguments

```
type_1L_chr Type (a character vector of length one)

pt_ns_1L_chr Prototype namespace (a character vector of length one)

vals_ls Values (a list)

ordered_1L_lgl Ordered (a logical vector of length one)

class_nm_1L_chr

Class name (a character vector of length one)

parent_cls_nm_1L_chr

Parent class name (a character vector of length one)

prototype_lup Prototype (a lookup table)
```

Value

Function prototype to make readyforwhatsnext S3 class (a prototype)

Description

make_fn_pt_to_make_unvld_r3_cls_inst() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make function prototype to make unvld readyforwhatsnext s3 class instance. The function is called for its side effects and does not return a value.

Usage

```
make_fn_pt_to_make_unvld_r3_cls_inst(
   type_1L_chr,
   pt_chkr_pfx_1L_chr,
   pt_ns_1L_chr,
   class_nm_1L_chr,
   s3_prototype_ls
)
```

Arguments

Value

Function prototype to make unvld readyforwhatsnext S3 class (an instance)

```
{\tt make\_fn\_pt\_to\_make\_vldd\_r3\_cls\_inst}
```

Make function prototype to make validated readyforwhatsnext S3 class instance

Description

make_fn_pt_to_make_vldd_r3_cls_inst() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make function prototype to make validated ready-forwhatsnext s3 class instance. The function is called for its side effects and does not return a value.

Usage

```
make_fn_pt_to_make_vldd_r3_cls_inst(
  class_nm_1L_chr,
  s3_prototype_ls,
  s3_constructor_ls,
  s3_validator_ls
)
```

Arguments

```
class_nm_1L_chr
Class name (a character vector of length one)
s3_prototype_1s
S3 prototype (a list)
s3_constructor_1s
S3 constructor (a list)
s3_validator_1s
S3 validator (a list)
```

Value

Function prototype to make validated readyforwhatsnext S3 class (an instance)

```
make_fn_pt_to_make_vld_r3_cls_inst
```

Make function prototype to make valid readyforwhatsnext S3 class instance

Description

make_fn_pt_to_make_vld_r3_cls_inst() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make function prototype to make valid readyforwhatsnext s3 class instance. The function is called for its side effects and does not return a value.

make_gnrc_fn 23

Usage

```
make_fn_pt_to_make_vld_r3_cls_inst(
  type_1L_chr,
  class_nm_1L_chr,
  s3_prototype_ls,
  min_max_vals_dbl,
  start_end_vals_dbl,
  vals_ls
)
```

Arguments

Value

Function prototype to make valid readyforwhatsnext S3 class (an instance)

Description

make_gnrc_fn() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make generic function. The function returns Generic function (a character vector of length one).

Usage

```
make_gnrc_fn(name_1L_chr, args_chr)
```

Arguments

```
name_1L_chr Name (a character vector of length one)
args_chr Arguments (a character vector)
```

Value

Generic function (a character vector of length one)

24 make_helper_fn

Description

make_gnrc_mthd_pair_ls() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make generic method pair list. The function returns Generic method pair (a list).

Usage

```
make_gnrc_mthd_pair_ls(
  name_1L_chr,
  args_chr = c("x"),
  signature_1L_chr = NA_character_,
  pkg_nm_1L_chr = NA_character_,
  where_1L_chr = NA_character_,
  class_nm_1L_chr,
  fn
)
```

Arguments

```
name_1L_chr Name (a character vector of length one)

args_chr Arguments (a character vector), Default: c("x")

signature_1L_chr Signature (a character vector of length one), Default: 'NA'

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

where_1L_chr Where (a character vector of length one), Default: 'NA'

class_nm_1L_chr Class name (a character vector of length one)

fn Function (a function)
```

Value

Generic method pair (a list)

Description

make_helper_fn() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make helper function. The function returns Helper function (a character vector of length one).

Usage

```
make_helper_fn(
  class_nm_1L_chr,
  parent_cls_nm_1L_chr,
  slots_chr,
  pt_ls,
  prototype_lup,
  parent_ns_ls
)
```

Arguments

Value

Helper function (a character vector of length one)

Description

make_lines_for_writing_dmtd_fn() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make lines for writing documented function. The function is called for its side effects and does not return a value.

