Package ‘forge’
October 13, 2022

Type Package
Title Casting Values into Shape
Version 0.2.0
Description Helper functions with a consistent interface to coerce and verify the types and shapes of values for input checking.
License Apache License (>= 2.0)
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Description
These functions verify and attempt to coerce values into the specified types and shapes. If they are unsuccessful in the coercion, an error is thrown.

Usage

```r
cast_integer(x, n = NULL, allow_na = FALSE, allow_null = FALSE, id = NULL, return_id = FALSE)
cast_scalar_integer(x, allow_na = FALSE, allow_null = FALSE, id = NULL, return_id = FALSE)
cast_nullable_integer(x, n = NULL, allow_na = FALSE, id = NULL, return_id = FALSE)
cast_nullable_scalar_integer(x, allow_na = FALSE, id = NULL, return_id = FALSE)
cast_integer_list(x, n = NULL, allow_na = FALSE, allow_null = FALSE, id = NULL, return_id = FALSE)
cast_nullable_integer_list(x, n = NULL, allow_na = FALSE, id = NULL, return_id = FALSE)
cast_double(x, n = NULL, allow_na = FALSE, allow_null = FALSE, id = NULL, return_id = FALSE)
cast_scalar_double(x, allow_na = FALSE, allow_null = FALSE, id = NULL, return_id = FALSE)
cast_nullable_double(x, n = NULL, allow_na = FALSE, id = NULL, return_id = FALSE)
cast_nullable_scalar_double(x, allow_na = FALSE, id = NULL, return_id = FALSE)
cast_double_list(x, n = NULL, allow_na = FALSE, allow_null = FALSE, id = NULL, return_id = FALSE)
cast_nullable_double_list(x, n = NULL, allow_na = FALSE, id = NULL, return_id = FALSE)
cast_character(x, n = NULL, allow_na = FALSE, allow_null = FALSE, id = NULL, return_id = FALSE)
```
cast

id = NULL, return_id = FALSE)

cast_scalar_character(x, allow_na = FALSE, allow_null = FALSE,
  id = NULL, return_id = FALSE)

cast_nullable_character(x, n = NULL, allow_na = FALSE, id = NULL,
  return_id = FALSE)

cast_nullable_scalar_character(x, allow_na = FALSE, id = NULL,
  return_id = FALSE)

cast_character_list(x, n = NULL, allow_na = FALSE,
  allow_null = FALSE, id = NULL, return_id = FALSE)

cast_nullable_character_list(x, n = NULL, allow_na = FALSE,
  id = NULL, return_id = FALSE)

cast_string(x, allow_na = FALSE, allow_null = FALSE, id = NULL,
  return_id = FALSE)

cast_nullable_string(x, allow_na = FALSE, id = NULL,
  return_id = FALSE)

cast_string_list(x, n = NULL, allow_na = FALSE, allow_null = FALSE,
  id = NULL, return_id = FALSE)

cast_nullable_string_list(x, n = NULL, allow_na = FALSE, id = NULL,
  return_id = FALSE)

cast_logical(x, n = NULL, allow_na = FALSE, allow_null = FALSE,
  id = NULL, return_id = FALSE)

cast_scalar_logical(x, allow_na = FALSE, allow_null = FALSE,
  id = NULL, return_id = FALSE)

cast_nullable_logical(x, n = NULL, allow_na = FALSE, id = NULL,
  return_id = FALSE)

cast_nullable_scalar_logical(x, allow_na = FALSE, id = NULL,
  return_id = FALSE)

cast_logical_list(x, n = NULL, allow_na = FALSE, allow_null = FALSE,
  id = NULL, return_id = FALSE)

cast_nullable_logical_list(x, n = NULL, allow_na = FALSE, id = NULL,
  return_id = FALSE)

cast_choice(x, choices, allow_na = FALSE, allow_null = FALSE,
id = NULL, return_id = FALSE)

Arguments

x A vector.
n The required length of the vector. If NULL, the length is not checked.
allow_na Whether to allow NAs in the vector.
allow_null Whether to allow NULL.
id Name given to the input to aid the user in identifying the bad value.
return_id Whether to return the ID as an attribute. This should only be set to TRUE when piping the result to another forge function. Defaults to FALSE.
choices A character, numeric, or integer vector of allowed values.

Examples

# Cast a double vector to integer
cast_integer(c(1, 2))

# Cast a numeric to a string
cast_string(4.5)

# Cast an integer vector to a list of doubles
cast_double_list(1:4)

certify id = NULL, return_id = FALSE)

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Description

Checks that the input value satisfies specified conditions

Usage

certify(x, ..., allow_null = FALSE, id = NULL, return_id = FALSE)

gt(l)
gte(l)
l(t(u)
lte(u)

bounded(l = NULL, u = NULL, incl_lower = TRUE, incl_upper = TRUE)
Arguments

x  The value to be checked.

...  Conditions to be checked; should be functions that return TRUE/FALSE.

allow_null  Whether to allow null input.

id  Name given to the input to aid the user in identifying the bad value.

return_id  Whether to return the ID as an attribute. This should only be set to TRUE when piping the result to another forge function. Defaults to FALSE.

l  Lower bound for the inequality condition.

u  Upper bound for the inequality condition.

incl_lower  Whether to include the left endpoint.

incl_upper  Whether to include the right endpoint.
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