

Package ‘ReporteRs’

November 6, 2016

Type Package

Title Microsoft Word and PowerPoint Documents Generation

Version 0.8.7

Description Create 'Microsoft Word' document (≥ 2007), 'Microsoft PowerPoint' document (≥ 2007) and 'HTML' documents from R. There are several features to let you format and present R outputs ; e.g. Editable Vector Graphics, functions for complex tables reporting, reuse of corporate template document. You can use the package as a tool for fast reporting and as a tool for reporting automation. The package does not require any installation of Microsoft product to be able to write Microsoft files.

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Depends R (≥ 3.0), ReporteRsjars ($\geq 0.0.2$)

Imports grDevices, rJava, utils, rvg ($\geq 0.1.1$), xml2, gdtools, png, R.utils, knitr, shiny

Suggests ggplot2, jpeg, bmp, testthat, magrittr, rmarkdown

SystemRequirements java (≥ 1.6)

URL <http://davidgohel.github.io/ReporteRs/index.html>,
<http://groups.google.com/group/reporters-package>

BugReports <https://github.com/davidgohel/ReporteRs/issues>

RoxygenNote 5.0.1.9000

NeedsCompilation no

Author David Gohel [aut, cre],
Bootstrap [ctb, cph] (Bootstrap development team),
jQuery [ctb, cph] (The jQuery Foundation)

Maintainer David Gohel <david.gohel@lysis-consultants.fr>

Repository CRAN

Date/Publication 2016-11-06 00:23:39

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Description

ReporteRs lets you create Microsoft Word, Microsoft PowerPoint and html documents.

Details

To get an r document object:

- `docx` Create a Microsoft Word document object
- `pptx` Create a Microsoft PowerPoint document object
- `bsdoc` Create an HTML document object (deprecated)

The following functions can be used whatever the output format is (docx, pptx, bsdoc).

- `addTitle` Add a title
- `addFlexTable` Add a table (new)
- `addPlot` Add plots
- `addImage` Add external images
- `addParagraph` Add paragraphs of text
- `addRScript` Add an r script
- `writeDoc` Write the document into a file or a directory

ReporteRs comes with an object of class `pot` to let you handle text output and format. You can associate a text with formats (font size, font color, etc.), with an hyperlink or with a `Footnote` as a reference note.

ReporteRs comes also with an object of class `FlexTable` that let you design and format tabular outputs.

Default values:

With ReporteRs, some options can be used to reduce usage of some parameters:

- `"ReporteRs-default-font"` Default font family to use (default to "Helvetica"). This will be used as default values for argument `fontname` of `addPlot` and argument `font.family` of `pot`.
- `"ReporteRs-fontsize"` Default font size to use (default to 11). This will be used as default values for argument `pointsize` of `addPlot` and argument `font.size` of `pot`.
- `"ReporteRs-list-definition"` see `list.settings`.
- `"ReporteRs-locale.language"` language encoding (for html objects). Default to "en".
- `"ReporteRs-locale.region"` region encoding (for html objects). Default to "US".

Note

Examples are in a dontrun section as they are using font that may be not available on the host machine. Default font is Helvetica, it can be modified with option `ReporteRs-default-font`. To run an example with 'Arial' default font, run first

```
options("ReporteRs-default-font" = "Arial")
```

Author(s)

David Gohel <david.gohel@lysis-consultants.fr>

Examples

```
options("ReporteRs-fontsize"=10, "ReporteRs-default-font"="Helvetica")
numbering.pattern = c( "%1.", "%1. %2.", "%1. %2. %3.",
  "%4.", "%5.", "%6.", "%7.", "%8.", "%9." )

ordered.formats = rep( c( "decimal", "upperRoman", "upperLetter"), 3 )

unordered.formats = rep( c( "square", "disc", "circle"), 3 )

left.indent = seq( from = 0, by = 0.5, length.out = 9)

options("ReporteRs-list-definition" = list(
  ol.left = left.indent,
  ol.hanging = rep( 0.4, 9 ),
  ol.format = ordered.formats,
  ol.pattern = numbering.pattern,
  ul.left = left.indent,
  ul.hanging = rep( 0.4, 9 ),
  ul.format = unordered.formats
)
)
```

+.pot

pot concatenation

Description

"+" function is to be used for concatenation of [pot](#) elements. Concatenation of 2 pot objects returns a pot (of length 2).

Usage

```
## S3 method for class 'pot'
e1 + e2
```

Arguments

- e1 a pot object or a character (vector of length 1).
- e2 a pot object or a character (vector of length 1).

Details

at least one of the two objects must be a pot object. If one of the 2 parameters is a simple string, it is converted as a pot object with no associated format ; therefore, document default document style will be used (see [addParagraph](#)).

See Also

[addParagraph](#)

Examples

```
pot("My tailor", textProperties(color="red") ) + " is " + pot("rich"
, textProperties(font.weight="bold") )
```

add.pot

add a paragraph to an existing set of paragraphs of text

Description

add a paragraph to an existing set of paragraphs of text ([set_of_paragraphs](#) object).

Usage

```
add.pot(x, value)
```

Arguments

- x set_of_paragraphs object
- value pot object to add as a new paragraph

See Also

[set_of_paragraphs](#), [pot](#)

Examples

```
pot1 = pot("My tailor", textProperties(color="red") ) + " is " + pot("rich"
, textProperties(font.weight="bold") )
my.pars = set_of_paragraphs( pot1 )
pot2 = pot("Cats", textProperties(color="red") ) + " and " + pot("Dogs"
, textProperties(color="blue") )
my.pars = add.pot( my.pars, pot2 )
```

addCodeBlock	<i>Add code block into a document object</i>
--------------	--

Description

Add a code block into a document object

Usage

```
addCodeBlock(doc, file, text, ...)

## S3 method for class 'docx'
addCodeBlock(doc, file, text, par.properties = parProperties(),
  text.properties = textProperties(color = "#A7947D"), bookmark, ...)

## S3 method for class 'bsdoc'
addCodeBlock(doc, file, text,
  par.properties = parProperties(), text.properties = textProperties(color =
  "#A7947D"), ...)

## S3 method for class 'pptx'
addCodeBlock(doc, file, text, par.properties = parProperties(),
  text.properties = textProperties(color = "#A7947D"), append = FALSE, ...)
```

Arguments

doc	document object
file	script file. Not used if text is provided.
text	character vector. The text to parse. Not used if file is provided.
...	further arguments passed to other methods
par.properties	code block paragraph properties. An object of class parProperties
text.properties	code block text properties. An object of class textProperties
bookmark	Only for docx. A character value ; id of the Word bookmark to replace by the script. optional. See bookmark .
append	Only for pptx. boolean default to FALSE. If TRUE, paragraphs will be appened in the current shape instead of beeing sent into a new shape. Paragraphs can only be appended on shape containing paragraphs (i.e. you can not add paragraphs after a FlexTable).