Usage

```
make_lines_for_writing_dmtd_fn(
   fn_name_1L_chr,
   fn_body_1L_chr,
   fn_type_1L_chr,
   class_nm_1L_chr,
   class_desc_1L_chr,
   abbreviations_lup = NULL
)
```

Arguments

```
fn_name_1L_chr Function name (a character vector of length one)
fn_body_1L_chr Function body (a character vector of length one)
fn_type_1L_chr Function type (a character vector of length one)
class_nm_1L_chr Class name (a character vector of length one)
class_desc_1L_chr Class description (a character vector of length one)
abbreviations_lup Abbreviations (a lookup table), Default: NULL
```

```
make_ls_of_pkgs_to_imp
```

Make list of packages to import

Description

make_ls_of_pkgs_to_imp() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make list of packages to import. The function returns Packages to import (a list).

Usage

```
make_ls_of_pkgs_to_imp(curr_gnrcs_ls, fn_name_1L_chr, nss_to_ignore_chr)
```

Arguments

Value

Packages to import (a list)

```
{\tt make\_ls\_of\_tfd\_nms\_of\_curr\_gnrcs}
```

Make list of transformed names of current generics

Description

make_ls_of_tfd_nms_of_curr_gnrcs() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make list of transformed names of current generics. The function returns Current generics (a list).

make_lup 27

Usage

```
make_ls_of_tfd_nms_of_curr_gnrcs(
  req_pkgs_chr,
  generic_1L_chr,
  nss_to_ignore_chr
)
```

Arguments

```
req_pkgs_chr Req packages (a character vector)
generic_1L_chr Generic (a character vector of length one)
nss_to_ignore_chr
Namespaces to ignore (a character vector)
```

Value

Current generics (a list)

make_lup

Make lookup table

Description

make_lup() is a Make Lookup Table generic that applies a Make method and then updates the output of that method.

Usage

```
make_lup(x, ...)
```

Arguments

x An object... Additional arguments

```
make_lup.ready4_constructor_tbl
```

Make lookup table method applied to readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE.

Description

make_lup.ready4_constructor_tbl() is a Make Lookup Table method that applies a Make method and then updates the output of that method. 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'
make_lup(x, dev_pkg_ns_1L_chr, prefix_1L_chr)
```

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)

prefix_1L_chr Prefix (a character vector of length one)

Value

Instance (a readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE)

```
make_new_ready4_class_pt_lup

Make new readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP

TABLE
```

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
```

Make new readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

Description

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

Usage

```
make_new_ready4_constructor_tbl(x)
```

Arguments

Χ

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_one_row_class_pt_tb
```

Make one row class prototype

Description

make_one_row_class_pt_tb() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make one row class prototype tibble. The function returns One row class prototype (a tibble).

Usage

```
make_one_row_class_pt_tb(class_type_mk_ls, make_s3_1L_lgl = T)
```

Arguments

Value

One row class prototype (a tibble)

```
make_one_row_pt_tb_for_new_r3_cls
```

Make one row prototype tibble for new readyforwhatsnext S3 class

Description

make_one_row_pt_tb_for_new_r3_cls() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make one row prototype tibble for new readyforwhatsnext s3 class. The function returns One row class prototype (a tibble).

Usage

```
make_one_row_pt_tb_for_new_r3_cls(x)
```

Arguments

Х

PARAM_DESCRIPTION

Value

One row class prototype (a tibble)

```
make_one_row_pt_tb_for_new_r4_cls
```

Make one row prototype tibble for new readyforwhatsnext S4 class

Description

make_one_row_pt_tb_for_new_r4_cls() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make one row prototype tibble for new readyforwhatsnext s4 class. The function returns One row class prototype (a tibble).

Usage

```
make_one_row_pt_tb_for_new_r4_cls(x)
```

Arguments

Χ

PARAM_DESCRIPTION

Value

One row class prototype (a tibble)

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

make_pt_ls

Make prototype

Description

make_pt_ls() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make prototype list. The function returns Prototype (a list).

Usage

```
make_pt_ls(
    slots_chr,
    type_chr = NULL,
    vals_ls = NULL,
    make_val_1L_lgl = TRUE,
    prototype_lup
)
```

Arguments

```
slots_chr Slots (a character vector)

type_chr Type (a character vector), Default: NULL

vals_ls Values (a list), Default: NULL

make_val_1L_lgl

Make value (a logical vector of length one), Default: TRUE

prototype_lup Prototype (a lookup table)
```

Value

Prototype (a list)

```
make_pt_ls_for_new_r3_cls
```

Make prototype for new readyforwhatsnext S3 class

Description

make_pt_ls_for_new_r3_cls() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make prototype list for new readyforwhatsnext s3 class. The function returns Prototype list for new readyforwhatsnext S3 class (a list).

Usage

