

Package ‘tidyplus’

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Title Additional 'tidyverse' Functions

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Description Provides functions such as `str_crush()`, `add_missing_column()`, `coalesce_data()` and `drop_na_all()` that complement 'tidyverse' functionality or functions that provide alternative behaviors such as `if_else2()` and `str_detect2()`.

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add_missing_column	<i>Add missing columns to a data frame</i>
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Description

This is a convenient way to add one more columns (if not already present) to an existing data frame. It is useful to ensure that all required columns are present in a data frame.

Usage

```
add_missing_column(
  .data,
  ...,
  .before = NULL,
  .after = NULL,
  .name_repair = c("check_unique", "unique", "universal", "minimal")
)
```

Arguments

.data	Data frame to append to.
...	<dynamic-dots> Name-value pairs, passed on to tibble() . All values must have the same size of .data or size 1.
.before, .after	One-based column index or column name where to add the new columns, default: after last column.
.name_repair	Treatment of problematic column names: <ul style="list-style-type: none"> • "minimal": No name repair or checks, beyond basic existence, • "unique": Make sure names are unique and not empty, • "check_unique": (default value), no name repair, but check they are unique, • "universal": Make the names unique and syntactic • a function: apply custom name repair (e.g., .name_repair = make.names for names in the style of base R). • A purrr-style anonymous function, see rlang::as_function() <p>This argument is passed on as repair to vctrs::vec_as_names(). See there for more details on these terms and the strategies used to enforce them.</p>

Details

It is wrapper on [tibble::add_column\(\)](#) that doesn't error if the column is already present.

Value

The original data frame with missing columns added if not already present.

See Also

[tibble::add_column\(\)](#)

Examples

```
data <- tibble::tibble(x = 1:3, y = 3:1)

tibble::add_column(data, z = -1:1, w = 0)
add_missing_column(data, z = -1:1, .before = "y")

# add_column errors if already present
try(tibble::add_column(data, x = 4:6))

# add_missing_column silently ignores
add_missing_column(data, x = 4:6)
```

coalesce_data

Coalesce Data

Description

Coalesce values in multiple columns by finding the first non-missing value at each position. Coalesced columns are removed.

Usage

```
coalesce_data(x, coalesce = list(), quiet = FALSE)
```

Arguments

x	A data frame.
coalesce	A uniquely named list of character vectors where the names are the new column names and the values are the names of the columns to coalesce. If a single value is provided for a column it is treated as a regular expression.
quiet	A flag specifying whether to provide messages.

Details

Coalescence is performed in the order specified in the coalesce argument such that a column produced by coalescence can be further coalesced.

Value

The original data frame with one or more columns coalesced into a new column.

See Also

[dplyr::coalesce\(\)](#)

Examples

```
data <- data.frame(x = c(1, NA, NA), y = c(NA, 3, NA), z = c(7, 8, 9), a = c(4, 5, 6))
coalesce_data(data, list(b = c("x", "y")), quiet = TRUE)
coalesce_data(data, list(z = c("y", "x"), d = c("z", "a")))
```

collapse_comments *Collapse Comments*

Description

Collapse comments coercing each element to a string (character scalar) and then collapsing into a single string using the '.' separator.

Usage

```
collapse_comments(...)
```

Arguments

... objects to be collapsed into a string.

Value

A string of the collapsed comments.

See Also

[unite_str\(\)](#)

Examples

```
collapse_comments("Saw fish", character(0), "Nice. .", NA_character_)

data <- data.frame(
  visit = c(1,1,2, 2),
  fish = 1:4,
  comment = c("Sunny day. ", "Skinny fish", "Lost boot", NA))

data |>
  dplyr::group_by(visit) |>
  dplyr::summarise(comment = collapse_comments(comment)) |>
  dplyr::ungroup()
```

drop_na_all	<i>Drop rows containing all missing values</i>
-------------	--

Description

This is a convenient way to drop uninformative rows from a data frame.

Usage

```
drop_na_all(data, ...)
```

Arguments

data	A data frame.
...	<tidy-select> Columns to inspect for missing values. If empty, all columns are used.

Value

The original data frame with rows for which all values are missing dropped.

See Also

[tidyr::drop_na](#) and [drop_uninformative_columns](#)

Examples

```
data <- tibble::tibble(  
  a = c(NA, NA, NA), b = c(1, 1, NA), c = c(2, NA, NA))  
  
drop_na_all(data)  
drop_na_all(data, a, c)
```

drop_uninformative_columns	<i>Drop uninformative columns from a data frame</i>
----------------------------	---

Description

This is a convenient way to drop columns which all have one value (missing or not) or if `na_distinct = FALSE` also drop columns which all have one value and/or missing values.

Usage

```
drop_uninformative_columns(data, na_distinct = TRUE)
```

Arguments

`data` A data frame.
`na_distinct` A flag specifying whether to treat missing values as distinct from other values.

Value

The original data frame with only informative columns.

Examples

```
data <- tibble::tibble(
  a = c(1,1,1), x = c(NA, NA, NA), b = c(1, 1, NA),
  z = c(1, 2, 2), e = c(1, 2, NA))

drop_uninformative_columns(data)
drop_uninformative_columns(data, na_distinct = FALSE)
```

`if_else2` *Vectorised if else.*

Description

Vectorised if else that if true returns first possibility otherwise returns second possibility (even if the condition is a missing value). When searching character vectors an alternative solution is to use [str_detect2\(\)](#).

Usage

```
if_else2(condition, true, false)
```

Arguments

`condition` Logical vector
`true, false` Values to use for TRUE and FALSE values of condition. They must be either the same length as condition, or length 1. They must also be the same type: `if_else()` checks that they have the same type and same class. All other attributes are taken from true.