Value

a document object

See Also[docx](#), [pptx](#)**Examples**

```
cb <- "ls -a\nwhich -a ls"

options( "ReporteRs-fontsize" = 11 )

# docx example -----
doc = docx( )
doc <- addCodeBlock( doc, text = cb )
writeDoc( doc, file = "ex_codeblock.docx" )

# pptx example -----
doc = pptx( )
doc = addSlide( doc, slide.layout = "Title and Content" )
doc <- addCodeBlock( doc, text = cb )
writeDoc( doc, file = "ex_codeblock.pptx" )
```

addColumnBreak	<i>Add a column break into a section</i>
----------------	--

Description

Add a column break into a section

Usage

```
addColumnBreak(doc, ...)
```

```
## S3 method for class 'docx'
addColumnBreak(doc, ...)
```

Arguments

doc	document object
...	further arguments passed to other methods

Details

addColumnBreak only works with docx documents.

Value

a document object

See Also[docx, addSection](#)**Examples**

```

doc.filename = "add_col_break.docx"
doc = docx( )
doc = addSection(doc, ncol = 2, columns.only = TRUE )
doc = addParagraph( doc = doc, "Text 1.", "Normal" )
doc = addColumnBreak(doc )
doc = addParagraph( doc = doc, "Text 2.", "Normal" )

writeDoc( doc, file = doc.filename )

```

addDate*Insert a date*

Description

Insert a date into a document object

Usage

```
addDate(doc, ...)
```

```

## S3 method for class 'pptx'
addDate(doc, value, str.format = "%Y-%m-%d", ...)

```

Arguments

doc	document object
...	further arguments passed to other methods
value	character value to add into the date shape of the current slide. optional. If missing current date will be used.
str.format	character value to use to format current date (if value is missing).

Details

addDate only works for pptx documents.

Value

a document object

See Also[pptx, addFooter, addPageNumber](#)

Examples

```

doc.filename = "addDate_example.pptx"

options( "ReporteRs-fontsize" = 24 )
doc = pptx( title = "title" )
doc = addSlide( doc, slide.layout = "Title Slide" )
#set the main title
doc = addTitle( doc, "Presentation title" )
#set the sub-title
doc = addSubtitle( doc , "This document is generated with ReporteRs.")

## add a date on the current slide
doc = addDate( doc )

doc = addSlide( doc, slide.layout = "Title and Content" )
## add a page number on the current slide but not
## the default text (slide number)
doc = addDate( doc, "Dummy date" )

writeDoc( doc, file = doc.filename )

```

addDocument

Add an external document into a document object

Description

Add an external document into a document object

Usage

```

addDocument(doc, filename, ...)

## S3 method for class 'docx'
addDocument(doc, filename, ...)

```

Arguments

doc	document object
filename	"character" value, complete filename of the external file
...	further arguments passed to other methods

Details

ReporteRs does only copy the document as an external file. Headers and footers are also imported and displayed. This function is not to be used to merge documents.

Value

a document object

See Also

[docx](#)

Examples

```
## Not run:
doc.filename <- "addDocument_example.docx"
# set default font size to 10
options( "ReporteRs-fontsize" = 10 )

doc2embed <- docx( )
img.file <- file.path( Sys.getenv("R_HOME"),
                      "doc", "html", "logo.jpg" )
if( file.exists(img.file) && requireNamespace("jpeg", quietly = TRUE) ){
  dims <- attr( jpeg::readJPEG(img.file), "dim" )

  doc2embed <- addImage(doc2embed, img.file,
                       width = dims[2]/72, height = dims[1]/72)
  writeDoc( doc2embed, file = "external_file.docx" )

  doc <- docx( )
  doc <- addDocument( doc, filename = "external_file.docx" )
  writeDoc( doc, file = doc.filename )
}

## End(Not run)
```

addFlexTable

Insert a FlexTable into a document object

Description

Insert a FlexTable into a document object

FlexTable can be manipulated so that almost any formatting can be specified. See [FlexTable](#) for more details.

Usage

```
addFlexTable(doc, flextable, ...)
```

```
## S3 method for class 'docx'
addFlexTable(doc, flextable,
             par.properties = parProperties(text.align = "left"), bookmark, ...)
```

```
## S3 method for class 'bsdoc'
addFlexTable(doc, flextable,
  par.properties = parProperties(text.align = "left"), ...)

## S3 method for class 'pptx'
addFlexTable(doc, flextable, offx, offy, width, height, ...)
```

Arguments

doc	document object
flextable	the FlexTable object
...	further arguments passed to other methods
par.properties	paragraph formatting properties of the paragraph that contains the table. An object of class parProperties
bookmark	a character vector specifying bookmark id (where to put the table). If provided, table will be add after paragraph that contains the bookmark. See bookmark . If not provided, table will be added at the end of the document.
offx	optional, x position of the shape (top left position of the bounding box) in inches. See details.
offy	optional, y position of the shape (top left position of the bounding box) in inches. See details.
width	optional, width of the shape in inches. See details.
height	optional, height of the shape in inches. See details.

Details

When document is a pptx object, two positioning methods are available.

If arguments offx, offy, width, height are missing, position and dimensions will be defined by the width and height of the next available shape of the slide. This dimensions can be defined in the layout of the PowerPoint template used to create the pptx object.

If arguments offx, offy, width, height are provided, they become position and dimensions of the new shape.

Value

a document object

See Also

[FlexTable](#), [docx](#), [pptx](#)

Examples

```
options( "ReporteRs-fontsize" = 11 )

ft_obj <- vanilla.table(mtcars)
```

```
# docx example -----
doc = docx( )
doc = addFlexTable( doc, flextable = ft_obj )
writeDoc( doc, file = "add_ft_ex.docx" )

# bsdoc example -----
doc = pptx( )
doc = addSlide( doc, slide.layout = "Title and Content" )
doc = addFlexTable( doc, flextable = ft_obj )
writeDoc( doc, file = "add_ft_ex.pptx" )
```

addFooter

Insert a footer into a document object

Description

Insert a footer into a document object

Usage

```
addFooter(doc, ...)
```

Arguments

doc	document object
...	further arguments passed to other methods

Details

addFooter only works for pptx documents.

Value

a document object

See Also

[pptx](#)

addFooter.pptx	<i>Insert a footer shape into a document pptx object</i>
----------------	--

Description

Insert a footer shape into the current slide of a pptx object.

Usage

```
## S3 method for class 'pptx'  
addFooter(doc, value, ...)
```

Arguments

doc	pptx object
value	character value to add into the footer shape of the current slide.
...	further arguments, not used.