```
make_pt_ls_for_new_r3_cls(
  class_name_1L_chr,
  type_1L_chr,
  pt_ns_1L_chr,
  pt_chkr_pfx_1L_chr,
  vals_ls,
  ordered_1L_lgl,
  parent_cls_nm_1L_chr,
  prototype_lup,
  min_max_vals_dbl,
  start_end_vals_dbl,
  nss_to_ignore_chr
)
```

Arguments

```
class_name_1L_chr
                  Class name (a character vector of length one)
type_1L_chr
                  Type (a character vector of length one)
pt_ns_1L_chr
                  Prototype namespace (a character vector of length one)
pt_chkr_pfx_1L_chr
                  Prototype checker prefix (a character vector of length one)
                  Values (a list)
vals_ls
ordered_1L_lgl Ordered (a logical vector of length one)
parent_cls_nm_1L_chr
                  Parent class name (a character vector of length one)
prototype_lup Prototype (a lookup table)
min_max_vals_dbl
                  Min max values (a double vector)
start_end_vals_dbl
                  Start end values (a double vector)
nss_to_ignore_chr
                  Namespaces to ignore (a character vector)
```

Value

Prototype list for new readyforwhatsnext S3 class (a list)

```
make_pt_tb_for_new_r3_cls

Make prototype tibble for new readyforwhatsnext S3 class
```

Description

make_pt_tb_for_new_r3_cls() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make prototype tibble for new readyforwhatsnext s3 class. The function returns Prototype tibble for new readyforwhatsnext S3 class (a tibble).

34 make_show_mthd_fn

Usage

```
make_pt_tb_for_new_r3_cls(x)
```

Arguments

Х

PARAM_DESCRIPTION

Value

Prototype tibble for new readyforwhatsnext S3 class (a tibble)

```
make_pt_tb_for_new_r4_cls
```

Make prototype tibble for new readyforwhatsnext S4 class

Description

make_pt_tb_for_new_r4_cls() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make prototype tibble for new readyforwhatsnext s4 class. The function returns Prototype tibble for new readyforwhatsnext S3 class (a tibble).

Usage

```
make_pt_tb_for_new_r4_cls(x)
```

Arguments

Х

PARAM_DESCRIPTION

Value

Prototype tibble for new readyforwhatsnext S3 class (a tibble)

make_show_mthd_fn

Make show method

Description

make_show_mthd_fn() is a Make function that creates a new R object. Specifically, this function implements an algorithm to make show method function. The function returns Show method function (a character vector of length one).

Usage

```
make_show_mthd_fn(class_nm_1L_chr, meaningful_nms_ls)
```

order_tb 35

Arguments

```
class_nm_1L_chr
Class name (a character vector of length one)
meaningful_nms_ls
Meaningful names (a list)
```

Value

Show method function (a character vector of length one)

order_tb

Order tibble

Description

order_tb() is an Order Tibble generic that orders a tibble.

Usage

```
order_tb(x, ...)
```

Arguments

x An object... Additional arguments

```
order_tb.ready4_constructor_tbl
```

Order tibble method applied to readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE.

Description

order_tb.ready4_constructor_tbl() is an Order Tibble method that orders a tibble. 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'
order_tb(x, name_pfx_1L_chr)
```

Arguments

```
{\tt x} — An instance of ready
forwhatsnext S3 class CLASS CONSTRUCTOR TABLE name_pfx_1L_chr
```

Name prefix (a character vector of length one)

Value

Instance (a readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE)

36 ready4_class_pt_lup

prototype_lup

Class prototype lookup table

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)
```

ready4_class_pt_lup

readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE

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

Χ

A prototype for the readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE, Default: make_prototype_ready4_class_pt_lup()

Details

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

ready4_constructor_tbl

Value

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

```
ready4_constructor_tbl
```

readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

37

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 TA-BLE, 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

Remake list columns

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

Χ

An instance of readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE

Value

Instance (a readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE)

```
remove_class_from_cache
```

Remove class from cache

Description

remove_class_from_cache() is a Remove function that edits an object, removing a specified element or elements. Specifically, this function implements an algorithm to remove class from cache. Function argument class_nm_1L_chr specifies the object to be updated. Argument class_in_cache_cdn_1L_chr provides the object to be updated. The function is called for its side effects and does not return a value.

Usage

```
remove_class_from_cache(class_nm_1L_chr, class_in_cache_cdn_1L_chr = "stop")
```

Arguments

```
class_nm_1L_chr
```

Class name (a character vector of length one)