Value

Where condition is TRUE, the matching value from true, where it's FALSE or NA, the matching value from false.

See Also

[ifelse\(\)](#) and [dplyr::if_else\(\)](#).

Examples

```
# consider the following data frame
data <- tibble::tibble(
  x = c(TRUE, FALSE, NA),
  y = c("x is false", NA, "hello"))

# with a single vector if_else2() behaves the same as the default call to if_else().
dplyr::mutate(data,
  y1 = dplyr::if_else(y != "x is false", "x is true", y),
  y2 = if_else2(y != "x is false", "x is true", y))

# however in the case of a second vector the use of
# if_else2() does not introduce missing values
dplyr::mutate(data,
  x1 = dplyr::if_else(stringr::str_detect(y, "x is false"), FALSE, x),
  x2 = if_else2(stringr::str_detect(y, "x is false"), FALSE, x))

# in the case of regular expression matching an alternative is to use
# str_detect2()
dplyr::mutate(data,
  x3 = dplyr::if_else(str_detect2(y, "x is false"), FALSE, x))
```

only

Extract the only distinct value from a vector

Description

Extracts the only distinct value from an atomic vector or throws an informative error if no values or multiple distinct values.

Usage

```
only(x, na_rm = FALSE)
```

Arguments

x	An atomic vector.
na_rm	A flag indicating whether to exclude missing values.

Details

only() is useful when summarizing a vector by group while checking the assumption that it is constant within the group.

Value

The only distinct value from a vector otherwise throws an error.

See Also

[dplyr::first\(\)](#)

Examples

```
only(c(1, 1))
only(c(NA, NA))
only(c(1, 1, NA), na_rm = TRUE)
try(only(character(0)))
try(only(c(1, NA)))
try(only(c(1, 2)))
```

replace_na_if

Conditional replacement of NAs with specified values

Description

Unlike [tidyr::replace_na\(\)](#), it is only defined for vectors.

Usage

```
replace_na_if(x, condition, true)
```

Arguments

x	Vector with missing values to modify.
condition	Logical vector
true	The replacement values where condition is TRUE.

Details

`replace_na_if()` is a wrapper on `if_else2(is.na(x) & condition, true, x)`

Value

A modified version of x that replaces any missing values where condition is TRUE with true.

See Also

[tidyr::replace_na\(\)](#) and [if_else2\(\)](#)

Examples

```
data <- tibble::tibble(
  x = c(TRUE, FALSE, NA),
  y = c("x is false", NA, "x is false"))

dplyr::mutate(data,
  x1 = tidyr::replace_na(x, FALSE),
  x3 = if_else2(is.na(x) & y == "x is false", FALSE, x),
  x4 = replace_na_if(x, y == "x is false", FALSE))
```

str_crush	<i>Remove whitespace from a string</i>
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Description

str_crush(), which removes all whitespace from a string, is the logical extension to [stringr::str_trim\(\)](#) and [stringr::str_squish\(\)](#).

Usage

```
str_crush(string)
```

Arguments

string A character vector.

Details

str_crush() is considered **too specialized** to be part of stringr.

Value

A character vector.

See Also

[stringr::str_trim\(\)](#) and [stringr::str_squish\(\)](#)

Examples

```
str_crush(" String with trailing, middle, and leading white space\t")
```

`str_detect2`*Detect the presence or absence of a pattern in a string.*

Description

Vectorised over `string` and `pattern`. Actually equivalent to `grepl(pattern, x)` as returns `FALSE` for NAs (unlike `stringr::str_detect()`). This behavior is useful when searching comments many of which are NA to indicate no comments present.

Usage

```
str_detect2(string, pattern, negate = FALSE)
```

Arguments

<code>string</code>	Input vector. Either a character vector, or something coercible to one.
<code>pattern</code>	Pattern to look for. The default interpretation is a regular expression, as described in stringi::stringi-search-regex . Control options with regex() . Match a fixed string (i.e. by comparing only bytes), using fixed() . This is fast, but approximate. Generally, for matching human text, you'll want coll() which respects character matching rules for the specified locale. Match character, word, line and sentence boundaries with boundary() . An empty pattern, "", is equivalent to <code>boundary("character")</code> .
<code>negate</code>	If TRUE, return non-matching elements.

Value

A logical vector.

See Also

[grepl\(\)](#) and [stringr::str_detect\(\)](#)

Examples

```
x <- c("b", NA, "ab")
pattern <- "^a"
grepl(pattern, x)
stringr::str_detect(x, pattern)
str_detect2(x, pattern)
```

unite_str	<i>Unite multiple character columns into one</i>
-----------	--

Description

Convenience function for combining character columns.

Usage

```
unite_str(data, col, ..., sep = ". ", remove = TRUE)
```

Arguments

data	A data frame.
col	The name of the new column, as a string or symbol. This argument is passed by expression and supports quasiquote (you can unquote strings and symbols). The name is captured from the expression with rlang::ensym() (note that this kind of interface where symbols do not represent actual objects is now discouraged in the tidyverse; we support it here for backward compatibility).
...	<tidy-select> Columns to unite
sep	Separator to use between values.
remove	If TRUE, remove input columns from output data frame.

Details

Blank values of "" are converted into missing values.

Value

The original data frame with the one or more columns combined as character vectors separated by a period.

See Also

[tidyr::unite\(\)](#) and [collapse_comments\(\)](#)

Examples

```
data <- tibble::tibble(x = c("good", "Saw fish.", "", NA), y = c("2021", NA, NA, NA))

# unite has poor handling of character vectors
tidyr::unite(data, "new", x, y, remove = FALSE)

unite_str(data, "new", x, y, remove = FALSE)
```

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