Package: openxlsx2Extras (via r-universe)

November 11, 2024

Title Extra Functions for the openxlsx2 package

Version 0.0.0.9000

Description Extends the openxlsx2 package with wrapper and helper functions designed to add new features and options when working with Excel workbooks.

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URL https://github.com/elipousson/openxlsx2Extras,
https://elipousson.github.io/openxlsx2Extras/

BugReports https://github.com/elipousson/openxlsx2Extras/issues

Imports cli, fs, lifecycle, openxlsx2, purrr, rlang, vctrs

Suggests gt, marquee, withr

Encoding UTF-8

Language en-US

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.2

Config/pak/sysreqs make libicu-dev

Repository https://elipousson.r-universe.dev

RemoteUrl https://github.com/elipousson/openxlsx2Extras

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Contents

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fmt_marquee_txt   *Use* marquee::marquee_parse() *to format Markdown text*

Description

[Experimental]

fmt_marquee_txt() uses marquee::marquee_parse() and openxlsx2::fmt_txt() to format Markdown text.

Usage

```
fmt_marquee_txt(
  text,
  ...,
  style = marquee::classic_style(),
  ignore_html = TRUE
)
```

Arguments

text	A character string. The core quality of markdown is that any text is valid markdown so there is no restrictions on the content
...	Ignored at this time. For future use.
style	A style set such as classic_style() that defines how the text should be rendered
ignore_html	Should HTML code be removed from the output

Examples

```
fmt_marquee_txt(
  "# ABC

  abc"
)
```

| read_xlsx_ext | *Create a data frame from a Workbook (with extra features)* |

Description

[Experimental]

[read_xlsx_ext()](#) uses [openxlsx2::read_xlsx()](#) but allows use of a name repair argument (″unique″ by default) to avoid blank ″″ or NA values for column names.

Usage

```
read_xlsx_ext(file, ..., repair = "unique")
```

Arguments

file   An xlsx file, [wbWorkbook](#) object or URL to xlsx file.

...   Arguments passed on to [openxlsx2::read_xlsx](#)

> sheet Either sheet name or index. When missing the first sheet in the workbook is selected.
>
> start_row first row to begin looking for data.
>
> start_col first column to begin looking for data.
>
> row_names If TRUE, the first col of data will be used as row names.
>
> col_names If TRUE, the first row of data will be used as column names.
>
> skip_empty_rows If TRUE, empty rows are skipped.
>
> skip_empty_cols If TRUE, empty columns are skipped.
>
> rows A numeric vector specifying which rows in the xlsx file to read. If NULL, all rows are read.
>
> cols A numeric vector specifying which columns in the xlsx file to read. If NULL, all columns are read.
>
> detect_dates If TRUE, attempt to recognize dates and perform conversion.
>
> na.strings A character vector of strings which are to be interpreted as NA. Blank cells will be returned as NA.
>
> na.numbers A numeric vector of digits which are to be interpreted as NA. Blank cells will be returned as NA.
>
> fill_merged_cells If TRUE, the value in a merged cell is given to all cells within the merge.
>
> named_region Character string with a named_region (defined name or table). If no sheet is selected, the first appearance will be selected. See [wb_get_named_regions()](#)
>
> check_names If TRUE then the names of the variables in the data frame are checked to ensure that they are syntactically valid variable names.
>
> show_hyperlinks If TRUE instead of the displayed text, hyperlink targets are shown.

repair   Either a string or a function. If a string, it must be one of `"check_unique"`,
                        `"minimal"`, `"unique"`, `"universal"`, `"unique_quiet"`, or `"universal_quiet"`.
                        If a function, it is invoked with a vector of minimal names and must return min-
                        imal names, otherwise an error is thrown.

- Minimal names are never `NULL` or `NA`. When an element doesn't have a
  name, its minimal name is an empty string.
- Unique names are unique. A suffix is appended to duplicate names to make
  them unique.
- Universal names are unique and syntactic, meaning that you can safely use
  the names as variables without causing a syntax error.

                        The `"check_unique"` option doesn't perform any name repair. Instead, an error
                        is raised if the names don't suit the `"unique"` criteria.

                        The options `"unique_quiet"` and `"universal_quiet"` are here to help the user
                        who calls this function indirectly, via another function which exposes `repair`
                        but not `quiet`. Specifying `repair = "unique_quiet"` is like specifying `repair = "unique"`, `quiet = TI`
                        When the `"*_quiet"` options are used, any setting of `quiet` is silently overrid-
                        den.