```
class_in_cache_cdn_1L_chr
```

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

replace_NA_in_fn 39

replace_NA_in_fn

Replace NA in

Description

replace_NA_in_fn() is a Replace function that edits an object, replacing a specified element with another specified element. Specifically, this function implements an algorithm to replace na in function. Function argument fn_body_1L_chr specifies the object to be updated. The function returns Function body (a character vector of length one).

Usage

```
replace_NA_in_fn(fn_body_1L_chr)
```

Arguments

fn_body_1L_chr Function body (a character vector of length one)

Value

Function body (a character vector of length one)

```
transform_alg_to_ref_cls_nm
```

Transform algorithm to reference class name

Description

transform_alg_to_ref_cls_nm() is a Transform function that edits an object in such a way that core object attributes - e.g. shape, dimensions, elements, type - are altered. Specifically, this function implements an algorithm to transform algorithm to reference class name. Function argument alg_to_ref_cls_nm specifies the object to be updated. Argument pkg_nm_1L_chr provides the object to be updated. The function is called for its side effects and does not return a value.

Usage

```
transform_alg_to_ref_cls_nm(alg_to_ref_cls_nm, pkg_nm_1L_chr)
```

Arguments

```
alg_to_ref_cls_nm
PARAM_DESCRIPTION

pkg_nm_1L_chr Package name (a character vector of length one)
```

Value

Transformed algorithm to reference class (a name)

40 transform_fn_into_chr

transform_class_ns

Transform class namespace

Description

transform_class_ns() is a Transform function that edits an object in such a way that core object attributes - e.g. shape, dimensions, elements, type - are altered. Specifically, this function implements an algorithm to transform class namespace. Function argument class_ns_1L_chr specifies the object to be updated. Argument dev_pkg_ns_1L_chr provides the object to be updated. The function returns Transformed class namespace (a character vector of length one).

Development package namespace (a character vector of length one)

Usage

```
transform_class_ns(class_ns_1L_chr, dev_pkg_ns_1L_chr)
```

Arguments

```
class_ns_1L_chr

Class namespace (a character vector of length one)

dev_pkg_ns_1L_chr
```

Value

Transformed class namespace (a character vector of length one)

```
transform_fn_into_chr Transform function into
```

Description

transform_fn_into_chr() is a Transform function that edits an object in such a way that core object attributes - e.g. shape, dimensions, elements, type - are altered. Specifically, this function implements an algorithm to transform function into character vector. Function argument fn specifies the object to be updated. The function returns Function (a character vector of length one).

Usage

```
transform_fn_into_chr(fn)
```

Arguments

fn

Function (a function)

Value

Function (a character vector of length one)

transform_parent_ns_ls

Transform parent namespace

Description

transform_parent_ns_ls() is a Transform function that edits an object in such a way that core object attributes - e.g. shape, dimensions, elements, type - are altered. Specifically, this function implements an algorithm to transform parent namespace list. Function argument parent_ns_ls specifies the object to be updated. The function returns Transformed parent namespace (a list).

Usage

```
transform_parent_ns_ls(parent_ns_ls)
```

Arguments

```
parent_ns_ls Parent namespace (a list)
```

Value

Transformed parent namespace (a list)

```
transform_pt_ls_for_new_clss
```

Transform prototype list for new classes

Description

transform_pt_ls_for_new_clss() is a Transform function that edits an object in such a way that core object attributes - e.g. shape, dimensions, elements, type - are altered. Specifically, this function implements an algorithm to transform prototype list for new classes. Function argument pts_for_new_clss_ls specifies the object to be updated. The function returns Transformed prototypes for new classes (a list).

Usage

```
transform_pt_ls_for_new_clss(pts_for_new_clss_ls)
```

Arguments

```
pts_for_new_clss_ls
```

Prototypes for new classes (a list)

Value

Transformed prototypes for new classes (a list)

update_lup_for_ns

Update lookup table for namespace

Description

update_lup_for_ns() is an Update Lookup Table for Namespace generic that updates a lookup table with namespace data.

Usage

```
update_lup_for_ns(x, attached_nss_chr, ...)
```

Arguments

```
    x An object
    attached_nss_chr
    Attached namespaces (a character vector)
    ... Additional arguments
```

```
update_lup_for_ns.ready4_class_pt_lup
```

Update lookup table for namespace method applied to readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE.

Description

update_lup_for_ns.ready4_class_pt_lup() is an Update Lookup Table for Namespace method that updates a lookup table with namespace data. This method is implemented for the readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE. The function returns Instance (a readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE).

Usage

```
## S3 method for class 'ready4_class_pt_lup'
update_lup_for_ns(x, attached_nss_chr)
```

Arguments

