

Package ‘ftExtra’

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Title Extensions for 'Flextable'

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Description Build display tables easily by extending the functionality of the 'flextable' package. Features include spanning header, grouping rows, parsing markdown and so on.

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URL <https://ftextra.atusy.net>, <https://github.com/atusy/ftExtra>

BugReports <https://github.com/atusy/ftExtra/issues>

Imports dplyr (>= 1.0.0), jsonlite, flextable (>= 0.8.3), tidyr, purrr (>= 1.0.0), magrittr, rmarkdown, rlang, stringr, tibble, tidyselect (>= 1.1.0), xfun, yaml, vctrs

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SystemRequirements pandoc (>= 2.0.6) - <http://pandoc.org>

Config/testthat/edition 3

NeedsCompilation no

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as_flextable_methods *Method to transform objects into flextables*

Description

This is a convenient function to let users create flextable bindings from any objects. Users should consult documentation of corresponding method to understand the details and see what arguments can be used.

Usage

```
## S3 method for class 'grouped_df'
as_flextable(
  x,
  groups_to = c("titles", "merged", "asis"),
  groups_pos = c("left", "asis"),
  groups_arrange = NULL,
  ...
)

## S3 method for class 'data.frame'
as_flextable(x, col_keys = names(x), ...)
```

Arguments

x	object to be transformed as flextable
groups_to	One of titles, merged, or asis. See examples and vignette("group-rows") for the result.
groups_pos	When groups_to = "merged", grouping columns are reordered according to group_pos. Choices are left (default) or asis.
groups_arrange	TRUE automatically arranges grouping columns by <code>dplyr::arrange()</code> . Specify FALSE to keep the arrangement of the input data frame. The default value is NULL which implies FALSE to keep the backward compatibility, but will be TRUE in the future.
...	arguments for custom methods

`col_keys` columns names/keys to display. If some column names are not in the dataset, they will be added as blank columns by default.

See Also

Other `as_flextable` methods: `as_flextable.data.frame()`, `as_flextable.gam()`, `as_flextable.glm()`, `as_flextable.grouped_data()`, `as_flextable.htest()`, `as_flextable.kmeans()`, `as_flextable.lm()`, `as_flextable.merMod()`, `as_flextable.pam()`, `as_flextable.summarizer()`, `as_flextable.table()`, `as_flextable.tabular()`, `as_flextable.tabulator()`, `as_flextable.xtable()`

Examples

```
# For grouped_df
grouped_df <- iris %>%
  dplyr::group_by(Species) %>%
  dplyr::slice(1, 2)

as_flextable(grouped_df, groups_to = "titles")
as_flextable(grouped_df, groups_to = "titles", hide_grouplabel = TRUE)
as_flextable(grouped_df, groups_to = "merged")
as_flextable(grouped_df, groups_to = "asis")
# For data.frame
iris %>%
  head() %>%
  as_flextable()
```

as_paragraph_md

Convert a character vector into markdown paragraph(s)

Description

Parse markdown cells and returns the "paragraph" object.

Usage

```
as_paragraph_md(
  x,
  auto_color_link = "blue",
  md_extensions = NULL,
  pandoc_args = NULL,
  metadata = rmarkdown::metadata,
  replace_na = "",
  .from = "markdown+autolink_bare_uris-raw_html-raw_attribute",
  .footnote_options = NULL,
  ...
)
```

Arguments

x	A character vector.
auto_color_link	A color of the link texts.
md_extensions	Pandoc's extensions. Although it is prefixed with "md", extensions for any formats specified to .from can be used. See https://www.pandoc.org/MANUAL.html#extensions for details.
pandoc_args	Additional command line options to pass to pandoc
metadata	A list of metadata, typically the parsed result of the YAML front matter (default: rmarkdown::metadata). This value is used iff the .from argument specifies the input format that supports the YAML metadata blocks.
replace_na	A value to replace NA (default = "").
.from	Pandoc's --from argument (default: 'markdown+autolink_bare_uris').
.footnote_options	Options for footnotes generated by footnote_options().
...	Arguments passed to internal functions.

Examples

```

if (rmarkdown::pandoc_available("2.0.6")) {
  library(flextable)
  ft <- flextable(
    data.frame(
      x = c("**foo** bar", "***baz***", "*qux*"),
      stringsAsFactors = FALSE
    )
  )
  ft <- compose(ft, j = "x", i = 1:2, value = as_paragraph_md(x))
  autofit(ft)
}

```

colformat_md

Format character columns as markdown text

Description

Format character columns as markdown text

Usage

```

colformat_md(
  x,
  j = where(is.character),
  part = c("body", "header", "all"),
  auto_color_link = "blue",

```

```

md_extensions = NULL,
pandoc_args = NULL,
metadata = rmarkdown::metadata,
replace_na = "",
.from = "markdown+autolink_bare_uris-raw_html-raw_attribute",
.footnote_options = footnote_options(),
.sep = "\n\n"
)