Value

a document object

See Also

[pptx](#), [addDate.pptx](#), [addPageNumber.pptx](#)

Examples

```
doc = pptx( )  
doc = addSlide( doc, slide.layout = "Title and Content" )  
doc = addFooter( doc, "Hi!" )  
writeDoc( doc, file = "ex_footer.pptx" )
```

addFooterRow	<i>add footer in a FlexTable</i>
--------------	----------------------------------

Description

add a footer row in a FlexTable

Usage

```
addFooterRow(x, value, colspan, text.properties, par.properties,  
             cell.properties)
```

Arguments

x	a FlexTable object
value	FlexRow object to insert as a footer row or a character vector specifying labels to use as columns labels.
colspan	integer vector. Optional. Applies only when argument value is a character vector. Vector specifying the number of columns to span for each corresponding value (in values).
text.properties	Optional. textProperties to apply to each cell. Used only if values are not missing.
par.properties	Optional. parProperties to apply to each cell. Used only if values are not missing.
cell.properties	Optional. cellProperties to apply to each cell. Used only if values are not missing.

See Also

[FlexTable](#), [addHeaderRow](#) , [alterFlexTable](#)

Examples

```
#
#####
# simple example
#####

MyFTable = FlexTable( data = iris[1:5,1:4] )

# add a footer row with 1 cell that spans four columns
MyFTable = addFooterRow( MyFTable,
  value = c("a note in table footer"), colspan = 4 )
#####
# example with FlexRow objects usage
#####

# create a FlexTable
MyFTable = FlexTable( data = iris[1:5,1:4] )

# define a complex formatted text
mytext = pot("*",
  format = textProperties(vertical.align="superscript", font.size = 9)
) + pot( " this text is superscripted",
  format = textProperties(font.size = 9) )

# create a FlexRow - container for 1 cell
footerRow = FlexRow()
footerRow[1] = FlexCell( mytext, colspan = 4 )
```

```
# add the FlexRow to the FlexTable
MyFTable = addFooterRow( MyFTable, footerRow )
```

addHeaderRow	<i>add header in a FlexTable</i>
--------------	----------------------------------

Description

add a header row in a FlexTable

Usage

```
addHeaderRow(x, value, colspan, text.properties, par.properties,
             cell.properties, first = FALSE)
```

Arguments

x	a FlexTable object
value	FlexRow object to insert as an header row or a character vector specifying labels to use as columns labels.
colspan	integer vector. Optional. Applies only when argument value is a character vector. Vector specifying the number of columns to span for each corresponding value (in values).
text.properties	Optional. textProperties to apply to each cell. Used only if values are not missing. Default is the value of argument header .text.props provided to function FlexTable when object has been created
par.properties	Optional. parProperties to apply to each cell. Used only if values are not missing. Default is the value of argument header .par.props provided to function FlexTable when object has been created
cell.properties	Optional. cellProperties to apply to each cell. Used only if values are not missing. Default is the value of argument header .cell.props provided to function FlexTable when object has been created
first	if TRUE, row will be inserted as first row

See Also

[FlexTable](#), [addFooterRow](#) , [alterFlexTable](#)

Examples

```

#
#####
# simple example
#####

# set header.columns to FALSE so that default header row is not added in
# the FlexTable object
# We do only want the 4 first columns of the dataset
MyFTable = FlexTable( data = iris[46:55, ], header.columns = FALSE )

# add an header row with 3 cells, the first one spans two columns,
# the second one spans two columns and the last one does not span
# multiple columns
MyFTable = addHeaderRow( MyFTable,
  value = c("Sepal", "Petal", ""),
  colspan = c( 2, 2, 1)
)

# add an header row with modified table columns labels
MyFTable = addHeaderRow( MyFTable,
  value=c("Length", "Width", "Length", "Width", "Species")
)
#####
# how to change default formats
#####

MyFTable = FlexTable( data = iris[46:55, ], header.columns = FALSE,
  body.cell.props = cellProperties(border.color="#7895A2")
)
# add an header row with table columns labels
MyFTable = addHeaderRow( MyFTable,
  text.properties = textProperties(color = "#517281", font.weight="bold"),
  cell.properties = cellProperties(border.color="#7895A2"),
  value = c("Sepal Length", "Sepal Width",
    "Sepal Length", "Sepal Width", "Species")
)

```

addImage

Add an external image into a document object

Description

Add an external image into a document object

Usage

```
addImage(doc, filename, ...)
```

```

## S3 method for class 'docx'
addImage(doc, filename, bookmark,
  par.properties = parProperties(text.align = "center", padding = 5), width,
  height, ...)

## S3 method for class 'bsdoc'
addImage(doc, filename, width, height,
  par.properties = parProperties(text.align = "center", padding = 5), ...)

## S3 method for class 'pptx'
addImage(doc, filename, offx, offy, width, height, ...)

```

Arguments

doc	document object
filename	"character" value, complete filename of the external image
...	further arguments passed to other methods
bookmark	a character value ; id of the Word bookmark to replace by the image. optional. if missing, image is added at the end of the document. See bookmark .
par.properties	paragraph formatting properties of the paragraph that contains images. An object of class parProperties . It has no effect if doc is a pptx object.
width	image width in inches
height	image height in inches
offx	optional, x position of the shape (top left position of the bounding box) in inches. See details.
offy	optional, y position of the shape (top left position of the bounding box) in inches. See details.

Details

Arguments width and height can be defined with functions `png::readPNG`, `jpeg::readJPEG` or `bmp::read.bmp`.

When document object is a pptx, width and height are not mandatory. By default, image is added to the next free 'content' shape of the current slide. See [slide.layouts.pptx](#) to view the slide layout.

If arguments offx and offy are missing, position is defined as the position of the next available shape of the slide. This dimensions can be defined in the layout of the PowerPoint template used to create the pptx object.

Value

a document object

See Also

[docx](#), [pptx](#), [bsdoc](#)

Examples

```

# get rlogo
img.file <- file.path( Sys.getenv("R_HOME"), "doc", "html", "logo.jpg" )

# tests to use later
has_img <- file.exists( img.file )
has_jpeg <- requireNamespace("jpeg", quietly = TRUE)
has_wmf <- exists("win.metafile")
is_sunos <- tolower(Sys.info()[["sysname"]]) == "sunos"

# create a wmf file if possible
if( has_wmf ){
  win.metafile(filename = "image.wmf", width = 5, height = 5 )
  barplot( 1:6, col = 2:7)
  dev.off()
}

# Image example for MS Word -----
doc <- docx()

if( has_img && has_jpeg ){
  dims <- attr( jpeg::readJPEG(img.file), "dim" )
  doc <- addImage(doc, img.file, width = dims[2]/72,
    height = dims[1]/72)
}

if( has_wmf ){
  doc <- addImage(doc, "image.wmf", width = 5, height = 5 )
}

writeDoc( doc, file = "ex_add_image.docx" )

# Image example for an HTML document -----
doc <- bsdoc()

if( has_img && has_jpeg ){
  dims <- attr( jpeg::readJPEG(img.file), "dim" )
  doc <- addImage(doc, img.file, width = dims[2]/72,
    height = dims[1]/72)
}

writeDoc( doc, file = "ex_add_image/example.html" )

# Image example for MS PowerPoint -----
if( !is_sunos ){
  doc <- pptx()
}