```
{\sf x} — An instance of ready
forwhatsnext S3 class CLASS PROTOTYPE LOOKUP TABLE attached_nss_chr
```

Attached namespaces (a character vector)

Value

Instance (a readyforwhatsnext S3 class CLASS PROTOTYPE LOOKUP 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

An unvalidated instance of the readyforwhatsnext S3 class CLASS PROTO-TYPE 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

Write classes

Description

write_classes() is a Write Classes generic that writes new classes.

Usage

```
write_classes(x, ...)
```

Arguments

```
x An object
```

... Additional arguments

```
write_classes.ready4_constructor_tbl
```

Write classes method applied to readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE.

Description

write_classes.ready4_constructor_tbl() is a Write Classes method that writes new classes. 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. WARNING: This function writes R scripts to your local environment. Make sure to only use if you want this behaviour

```
## S3 method for class 'ready4_constructor_tbl'
write_classes(
    x,
    name_pfx_1L_chr,
    output_dir_1L_chr,
    file_exists_cdn_1L_chr = NULL,
    prototype_lup = NULL,
    nss_to_ignore_chr,
    req_pkgs_chr = NA_character_,
    class_in_cache_cdn_1L_chr = "stop",
    abbreviations_lup = NULL
)
```

```
An instance of readyforwhatsnext S3 class CLASS CONSTRUCTOR TABLE
name_pfx_1L_chr
                  Name prefix (a character vector of length one)
output_dir_1L_chr
                  Output directory (a character vector of length one)
file_exists_cdn_1L_chr
                  File exists condition (a character vector of length one), Default: NULL
                 Prototype (a lookup table), Default: NULL
prototype_lup
nss_to_ignore_chr
                  Namespaces to ignore (a character vector)
                  Req packages (a character vector), Default: 'NA'
req_pkgs_chr
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
```

```
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

```
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)

Description

write_gtr_str_mthds_for_r4() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write getter setter methods for readyforwhat-snext s4. 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_gtr_str_mthds_for_r4(
    slot_nm_1L_chr,
    set_only_1L_lgl,
    pkgs_to_imp_ls,
    class_nm_1L_chr,
    print_gtrs_strs_1L_lgl,
    output_dir_1L_chr
)
```

Arguments

Description

write_gtr_str_mthds_for_slots() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write getter setter methods for slots. 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_gtr_str_mthds_for_slots(
    slot_names_chr,
    set_only_chr,
    parent_cls_nm_1L_chr,
    class_nm_1L_chr,
    print_gtrs_strs_1L_lgl,
    output_dir_1L_chr,
    nss_to_ignore_chr,
    req_pkgs_chr
)
```

Arguments

Description

write_mthds_for_r3_or_r4_clss() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write methods for readyforwhatsnext s3 or readyforwhatsnext s4 classes. 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

```
write_mthds_for_r3_or_r4_clss(
  methods_tb,
  fn_ls,
  pkg_nm_1L_chr,
  output_dir_1L_chr
)
```

```
methods_tb Methods (a tibble)

fn_ls Function list (a list of functions)

pkg_nm_1L_chr Package name (a character vector of length one)

output_dir_1L_chr

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

Description

write_scripts_to_make_gnrc_and_mthd() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write scripts to make generic and method. 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_scripts_to_make_gnrc_and_mthd(
  fn_name_1L_chr,
  args_chr = c("x"),
  signature_1L_chr = NA_character_,
  pkg_nm_1L_chr = NA_character_,
  where_chr = NA_character_,
  class_nm_1L_chr,
  fn,
  fn_type_chr,
  fn_desc_chr = rep(NA_character_, 2),
  fn_title_1L_chr = NA_character_,
  fn_outp_type_1L_chr = NA_character_,
  imports_chr,
  write_file_ls,
  output_dir_1L_chr,
  append_1L_lgl = T,
  doc_in_class_1L_lgl = F,
  gnrc_exists_1L_lgl,
  overwrite_1L_lgl = F,
  s3_1L_lgl,
  write_1L_lgl
)
```