```

Arguments

x	A flextable object
j	Columns to be treated as markdown texts. Selection can be done by the semantics of <code>dplyr::select()</code> .
part	One of "body", "header", and "all". If "all", formatting proceeds in the order of "header" and "body".
auto_color_link	A color of the link texts.
md_extensions	Pandoc's extensions. Although it is prefixed with "md", extensions for any formats specified to <code>.from</code> can be used. See https://www.pandoc.org/MANUAL.html#extensions for details.
pandoc_args	Additional command line options to pass to pandoc
metadata	A list of metadata, typically the parsed result of the YAML front matter (default: <code>rmarkdown::metadata</code>). This value is used iff the <code>.from</code> argument specifies the input format that supports the YAML metadata blocks.
replace_na	A value to replace NA (default = "").
.from	Pandoc's <code>--from</code> argument (default: 'markdown+autolink_bare_uris').
.footnote_options	Options for footnotes generated by <code>footnote_options()</code> .
.sep	A separator of paragraphs (default: "\n\n")

Examples

```

if (rmarkdown::pandoc_available("2.0.6")) {
  d <- data.frame(
    x = c("**bold**", "*italic*"),
    y = c("^superscript^", "~subscript~"),
    z = c("***^ft^~Extra~** is*", "*Cool*")
  )
  colformat_md(flextable::flextable(d))
}

```

footnote_options *Options for footnotes*

Description

Configure options for footnotes.

Usage

```
footnote_options(
  ref = c("1", "a", "A", "i", "I", "*"),
  prefix = "",
  suffix = "",
  start = 1L,
  max = 26L,
  inline = FALSE,
  sep = "; "
)
```

Arguments

ref	A string or a function that defines symbols of footnote references. If the value is string, it must be one of the "1", "a", "A", "i", "I", or "*". If a function, keep in mind this is an experimental feature. It receives 3 parameters (n, part, and footer) and returns character vectors which will further be processed as markdown. See examples for the details.
prefix, suffix	Pre- and suf-fixes for ref (default: ""). These parameters are used if and only if ref is a character.
start	A starting number of footnotes.
max	A max number of footnotes used only when ref is "a" or "A".
inline	whether to add footnote on same line as previous footnote or not
sep	used only when inline = TRUE, character string to use as a separator between footnotes.

Value

An environment

Examples

```
# A example flextable with unprocessed markdown footnotes
ft <- as_flextable(tibble::tibble(
  "header1^[note a]" = c("x^[note 1]", "y"),
  "header2" = c("a", "b^[note 2]"))
))
```

```

# Render all footnotes in the same format.
if (rmarkdown::pandoc_available()) {
  ft %>%
    colformat_md(
      part = "all",
      .footnote_options = footnote_options("1", start = 1L)
    )
}

# Use a user-defined function to format footnote symbols
if (rmarkdown::pandoc_available()) {
  # a function to format symbols of footnote references
  ref <- function(n, part, footer) {
    # Change symbols by context
    # - header: letters (a, b, c, ...)
    # - body: integers (1, 2, 3, ...)
    s <- if (part == "header") {
      letters[n]
    } else {
      as.character(n)
    }

    # Suffix symbols with ": " (a colon and a space) in the footer
    if (footer) {
      return(paste0(s, ":\ "))
    }

    # Use superscript in the header and the body
    return(paste0("^", s, "^"))
  }

  # apply custom format of symbols
  ft %>%
    # process header first
    colformat_md(
      part = "header", .footnote_options = footnote_options(ref = ref)
    ) %>%
    # process body next
    colformat_md(
      part = "body", .footnote_options = footnote_options(ref = ref)
    ) %>%
    # tweak width for visibility
    flextable::autofit(add_w = 0.2)
}

```

separate_header

Separate the header based on delimiters

Description

Separate the header based on delimiters

Usage

```
separate_header(x, sep = "[_\\.]", theme_fun = NULL, ...)
```

Arguments

x	A flextable object‘
sep	Separator between columns. If character, sep is interpreted as a regular expression. The default value is a regular expression that matches any sequence of non-alphanumeric values. If numeric, sep is interpreted as character positions to split at. Positive values start at 1 at the far-left of the string; negative value start at -1 at the far-right of the string. The length of sep should be one less than into.
theme_fun	A flextable theme function. When NULL (default), the value is resolved by flextable::get_flextable_defaults().
...	Passed to theme_fun

Examples

```
iris %>%
  as_flextable() %>%
  separate_header()
```

span_header

Span the header based on delimiters

Description

Span the header based on delimiters

Usage

```
span_header(x, sep = "[_\\.]", theme_fun = NULL, ...)
```

Arguments

x	A flextable object‘
sep	Separator between columns. If character, sep is interpreted as a regular expression. The default value is a regular expression that matches any sequence of non-alphanumeric values. If numeric, sep is interpreted as character positions to split at. Positive values start at 1 at the far-left of the string; negative value start at -1 at the far-right of the string. The length of sep should be one less than into.
theme_fun	A flextable theme function. When NULL (default), the value is resolved by flextable::get_flextable_defaults().
...	Passed to theme_fun

Examples

```
iris %>%  
  as_flextable() %>%  
  span_header()
```

with_blanks*Specify blank columns easily via col_keys*

Description

Specify blank columns easily via col_keys

Usage

```
with_blanks(after = NULL, before = NULL)
```

Arguments

after, before Blank columns are added after/before the selected columns. Selections can be done by the semantics of `dplyr::select`.

Examples

```
iris %>%  
  as_flextable(col_keys = with_blanks(dplyr::ends_with("Width")))
```

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