```

```
if( has_img && has_jpeg ){
  doc <- addSlide( doc, "Title and Content" )
  dims <- attr( jpeg::readJPEG(img.file), "dim" )
  doc <- addImage(doc, img.file, width = dims[2]/72,
    height = dims[1]/72)
}
if( has_wmf ){
  doc <- addSlide( doc, "Title and Content" )
  doc <- addImage(doc, "image.wmf", width = 5, height = 5 )
}

writeDoc( doc, file = "ex_add_image.pptx" )

}
```

addJavascript	<i>add javascript into a bsdoc object</i>
---------------	---

Description

add javascript into a bsdoc object.

Usage

```
addJavascript(doc, file, text)
```

Arguments

doc	a bsdoc object.
file	a javascript file. Not used if text is provided.
text	character vector. The javascript text to parse. Not used if file is provided.

Value

an object of class `bsd`.

addMarkdown	<i>Add a markdown text or file</i>
-------------	------------------------------------

Description

Add markdown into a document object

The markdown definition used is John Gruber documented here: <http://daringfireball.net/projects/markdown/syntax>.

Images are not available as addImage or addPlot is available. Pandoc footnotes have been added (see <http://johnmacfarlane.net/pandoc/README.html#footnotes>).

Usage

```
addMarkdown(doc, file, text, ...)
```

Arguments

doc	document object
file	markdown file. Not used if text is provided.
text	character vector. The markdown to parse.
...	further arguments passed to other methods

Value

a document object

Note

This function is deprecated.

This function is deprecated.

addMarkdown.bsdoc	<i>Add a markdown text or file into an bsdoc object</i>
-------------------	---

Description

Add markdown into a `bsdoc` object.

Usage

```
## S3 method for class 'bsdoc'
addMarkdown(doc, file, text,
  text.properties = textProperties(font.size =
    getOption("ReporteRs-fontsize")),
  default.par.properties = parProperties(text.align = "justify"),
  blockquote.par.properties = parProperties(padding.top = 0, padding.bottom =
    0, shading.color = "#eeeeee"),
  code.par.properties = parProperties(shading.color = "#eeeeee"),
  hr.border = borderSolid(width = 2, color = "gray10"), ...)
```

Arguments

<code>doc</code>	Object of class <code>bsdoc</code> where markdown has to be added
<code>file</code>	markdown file. Not used if text is provided.
<code>text</code>	character vector. The markdown text to parse.
<code>text.properties</code>	default <code>textProperties</code> object
<code>default.par.properties</code>	default <code>parProperties</code> object
<code>blockquote.par.properties</code>	<code>parProperties</code> object used for blockquote blocks.
<code>code.par.properties</code>	<code>parProperties</code> object used for code blocks.
<code>hr.border</code>	<code>borderProperties</code> object used for horizontal rules.
<code>...</code>	further arguments, not used.

Details

You can configure backtick rendering (single or double backtick) with options "ReporteRs-backtick-color" and "ReporteRs-backtick-shading-color".

Value

an object of class `bsdoc`.

addMarkdown.docx	<i>Add a markdown text or file into a docx object</i>
------------------	---

Description

Add markdown into a `docx` object.

Usage

```
## S3 method for class 'docx'
addMarkdown(doc, file, text,
  text.properties = textProperties(font.size =
    getOption("ReporteRs-fontsize")),
  default.par.properties = parProperties(text.align = "justify"),
  blockquote.par.properties = parProperties(padding = 6, shading.color =
    "#eeeeee"), code.par.properties = parProperties(shading.color = "#eeeeee"),
  hr.border = borderSolid(width = 2, color = "gray10"), ...)
```

Arguments

doc	Object of class <code>docx</code> where markdown has to be added
file	markdown file. Not used if text is provided.
text	character vector. The markdown text to parse.
text.properties	default <code>textProperties</code> object
default.par.properties	default <code>parProperties</code> object
blockquote.par.properties	<code>parProperties</code> object used for blockquote blocks.
code.par.properties	<code>parProperties</code> object used for code blocks.
hr.border	<code>borderProperties</code> object used for horizontal rules.
...	further arguments, not used.

Details

You can configure backtick rendering (single or double backtick) with options "ReporteRs-backtick-color" and "ReporteRs-backtick-shading-color".

Value

an object of class `docx`.

addPageBreak	<i>Add a page break into a document object</i>
--------------	--

Description

Add a page break into a document object

Usage

```
addPageBreak(doc, ...)  
  
## S3 method for class 'docx'  
addPageBreak(doc, ...)
```

Arguments

doc	document object
...	further arguments passed to other methods

Details

addPageBreak only works with docx documents.
See [addPageBreak.docx](#) for examples.

Value

a document object

See Also

[docx](#)

Examples

```
doc = docx( title = "title" )  
doc = addPageBreak( doc )
```

addPageNumber	<i>Insert a page number into a document object</i>
---------------	--

Description

Insert a page number into a document object

Usage

```
addPageNumber(doc, ...)
```

Arguments

doc	document object
...	further arguments passed to other methods

Details

`addPageNumber` only works with pptx documents.

See [addPageNumber.pptx](#) for examples.

Value

a document object

See Also

[pptx](#), [addPageNumber.pptx](#)

`addPageNumber.pptx` *Insert a page number shape into a document pptx object*

Description

Insert a page number shape into the current slide of a pptx object.

Usage

```
## S3 method for class 'pptx'  
addPageNumber(doc, value, ...)
```

Arguments

<code>doc</code>	pptx object
<code>value</code>	character value to add into the page number shape of the current slide. optional. If missing current slide number will be used.
<code>...</code>	further arguments, not used.

Value

a [pptx](#) document object

See Also

[addPageNumber](#), [addDate.pptx](#)

Examples

```

doc.filename = "addPageNumber_example.pptx"

options( "ReporteRs-fontsize" = 24 )
doc = pptx( title = "title" )
# add a slide with layout "Title Slide"
doc = addSlide( doc, slide.layout = "Title Slide" )
doc = addTitle( doc, "Presentation title" ) #set the main title
#set the sub-title
doc = addSubtitle( doc , "This document is generated with ReporteRs.")

## add a page number on the current slide
doc = addPageNumber( doc )

doc = addSlide( doc, slide.layout = "Title and Content" )
## add a page number on the current slide but
## not the default text (slide number)
doc = addPageNumber( doc, value = "Page number text")

writeDoc( doc, file = doc.filename )

```

addParagraph

Add a paragraph into a document object

Description

Add a paragraph into a document object

Usage

```

addParagraph(doc, value, ...)

## S3 method for class 'docx'
addParagraph(doc, value, stylename, bookmark,
  par.properties = parProperties(), restart.numbering = FALSE, ...)

## S3 method for class 'bsdxc'
addParagraph(doc, value, par.properties = parProperties(),
  restart.numbering = FALSE, ...)

## S3 method for class 'pptx'
addParagraph(doc, value, offx, offy, width, height,
  par.properties, append = FALSE, restart.numbering = FALSE, ...)