```
fn_name_1L_chr Function name (a character vector of length one)

args_chr Arguments (a character vector), Default: c("x")

signature_1L_chr

Signature (a character vector of length one), Default: 'NA'
```

```
pkg_nm_1L_chr
                  Package name (a character vector of length one), Default: 'NA'
where_chr
                  Where (a character vector), Default: 'NA'
class_nm_1L_chr
                  Class name (a character vector of length one)
fn
                  Function (a function)
fn_type_chr
                  Function type (a character vector)
fn_desc_chr
                  Function description (a character vector), Default: rep(NA_character_, 2)
fn_title_1L_chr
                  Function title (a character vector of length one), Default: 'NA'
fn_outp_type_1L_chr
                  Function output type (a character vector of length one), Default: 'NA'
                  Imports (a character vector)
imports_chr
                  Write file (a list)
write_file_ls
output_dir_1L_chr
                  Output directory (a character vector of length one)
                  Append (a logical vector of length one), Default: T
append_1L_lgl
doc_in_class_1L_lgl
                  Document in class (a logical vector of length one), Default: F
gnrc_exists_1L_lgl
                  Generic exists (a logical vector of length one)
overwrite_1L_lgl
                  Overwrite (a logical vector of length one), Default: F
                  S3 (a logical vector of length one)
s3_1L_lgl
                  Write (a logical vector of length one)
write_1L_lgl
```

```
write_scripts_to_mk_clss
```

Write scripts to make classes

Description

write_scripts_to_mk_clss() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write scripts to make classes. 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

```
write_scripts_to_mk_clss(
  pts_for_new_clss_ls,
  pkg_nm_1L_chr,
  class_pfx_1L_chr,
  R_dir_1L_chr = "R",
  pt_lup,
  description_ls = NULL,
  nss_to_ignore_chr = NA_character_,
  req_pkgs_chr = NA_character_)
```

```
write_scripts_to_mk_r3_cls
```

Write scripts to make readyforwhatsnext S3 class

Description

write_scripts_to_mk_r3_cls() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write scripts to make readyforwhatsnext s3 class. 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

```
write_scripts_to_mk_r3_cls(
  name_stub_1L_chr,
  name_pfx_1L_chr = "ready4_",
  output_dir_1L_chr = "data-raw",
  class_desc_1L_chr = "",
  parent_cls_nm_1L_chr = NULL,
  type_1L_chr,
  pt_ns_1L_chr = "",
  pt_chkr_pfx_1L_chr = "is.",
  vals_ls = NULL,
  ordered_1L_lgl = FALSE,
  allowed_vals_ls = NULL,
  min_max_vals_dbl = NULL,
  start_end_vals_dbl = NULL,
  prototype_lup,
  nss_to_ignore_chr = NA_character_,
  file_exists_cdn_1L_chr = "skip",
  abbreviations_lup = NULL
)
```

```
name_stub_1L_chr
                  Name stub (a character vector of length one)
name_pfx_1L_chr
                  Name prefix (a character vector of length one), Default: 'ready4_'
output_dir_1L_chr
                  Output directory (a character vector of length one), Default: 'data-raw'
class_desc_1L_chr
                  Class description (a character vector of length one), Default: "
parent_cls_nm_1L_chr
                  Parent class name (a character vector of length one), Default: NULL
                  Type (a character vector of length one)
type_1L_chr
pt_ns_1L_chr
                  Prototype namespace (a character vector of length one), Default: "
pt_chkr_pfx_1L_chr
                  Prototype checker prefix (a character vector of length one), Default: 'is.'
                  Values (a list), Default: NULL
vals_ls
ordered_1L_1g1 Ordered (a logical vector of length one), Default: FALSE
allowed_vals_ls
                  Allowed values (a list), Default: NULL
min_max_vals_dbl
                  Min max values (a double vector), Default: NULL
start_end_vals_dbl
                  Start end values (a double vector), Default: NULL
prototype_lup
                  Prototype (a lookup table)
nss_to_ignore_chr
                  Namespaces to ignore (a character vector), Default: 'NA'
file_exists_cdn_1L_chr
                  File exists condition (a character vector of length one), Default: 'skip'
abbreviations_lup
                  Abbreviations (a lookup table), Default: NULL
```

```
write_scripts_to_mk_r4_cls
```

Write scripts to make readyforwhatsnext S4 class

Description

write_scripts_to_mk_r4_cls() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write scripts to make readyforwhatsnext s4 class. 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