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set_excel_fmt_class   *Prepare a data frame with Excel style class values for formatting by*
                             openxlsx2

Description

[Experimental]

Usage

```
set_excel_fmt_class(data, cols, fmt_class = "currency", multiple = TRUE)
```

Arguments

data   A data frame with columns to format.

cols   Column names or numbers to modify.

fmt_class   Excel style class, one of: c("currency", "accounting", "hyperlink", "percent-
                        age", "scientific", "formula"). Length is recycled to match length of cols using
                        [vctrs::vec_recycle()](#).

multiple   Whether `arg` may contain zero or several values.

Details

[set_excel_fmt_class()](#) applies a style to each specified column. See the openxlsx2 documenta-
tion for more information on this feature: https://janmarvin.github.io/openxlsx2/articles/openxlsx2_style_manual.html#numfmts2

---

wb_add_data_ext   *Add data using* openxlsx2::wb_add_data() *with extra features*

Description

[Experimental]

wb_add_data_ext() extends openxlsx2::wb_add_data() to add data to a workbook with special handling for sf input objects and labelled data.

Usage

```
wb_add_data_ext(
  wb,
  x,
  ...,
  start_row = 1,
  geometry = c("drop", "coords", "wkt"),
  labels = c("drop", "row_before"),
  call = caller_env()
)
```

Arguments

wb	A Workbook object containing a worksheet.
x	Object to be written. For classes supported look at the examples.
...	Arguments passed on to openxlsx2::wb_add_data
	sheet The worksheet to write to. Can be the worksheet index or name.
	dims Spreadsheet cell range that will determine start_col and start_row: "A1", "A1:B2", "A:B"
	start_col A vector specifying the starting column to write x to.
	array A bool if the function written is of type array
	col_names If TRUE, column names of x are written.
	row_names If TRUE, the row names of x are written.
	with_filter If TRUE, add filters to the column name row. NOTE: can only have one filter per worksheet.
	name The name of a named region if specified.
	sep Only applies to list columns. The separator used to collapse list columns to a character vector e.g. sapply(x$list_column, paste, collapse = sep).
	apply_cell_style Should we write cell styles to the workbook
	remove_cell_style keep the cell style?
	na.strings Value used for replacing NA values from x. Default looks if options(openxlsx2.na.strings) is set. Otherwise na_strings() uses the special #N/A value within the workbook.

inline_strings write characters as inline strings

enforce enforce that selected dims is filled. For this to work, dims must match x

start_row	A vector specifying the starting row to write x to.
geometry	String, one of "drop" (default), "coords", or "wkt". Both "coords" and "wkt" are not yet supported.
labels	Method for handling column labels. "drop" (default) or "row_before". If "row_before", insert column labels in the row before the column names.
call	The execution environment of a currently running function, e.g. caller_env(). The function will be mentioned in error messages as the source of the error. See the call argument of [abort()](#) for more information.

wb_add_marquee_text   *Add Markdown formatted text to a Workbook*

Description

[Experimental]

[wb_add_marquee_text()](#) uses [fmt_marquee_txt()](#) to add Markdown formatted text to a Workbook. [openxlsx2::wb_set_col_widths()](#) is applied to the workbook to adjust widths for the specified columns. Set widths = NULL to disable this functionality.

Usage

```
wb_add_marquee_text(
  wb = NULL,
  text,
  sheet = current_sheet(),
  dims = NULL,
  ...,
  cols = 1,
  widths = "auto"
)
```

Arguments

wb	A Workbook object containing a worksheet.
text	A character string. The core quality of markdown is that any text is valid markdown so there is no restrictions on the content
sheet	The worksheet to write to. Can be the worksheet index or name.
dims	Spreadsheet cell range that will determine start_col and start_row: "A1", "A1:B2", "A:B"
...	Arguments passed on to [fmt_marquee_txt](#)

style A style set such as classic_style() that defines how the text should
be rendered

ignore_html Should HTML code be removed from the output

cols   Indices of cols to set/remove column widths.

widths   Width to set cols to specified column width or "auto" for automatic sizing.
                widths is recycled to the length of cols. openxlsx2 sets the default width is
                8.43, as this is the standard in some spreadsheet software. See **Details** for gen-
                eral information on column widths.

Examples

```
library(openxlsx2)

wb_workbook() |>
  wb_add_worksheet() |>
  wb_add_marquee_text(
    text = "
# Heading 1

Example text.

~~Strikethrough text~~

## Heading 2

- Bulleted list item 1
  - Nested bullet
- Bulleted list item 2"
  )
```

---

wb_save_ext   *Save a workboook object to file while filling file name from assigned*
                               workbook title

Description

[Experimental]

wb_save_ext() is a helper function that fills in the file name when saving based on the XSLX title.
This function is not stable and may change in the future.