```

Arguments

doc document object

value	text to add to the document as paragraphs: an object of class pot or set_of_paragraphs or a character vector.
...	further arguments passed to other methods
stylename	value of the named style to apply to paragraphs in the docx document. Expected value is an existing stylename of the template document used to create the docx object. see styles.docx .
bookmark	a character value ; id of the Word bookmark to replace by the table. optional. See bookmark .
par.properties	parProperties to apply to paragraphs, only used if stylename if missing.
restart.numbering	boolean value. If TRUE, next numbered list counter will be set to 1.
offx	optional, x position of the shape (top left position of the bounding box) in inches. See details.
offy	optional, y position of the shape (top left position of the bounding box) in inches. See details.
width	optional, width of the shape in inches. See details.
height	optional, height of the shape in inches. See details.
append	boolean default to FALSE. If TRUE, paragraphs will be appened in the current shape instead of beeing sent into a new shape. Paragraphs can only be appended on shape containing paragraphs (i.e. you can not add paragraphs after a FlexTable). Applies to only pptx objects.

Details

a paragraph is a set of text that ends with an end of line. Read [pot](#) to see how to get different font formats. If an end of line is required, a new paragraph is required.

When document is a pptx object, two positioning methods are available.

If arguments `offx`, `offy`, `width`, `height` are missing, position and dimensions will be defined by the width and height of the next available shape of the slide. This dimensions can be defined in the layout of the PowerPoint template used to create the pptx object.

If arguments `offx`, `offy`, `width`, `height` are provided, they become position and dimensions of the new shape.

Also, when document is a pptx object, shading and border settings of argument `par.properties` will have no effect.

Value

a document object

See Also

[docx](#), [pptx](#), [bsdxc](#), [pot](#), [textProperties](#), [parProperties](#)

Examples

```

# docx example -----
doc.filename = "ex_paragraph.docx"
doc <- docx()
styles(doc)

doc = addTitle( doc, "Title example 1", level = 1 )

# Add "Hello World" into the document doc
doc = addParagraph(doc, "Hello Word", stylename = "Normal" )

doc = addTitle( doc, "Title example 2", level = 1 )

# define some text
sometext = c( "Lorem ipsum dolor sit amet, consectetur adipiscing elit.",
              "In sit amet ipsum tellus. Vivamus dignissim arcu sit amet faucibus auctor.",
              "Quisque dictum tristique ligula." )

# add sometext with stylename BulletList
doc = addParagraph( doc, value = sometext, stylename="BulletList" )

doc = addTitle( doc, "Title example 3", level = 1 )

# "My tailor is rich" with formatting on some words
pot1 = pot("My tailor", textProperties(color = "red" )
           ) + " is " + pot("rich", textProperties(shading.color = "red",
           font.weight = "bold" ) )

# "Cats and dogs" with formatting on some words
pot2 = pot("Cats", textProperties(color = "red" ) ) +
       " and " +
       pot("dogs", textProperties( color = "blue" ),
           hyperlink = "http://www.wikipedia.org/" )

# create a set of paragraphs made of pot1 and pot2
my.pars = set_of_paragraphs( pot1, pot2 )

# Add my.pars into the document doc
doc = addParagraph(doc, my.pars, stylename = "Normal" )

doc = addTitle( doc, "Title example 4", level = 1 )
# define some text
text1 = "Lorem ipsum dolor sit amet, consectetur adipiscing elit."
text2 = "In sit amet ipsum tellus. Vivamus arcu sit amet faucibus auctor."
text3 = "Quisque dictum tristique ligula."

# define parProperties with list properties
ordered.list.level1 = parProperties(list.style = "ordered",
level = 1 )
ordered.list.level2 = parProperties(list.style = "ordered",
level = 2 )

```

```

# define parProperties with list properties
unordered.list.level1 = parProperties(list.style = "unordered",
level = 1 )
unordered.list.level2 = parProperties(list.style = "unordered",
level = 2 )

# add ordered list items
doc = addParagraph( doc, value = text1,
par.properties = ordered.list.level1 )
doc = addParagraph( doc, value = text2,
par.properties = ordered.list.level2 )

# add ordered list items without restart renumbering
doc = addParagraph( doc, value = c( text1, text2, text3),
par.properties = ordered.list.level1 )

# add ordered list items and restart renumbering
doc = addParagraph( doc, value = c( text1, text2, text3),
restart.numbering = TRUE, par.properties = ordered.list.level1 )

# add unordered list items
doc = addParagraph( doc, value = text1,
par.properties = unordered.list.level1 )
doc = addParagraph( doc, value = text2,
par.properties = unordered.list.level2 )

writeDoc( doc, file = doc.filename )

# pptx example -----
doc.filename = "ex_paragraph.pptx"

options( "ReporteRs-fontsize" = 24 )
doc = pptx( title = "title" )

# add a slide with layout "Title and Content"
doc = addSlide( doc, slide.layout = "Title and Content" )

doc = addTitle( doc, "Title example 1" )

# Add "Hello World" into the document doc
doc = addParagraph(doc, "Hello Word" )

# add a slide with layout "Title and Content"
doc = addSlide( doc, slide.layout = "Title and Content" )

doc = addTitle( doc, "Title example 2" )

# "My tailor is rich" with formatting on some words
pot1 = pot("My tailor", textProperties(color = "red" )
) + " is " + pot("rich", textProperties(shading.color = "red",
font.weight = "bold" ) )