```
write_scripts_to_mk_r4_cls(
      name_stub_1L_chr,
      name_pfx_1L_chr = "ready4_",
      output_dir_1L_chr = "data-raw",
      outp_sub_dir_1L_chr = NULL,
      class_desc_1L_chr = "",
      parent_cls_nm_1L_chr = NULL,
      slots_chr,
      type_chr,
      meaningful_nms_ls = NULL,
      vals_ls = NULL,
      allowed_vals_ls = NULL,
      clss_to_inc_chr = NULL,
      prototype_lup,
      nss_to_ignore_chr = NA_character_,
      req_pkgs_chr = NA_character_,
      names_must_match_ls = NULL,
      slots_of_dif_lnts_chr = NULL,
      print_set_cls_1L_lgl = TRUE,
      print_helper = TRUE,
      print_gtrs_strs_1L_lgl = TRUE,
      print_validator_1L_lgl = TRUE,
      print_meaningful_nms_ls_1L_lgl = TRUE,
      class_in_cache_cdn_1L_chr = "stop"
    )
Arguments
    name_stub_1L_chr
                     Name stub (a character vector of length one)
    name_pfx_1L_chr
                     Name prefix (a character vector of length one), Default: 'ready4_'
    output_dir_1L_chr
                     Output directory (a character vector of length one), Default: 'data-raw'
   outp_sub_dir_1L_chr
                     Output sub directory (a character vector of length one), Default: NULL
    class_desc_1L_chr
                     Class description (a character vector of length one), Default: "
   parent_cls_nm_1L_chr
                     Parent class name (a character vector of length one), Default: NULL
    slots_chr
                     Slots (a character vector)
    type_chr
                     Type (a character vector)
   meaningful_nms_ls
                     Meaningful names (a list), Default: NULL
                     Values (a list), Default: NULL
    vals_ls
    allowed_vals_ls
                     Allowed values (a list), Default: NULL
    clss_to_inc_chr
                     Classes to include (a character vector), Default: NULL
```

```
prototype_lup Prototype (a lookup table)
nss_to_ignore_chr
                  Namespaces to ignore (a character vector), Default: 'NA'
req_pkgs_chr
                  Req packages (a character vector), Default: 'NA'
names\_must\_match\_ls
                  Names must match (a list), Default: NULL
slots_of_dif_lnts_chr
                  Slots of different lengths (a character vector), Default: NULL
print_set_cls_1L_lgl
                  Print set class (a logical vector of length one), Default: TRUE
                  PARAM_DESCRIPTION, Default: TRUE
print_helper
print\_gtrs\_strs\_1L\_lgl
                  Print getters setters (a logical vector of length one), Default: TRUE
print_validator_1L_lgl
                  Print validator (a logical vector of length one), Default: TRUE
print_meaningful_nms_ls_1L_lgl
                  Print meaningful names list (a logical vector of length one), Default: TRUE
class_in_cache_cdn_1L_chr
                  Class in cache condition (a character vector of length one), Default: 'stop'
```

```
write_script_to_make_gnrc
```

Write script to make generic

Description

write_script_to_make_gnrc() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write script to make generic. 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

```
write_script_to_make_gnrc(
   write_file_ls,
   gnrc_exists_1L_lgl,
   gen_mthd_pair_ls,
   fn_name_1L_chr,
   fn_type_1L_chr = NA_character_,
   fn_outp_type_1L_chr = NA_character_,
   fn_title_1L_chr = NA_character_,
   class_nm_1L_chr = NA_character_,
   output_dir_1L_chr = NA_character_,
   overwrite_1L_lgl = F,
   s3_1L_lgl = F,
   write_1L_lgl = T,
   doc_in_class_1L_lgl = F
```

```
write_file_ls Write file (a list)
gnrc_exists_1L_lgl
                  Generic exists (a logical vector of length one)
gen_mthd_pair_ls
                  Generate method pair (a list)
fn_name_1L_chr Function name (a character vector of length one)
fn_type_1L_chr Function type (a character vector of length one)
fn_desc_1L_chr Function description (a character vector of length one), Default: 'NA'
fn_outp_type_1L_chr
                  Function output type (a character vector of length one), Default: 'NA'
fn_title_1L_chr
                  Function title (a character vector of length one), Default: 'NA'
class_nm_1L_chr
                  Class name (a character vector of length one), Default: 'NA'
output_dir_1L_chr
                  Output directory (a character vector of length one), Default: 'NA'
overwrite_1L_lgl
                  Overwrite (a logical vector of length one), Default: F
                  S3 (a logical vector of length one), Default: F
s3_1L_lgl
                  Write (a logical vector of length one), Default: T
write_1L_lgl
doc_in_class_1L_lgl
                  Document in class (a logical vector of length one), Default: F
```

```
write_script_to_make_mthd
```

Write script to make method

Description

write_script_to_make_mthd() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write script to make method. 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

```
write_script_to_make_mthd(
   write_file_ls,
   gen_mthd_pair_ls,
   class_nm_1L_chr,
   fn_name_1L_chr,
   fn_type_1L_chr,
   fn_desc_1L_chr = NA_character_,
   fn_outp_type_1L_chr = NA_character_,
   imports_chr,
   write_1L_lgl = T,
   append_1L_lgl = T,
   doc_in_class_1L_lgl = F
```