Usage

```
wb_save_ext(wb, file = NULL, overwrite = TRUE, ...)
```

Arguments

`wb`	A wbWorkbook object to write to file
`file`	A path to save the workbook to
`overwrite`	If `FALSE`, will not overwrite when `file` already exists.
`...`	Arguments passed on to `openxlsx2::wb_save`
	`path` Deprecated argument. Please use `file` in new code.

Examples

```
library(openxlsx2)

withr::with_tempdir({
  wb_workbook(
    title = "Title used for output file"
  ) |>
    wb_add_worksheet() |>
    wb_save_ext()

  fs::dir_ls()
})
```

---

write_xlsx_ext   *Write data to an xlsx file with additional features*

Description

[Experimental]

`write_xlsx_ext()` wraps `wb_add_data_ext()` to provide an equivalent to `openxlsx2::write_xlsx()` with better support for sf and labelled data. Arguments passed to `openxlsx2::wb_workbook()` are ignored if x is a workbook instead of a data frame.

Usage

```
write_xlsx_ext(
  x,
  file = NULL,
  as_table = FALSE,
  ...,
  creator = NULL,
  title = NULL,
  subject = NULL,
  category = NULL,
  datetime_created = Sys.time(),
  theme = NULL,
  keywords = NULL,
```

```
    start_row = 1,
    overwrite = TRUE,
    geometry = c("drop", "coords", "wkt"),
    labels = c("drop", "row_before"),
    call = caller_env()
)
```

Arguments

x	An object or a list of objects that can be handled by [wb_add_data()](#) to write to file.
file	An optional xlsx file name. If no file is passed, the object is not written to disk and only a workbook object is returned.
as_table	If TRUE, will write as a data table, instead of data.
...	Arguments passed on to [wb_workbook](#), [wb_add_worksheet](#), [wb_add_data_table](#), [wb_add_data](#), [wb_freeze_pane](#), [wb_set_col_widths](#), [wb_save](#)
	creator Creator of the workbook (your name). Defaults to login username or options("openxlsx2.creator") if set.
	sheet A name for the new worksheet
	grid_lines A logical. If FALSE, the worksheet grid lines will be hidden.
	tab_color Color of the sheet tab. A [wb_color()](#), a valid color (belonging to grDevices::colors()) or a valid hex color beginning with "#".
	zoom The sheet zoom level, a numeric between 10 and 400 as a percentage. (A zoom value smaller than 10 will default to 10.)
	total_row logical. With the default FALSE no total row is added.
	start_col A vector specifying the starting column to write x to.
	start_row A vector specifying the starting row to write x to.
	col_names If TRUE, column names of x are written.
	row_names If TRUE, the row names of x are written.
	na.strings Value used for replacing NA values from x. Default looks if options(openxlsx2.na.string) is set. Otherwise [na_strings()](#) uses the special #N/A value within the workbook.
	first_active_row Top row of active region
	first_active_col Furthest left column of active region
	first_row If TRUE, freezes the first row (equivalent to first_active_row = 2)
	first_col If TRUE, freezes the first column (equivalent to first_active_col = 2)
	widths Width to set cols to specified column width or "auto" for automatic sizing. widths is recycled to the length of cols. openxlsx2 sets the default width is 8.43, as this is the standard in some spreadsheet software. See **Details** for general information on column widths.
	overwrite If FALSE, will not overwrite when file already exists.
creator	Creator of the workbook (your name). Defaults to login username or options("openxlsx2.creator") if set.

title, subject, category, keywords

        Additional workbook properties passed to [openxlsx2::wb_workbook()](). Ig-
        nored (with creator and title) if x is a workbook instead of a data frame.

datetime_created

        The time of the workbook is created

theme   Optional theme identified by string or number. See **Details** for options.

start_row   A vector specifying the starting row to write x to.

overwrite   If FALSE, will not overwrite when file already exists.

geometry   String, one of "drop" (default), "coords", or "wkt". Both "coords" and "wkt" are
                not yet supported.

labels   Method for handling column labels. "drop" (default) or "row_before". If "row_before",
                insert column labels in the row before the column names.

call   The execution environment of a currently running function, e.g. caller_env().
                The function will be mentioned in error messages as the source of the error. See
                the call argument of [abort()]() for more information.

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