```

```

# "Cats and dogs" with formatting on some words
pot2 = pot("Cats", textProperties(color = "red" ) ) +
  " and " +
  pot("dogs", textProperties( color = "blue" ),
    hyperlink = "http://www.wikipedia.org/" )

# create a set of paragraphs made of pot1 and pot2
my.pars = set_of_paragraphs( pot1, pot2 )

# Add my.pars into the document doc
doc = addParagraph(doc, my.pars )

# Add my.pars into the document doc
doc = addParagraph(doc, my.pars, offx = 3, offy = 3,
  width = 2, height = 0.5,
  par.properties=parProperties(text.align="center", padding=0) )

# add a slide with layout "Title and Content"
doc = addSlide( doc, slide.layout = "Title and Content" )

doc = addTitle( doc, "Title example 3" )

# "My tailor is rich" with formatting on some words
pot1 = pot("My tailor", textProperties(color = "red" )
  ) + " is " + pot("rich", textProperties(shading.color = "red",
  font.weight = "bold" ) )

# "Cats and dogs" with formatting on some words
pot2 = pot("Cats", textProperties(color = "red" ) ) +
  " and " +
  pot("dogs", textProperties( color = "blue" ),
    hyperlink = "http://www.wikipedia.org/" )

# create a set of paragraphs made of pot1 and pot2
my.pars = set_of_paragraphs( pot1, pot2 )

# Add my.pars into the document doc
doc = addParagraph(doc, my.pars,
  par.properties=parProperties(text.align="center", padding=24) )

# add a slide with layout "Title and Content"
doc = addSlide( doc, slide.layout = "Title and Content" )

doc = addTitle( doc, "Title example 1" )
# define some text
text1 = "Lorem ipsum dolor sit amet, consectetur adipiscing elit."
text2 = "In sit amet ipsum tellus. Vivamus arcu sit faucibus auctor."
text3 = "Quisque dictum tristique ligula."

# define parProperties with list properties
ordered.list.level1 = parProperties(list.style = "ordered",
level = 1 )

```

```

ordered.list.level2 = parProperties(list.style = "ordered",
level = 2 )

# define parProperties with list properties
unordered.list.level1 = parProperties(list.style = "unordered",
level = 1 )
unordered.list.level2 = parProperties(list.style = "unordered",
level = 2 )

# add ordered list items
doc = addParagraph( doc, value = text1,
par.properties = ordered.list.level1 )
doc = addParagraph( doc, value = text2, append = TRUE,
par.properties = ordered.list.level2 )

doc = addParagraph(doc, "This paragraph has no list attribute",
append = TRUE )

# add ordered list items without restart renumbering
doc = addParagraph( doc, value = c( text1, text2, text3),
append = TRUE, par.properties = ordered.list.level1 )

# add ordered list items and restart renumbering
doc = addParagraph( doc, value = c( text1, text2, text3),
append = TRUE, restart.numbering = TRUE,
par.properties = ordered.list.level1 )

# add unordered list items
doc = addParagraph( doc, value = text1,
append = TRUE,
par.properties = unordered.list.level1 )
doc = addParagraph( doc, value = text2,
append = TRUE,
par.properties = unordered.list.level2 )

writeDoc( doc, file = doc.filename )

```

addParagraph.Footnote *Insert a paragraph into a Footnote object*

Description

Insert paragraph(s) of text into a Footnote. To create a [Footnote](#) made of several paragraphs with different [parProperties](#), add sequentially paragraphs with their associated `parProperties` objects with this function.

Usage

```
## S3 method for class 'Footnote'
```

```
addParagraph(doc, value, par.properties = parProperties(),
  ...)
```

Arguments

doc [Footnote](#) object where to add paragraphs.

value text to add to the document as paragraphs: an object of class [pot](#) or [set_of_paragraphs](#) or a character vector.

par.properties [parProperties](#) to apply to paragraphs.

... further arguments, not used.

Value

an object of class [Footnote](#).

See Also

[Footnote](#), [parProperties](#), [pot](#) , [set_of_paragraphs](#)

addPlot	<i>Add a plot into a document object</i>
---------	--

Description

Add a plot into a document object

Usage

```
addPlot(doc, fun, pointsize = 12, vector.graphic = FALSE, ...)

## S3 method for class 'docx'
addPlot(doc, fun, pointsize = getOption("ReporteRs-fontsize"),
  vector.graphic = FALSE, width = 6, height = 6,
  fontname_serif = "Times New Roman", fontname_sans = "Calibri",
  fontname_mono = "Courier New", fontname_symbol = "Symbol",
  editable = TRUE, bookmark, par.properties = parProperties(text.align =
  "center", padding = 5), bg = "transparent", ...)

## S3 method for class 'pptx'
addPlot(doc, fun, pointsize = 11, vector.graphic = TRUE,
  fontname_serif = "Times New Roman", fontname_sans = "Calibri",
  fontname_mono = "Courier New", fontname_symbol = "Symbol",
  editable = TRUE, offx, offy, width, height, bg = "transparent", ...)

## S3 method for class 'bsdcc'
addPlot(doc, fun, pointsize = getOption("ReporteRs-fontsize"),
  vector.graphic = FALSE, width = 6, height = 6,
  par.properties = parCenter(padding = 5), bg = "transparent", ...)
```


Arguments

<code>doc</code>	document object
<code>fun</code>	plot function. The function will be executed to produce graphics. For <code>grid</code> or <code>lattice</code> or <code>ggplot</code> object, the function should just be <code>print</code> and an extra argument <code>x</code> should specify the object to plot. For traditional plots, the function should contain plot instructions. See examples.
<code>pointsize</code>	the default pointsize of plotted text in pixels, default to 12 pixels.
<code>vector.graphic</code>	logical scalar, if TRUE, vector graphics are produced instead, PNG images if FALSE.
<code>...</code>	further arguments passed to or from other methods. See details.
<code>width</code>	plot width in inches (default value is 6).
<code>height</code>	plot height in inches (default value is 6).
<code>fontname_serif</code> , <code>fontname_sans</code> , <code>fontname_mono</code> , <code>fontname_symbol</code>	font names for font faces. Use fonts available on operating system.
<code>editable</code>	logical value - if TRUE vector graphics elements (points, text, etc.) are editable.
<code>bookmark</code>	id of the Word bookmark to replace by the plot. optional. bookmark is a character vector specifying bookmark id to replace by the plot(s). If provided, plot(s) will replace the paragraph that contains the bookmark. See bookmark . If not provided, plot(s) will be added at the end of the document.
<code>par.properties</code>	paragraph formatting properties of the paragraph that contains plot(s). An object of class parProperties
<code>bg</code>	the initial background colour.
<code>offx</code> , <code>offy</code>	optional. x and y position of the shape (left top position of the bounding box) in inches. See details.

Details

Plot parameters are specified with the `...` argument. However, the most convenient usage is to wrap the plot code into a function whose parameters will be specified as `'...'`.

If you want to add `ggplot2` or `lattice` plot, use `print` function.

`vector.graphic`: SVG will be produced for `bsd` objects and `DrawingML` instructions for `docx` and `pptx` objects. Don't use vector graphics if document is a `docx` and MS Word version used to open the document is 2007.

When document is a `pptx` object, two positioning methods are available.

If arguments `offx`, `offy`, `width`, `height` are missing, position and dimensions will be defined by the width and height of the next available shape of the slide. This dimensions can be defined in the layout of the PowerPoint template used to create the `pptx` object.

If arguments `offx`, `offy`, `width`, `height` are provided, they become position and dimensions of the new shape.