```
write_file_ls Write file (a list)
gen_mthd_pair_ls
                  Generate method pair (a list)
class_nm_1L_chr
                  Class name (a character vector of length one)
fn_name_1L_chr Function name (a character vector of length one)
fn_type_1L_chr Function type (a character vector of length one)
fn_desc_1L_chr Function description (a character vector of length one), Default: 'NA'
fn_outp_type_1L_chr
                  Function output type (a character vector of length one), Default: 'NA'
imports_chr
                  Imports (a character vector)
write_1L_lgl
                  Write (a logical vector of length one), Default: T
append_1L_lgl
                  Append (a logical vector of length one), Default: T
doc_in_class_1L_lgl
                  Document in class (a logical vector of length one), Default: F
```

```
write\_slot\_gtr\_str\_mthds \\ \textit{Write slot getter setter methods}
```

Description

write_slot_gtr_str_mthds() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write slot getter setter methods. 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_slot_gtr_str_mthds(
    slot_nm_1L_chr,
    set_only_1L_lgl,
    parent_cls_nm_1L_chr,
    class_nm_1L_chr,
    print_gtrs_strs_1L_lgl,
    output_dir_1L_chr,
    nss_to_ignore_chr,
    req_pkgs_chr
)
```

write_std_mthd 57

write_std_mthd

Write standard method

Description

write_std_mthd() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write standard method. 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_mthd(
    fn,
    fn_name_1L_chr,
    class_nm_1L_chr,
    fn_desc_chr,
    fn_title_1L_chr,
    fn_outp_type_1L_chr,
    pkg_nm_1L_chr,
    output_dir_1L_chr,
    signature_1L_chr = NA_character_,
    append_1L_lgl = T,
    first_1L_lgl = T
)
```

```
fn Function (a function)

fn_name_1L_chr Function name (a character vector of length one)

class_nm_1L_chr Class name (a character vector of length one)

fn_desc_chr Function description (a character vector)

fn_title_1L_chr Function title (a character vector of length one)

fn_outp_type_1L_chr Function output type (a character vector of length one)

pkg_nm_1L_chr Package name (a character vector of length one)
```

```
output_dir_1L_chr
Output directory (a character vector of length one)
signature_1L_chr
Signature (a character vector of length one), Default: 'NA'
append_1L_1gl Append (a logical vector of length one), Default: T
first_1L_1gl First (a logical vector of length one), Default: T
```

Description

write_to_delete_fls_with_ptrn() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write to delete files with pattern. 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_delete_fls_with_ptrn(dir_1L_chr, pattern_1L_chr)
```

Arguments

```
dir_1L_chr Directory (a character vector of length one)
pattern_1L_chr Pattern (a character vector of length one)
```

Description

write_to_delete_gnrc_fn_fls() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write to delete generic 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_to_delete_gnrc_fn_fls(x, output_dir_1L_chr)
```

```
x PARAM_DESCRIPTION
output_dir_1L_chr
Output directory (a character vector of length one)
```

write_to_mk_r4_cls 59

write_to_mk_r4_cls

Write to make readyforwhatsnext S4 class

Description

write_to_mk_r4_cls() is a Write function that writes a file to a specified local directory. Specifically, this function implements an algorithm to write to make readyforwhatsnext s4 class. 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_mk_r4_cls(
    class_nm_1L_chr,
    slots_chr,
    type_chr,
    pt_ls,
    parent_cls_nm_1L_chr,
    print_set_cls_1L_lgl,
    class_desc_1L_chr,
    output_file_class,
    clss_to_inc_chr,
    prototype_lup,
    helper_lgl = F,
    parent_ns_ls
)
```

```
class_nm_1L_chr
                  Class name (a character vector of length one)
                  Slots (a character vector)
slots_chr
type_chr
                  Type (a character vector)
pt_ls
                  Prototype (a list)
parent_cls_nm_1L_chr
                  Parent class name (a character vector of length one)
print_set_cls_1L_lgl
                  Print set class (a logical vector of length one)
class_desc_1L_chr
                  Class description (a character vector of length one)
output\_file\_class
                  PARAM_DESCRIPTION
clss_to_inc_chr
                  Classes to include (a character vector)
                  Prototype (a lookup table)
prototype_lup
helper_lgl
                  Helper (a logical vector), Default: F
parent_ns_ls
                  Parent namespace (a list)
```

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