Value

a document object

See Also

[docx](#), [pptx](#), [bsdod](#)

Examples

```
is_sunos <- tolower(Sys.info()[["sysname"]]) == "sunos"

options( "ReporteRs-fontsize" = 11 )

# plot example for docx -----
doc = docx( )
doc = addPlot( doc, fun = function() barplot( 1:6, col = 2:7),
  vector.graphic = TRUE, width = 5, height = 7,
  par.properties = parProperties(text.align = "center")
)
writeDoc( doc, file = "ex_plot.docx" )

# plot example for pptx -----

doc = pptx( )
doc = addSlide( doc, slide.layout = "Title and Content" )

doc = addPlot( doc, fun = function() barplot( 1:6, col = 2:7),
  vector.graphic = TRUE, width = 5, height = 4 )
if( !is_sunos ){
  doc = addPlot( doc,
    fun = function() barplot( 1:6, col = 2:7),
    vector.graphic = FALSE,
    offx = 7, offy = 0,
    width = 3, height = 2
  )
}

writeDoc( doc, file = "ex_plot.pptx" )
```

addRScript

Add R script into a document object

Description

Add R script into a document object

Usage

```

addRScript(doc, rscript, file, text, ...)

## S3 method for class 'docx'
addRScript(doc, rscript, file, text, bookmark,
  par.properties = parProperties(), ...)

## S3 method for class 'pptx'
addRScript(doc, rscript, file, text, append = FALSE, ...)

## S3 method for class 'bsdoc'
addRScript(doc, rscript, file, text, ...)

```

Arguments

doc	document object
rscript	an object of class RScript. Not used if file or text is provided.
file	R script file. Not used if text or rscript is provided.
text	character vector. The text to parse. Not used if file or rscript is provided.
...	further arguments passed to other methods
bookmark	a character value ; id of the Word bookmark to replace by the script. optional. See bookmark .
par.properties	paragraph formatting properties of the paragraphs that contain rscript. An object of class parProperties
append	boolean default to FALSE. If TRUE, paragraphs will be appened in the current shape instead of beeing sent into a new shape. Paragraphs can only be appended on shape containing paragraphs (i.e. you can not add paragraphs after a FlexTable).

Details

You have to one of the following argument: file or text or rscript.

Value

a document object

See Also

[bsdoc](#), [docx](#), [pptx](#)

Examples

```

# docx example -----
doc.filename = "ex_rscript.docx"

```

```

options( "ReporteRs-fontsize" = 10 )
doc <- docx( )
doc = addRScript(doc, text = "x = rnorm(100)
plot(density( x ) )" )

writeDoc( doc, file = doc.filename )

# pptx example -----
doc.filename = "ex_rscript.pptx"

options( "ReporteRs-fontsize" = 24 )
doc = pptx( title = "title" )

# add a slide with layout "Title and Content"
doc = addSlide( doc, slide.layout = "Title and Content" )

doc = addTitle( doc, "Title example 1" )
doc = addRScript(doc, text = "x = rnorm(100)
plot(density( x ) )" )

writeDoc( doc, file = doc.filename )

```

addSection

Add a section into a document object

Description

Add a section into a document object

Usage

```
addSection(doc, ...)
```

```
## S3 method for class 'docx'
addSection(doc, landscape = FALSE, ncol = 1,
  space_between = 0.3, columns.only = FALSE, ...)
```

Arguments

doc	document object
...	further arguments passed to other methods
landscape	logical value. Specify TRUE to get a section with horizontal page.
ncol	integer number to specify how many columns the section should contains.
space_between	width in inches of the space between columns of the section.
columns.only	logical value, if set to TRUE, no break page will (continuous section).

Details

addSection only works with docx documents.

It lets you change document orientation and split new content along 2 or more columns. The function requires you to add a section before and after the item(s) that you want to be on a landscape and/or multicolumns mode page.

Value

a document object

See Also

[docx](#)

Examples

```
doc.filename = "addSection.docx"

options( "ReporteRs-fontsize" = 10 )
doc <- docx( )
doc = addSection(doc, landscape = TRUE, ncol = 2 )
doc = addPlot( doc = doc, fun = function() {
  barplot( 1:8, col = 1:8 )
}, width = 3, height = 3, pointsize = 5)

doc = addColumnBreak(doc )
doc = addFlexTable(doc, FlexTable( iris[1:10,] ) )

doc = addSection(doc, ncol = 2 )
doc = addParagraph( doc = doc, "Text 1.", "Normal" )
doc = addColumnBreak(doc )
doc = addParagraph( doc = doc, "Text 2.", "Normal" )

doc = addSection(doc, ncol = 2, columns.only = TRUE )
doc = addFlexTable(doc, FlexTable(iris[1:10,] ) )
doc = addColumnBreak(doc )
doc = addParagraph( doc = doc, "Text 3.", "Normal" )

doc = addSection( doc )
doc = addFlexTable(doc, FlexTable(mtcars, add.rownames = TRUE) )
doc = addParagraph( doc = doc, "Text 4.", "Normal" )

writeDoc( doc, file = doc.filename )
```

addSlide *Add a slide into a document object*

Description

Add a slide into a document object

Usage

```
addSlide(doc, ...)
```

```
## S3 method for class 'pptx'
addSlide(doc, slide.layout, bookmark, ...)
```

Arguments

doc	document object
...	further arguments passed to other methods
slide.layout	layout name of the slide to create. See slide.layouts.pptx
bookmark	"integer" page number to specify where slide has to be replaced with a new empty one.

Details

addSlide only works with pptx documents. See [addSlide.pptx](#) for examples.

This function is a key function ; if no slide has been added into the document object no content (tables, plots, images, text) can be added.

If creating a slide of type "Title and Content", only one content can be added because there is only one content shape in the layout. If creating a slide of type "Two Content", two content can be added because there are 2 content shapes in the layout.

Content shapes are boxes with dotted borders that hold content in its place on a slide layout. If you need a new layout, create it in PowerPoint :

On the View tab, in the Presentation Views group, click Slide Master.

Function `slide.layouts` returns available layout names of the template used when pptx object has been created. It is important to know that when using `addParagraph.pptx`, paragraph and default font formats will be defined by the properties of the shape of the `slide.layout` where content will be added. For example, if you set the shape formatting properties to a 'no bullet', paragraphs of text won't have any bullet.

Also when using `addPlot`, plot dimensions will be the shape dimensions. It means that if you want to change plot dimensions , this has to be done in the PowerPoint template used when creating the pptx object.

Value

a document object

See Also

[pptx](#), [slide.layouts](#)

Examples

```

doc.filename = "addSlide_example.pptx"

options( "ReporteRs-fontsize" = 24 )
doc = pptx( title = "title" )

# add a slide with layout "Title Slide"
doc = addSlide( doc, slide.layout = "Title Slide" )
#set the main title
doc = addTitle( doc, "Presentation title" )
#set the sub-title
doc = addSubtitle( doc , "This document is generated with ReporteRs.")

# add a slide with layout "Title and Content" then add content
doc = addSlide( doc, slide.layout = "Title and Content" )
doc = addTitle( doc, "Iris sample dataset", level = 1 )
doc = addFlexTable( doc, vanilla.table( iris[ 1:10,] ) )

# add a slide with layout "Two Content" then add content
doc = addSlide( doc, slide.layout = "Two Content" )
doc = addTitle( doc, "Two Content demo", level = 1 )
doc = addFlexTable( doc, vanilla.table( iris[ 46:55,] ) )
doc = addParagraph(doc, "Hello Word!" )

# to see available layouts :
slide.layouts( doc )

writeDoc( doc, file = doc.filename )

# demo slide replacement -----

# define 2 FlexTables
ft1 = vanilla.table( mtcars[1:6,] , add.rownames = TRUE )
ft2 = vanilla.table( iris[1:10,], add.rownames = TRUE )

# create an doc to be used as template later
mydoc = pptx( )
mydoc = addSlide( mydoc, slide.layout = "Title and Content")
mydoc = addTitle( mydoc, "a table")
mydoc = addFlexTable( mydoc, ft1 )
mydoc = addSlide( mydoc, slide.layout = "Title and Content")
mydoc = addTitle( mydoc, "some text")
mydoc = addParagraph( mydoc, "text example" )
writeDoc( mydoc, "template_example.pptx" )

# use file pp_template_example.pptx as template
# and replace slide 1
mydoc = pptx(template = "template_example.pptx" )

```

```

mydoc = addSlide( mydoc, slide.layout = "Title and Content", bookmark = 1)
mydoc = addTitle( mydoc, "a new table")
mydoc = addFlexTable( mydoc, ft2 )
writeDoc( mydoc, "slide_replacement.pptx" )

```

addSubtitle *Add a subtitle shape into a document object*

Description

Add a subtitle shape into a document object

Usage

```
addSubtitle(doc, ...)
```

Arguments

doc	document object
...	further arguments passed to other methods

Details

addSubtitle only works with pptx documents. See [addSubtitle.pptx](#) for examples.

Value

a document object

See Also

[pptx](#), [addSubtitle.pptx](#)

addSubtitle.pptx *Insert a addSubtitle shape into a pptx object*

Description

Add a addSubtitle shape into a [pptx](#) object.

Usage

```

## S3 method for class 'pptx'
addSubtitle(doc, value, ...)

```


Arguments

doc [pptx](#) object
value "character" value to use as subtitle text
... further arguments, not used.

Details

Subtitle shape only exist in slide of type 'Title Slide'.

Value

an object of class [pptx](#).

See Also

[pptx](#), [addSubtitle](#)

Examples

```
doc.filename = "addSubtitle_example.pptx"

options( "ReporteRs-fontsize" = 24 )
doc = pptx( title = "title" )
doc = addSlide( doc, slide.layout = "Title Slide" )
#set the main title
doc = addTitle( doc, "Presentation title" )
#set the sub-title
doc = addSubtitle( doc , "This document is generated with ReporteRs.")

writeDoc( doc, file = doc.filename )
```

addTitle	<i>Add a title into a document object</i>
----------	---

Description

Add a title into a document object

Usage

```
addTitle(doc, value, ...)  
  
## S3 method for class 'docx'  
addTitle(doc, value, level = 1, ...)  
  
## S3 method for class 'pptx'  
addTitle(doc, value, ...)
```

```
## S3 method for class 'bsdoc'
addTitle(doc, value, level = 1, id, ...)
```

Arguments

doc	document object
value	"character" value to use as title text
...	further arguments passed to or from other methods..
level	"integer" positive value to use as heading level. 1 for title1, 2 for title2, etc. Default to 1.
id	character single and unique value to use as title id when doc is bsdoc.

Details

In MS Word, you can use whatever style you want as title formatting style. But to be considered as entries for a Table of Content, used styles must be 'title' styles. These are always available in MS Word list styles. When template is read, ReporteRs try to guess what are these styles.

In MS PowerPoint, level can not be used as there is no associated level with a title in a slide.

Value

a document object

See Also

[docx](#), [pptx](#), [bsdoc](#)

Examples

```
# Title example for MS Word -----
doc.filename = "ex_add_title.docx"

options( "ReporteRs-fontsize" = 10 )
doc <- docx( )

doc = addTitle( doc, "Title example 1", level = 1 )

doc = addTitle( doc, "Title example 2", level = 1 )

writeDoc( doc, file = doc.filename )

# Title example for PowerPoint -----
doc.filename = "ex_add_title.pptx"

options( "ReporteRs-fontsize" = 24 )
doc = pptx( title = "title" )

# add a slide with layout "Title and Content"
doc = addSlide( doc, slide.layout = "Title and Content" )
```

```
doc = addTitle( doc, "Title example 1" )  
writeDoc( doc, file = doc.filename )
```

addTOC*Add a table of contents into a document object*

Description

Add a table of contents into a document object

Usage

```
addTOC(doc, ...)  
  
## S3 method for class 'docx'  
addTOC(doc, stylename, level_max = 3, ...)  
  
## S3 method for class 'bsdoc'  
addTOC(doc, ...)
```

Arguments

doc	document object
...	further arguments passed to other methods
stylename	optional. Stylename in the document that will be used to build entries of the TOC.
level_max	max title level to show in the TOC (default to 3, from title1 to title3).

Details

When working with docx object:

If stylename is not used, a classical table of content will be produced.

If stylename is used, a custom table of contents will be produced, pointing to entries that have been formatted with stylename. For example, this can be used to produce a toc with only plots.

Value

a document object

See Also

[docx](#), [bsdoc](#), [styles](#), [addTitle](#), [addParagraph](#)

Examples

```

# Create a new document
doc = docx( title = "title" )
#leave the first page blank and add a page break
doc = addPageBreak(doc)
# add a TOC (to be refresh when document is opened)
# and add a page break
doc = addTOC(doc)
doc = addPageBreak(doc)

# add titles that will be entries in the TOC
doc = addTitle( doc, "My first title", level = 1 )
doc = addTitle( doc, "My second title", level = 1 )

# Write the object in file "addTOC_example1.docx"
writeDoc( doc, "addTOC_example1.docx" )
doc = docx( title = "title" )

#leave the first page blank and add a page break
doc = addPageBreak(doc)

doc = addTitle( doc, "Plots", level = 1 )
doc = addPlot( doc, fun = plot,
  x = rnorm( 100 ),y = rnorm (100 ),
  main = "base plot main title"
)

doc = addParagraph( doc, value="graph example 1", stylename = "rPlotLegend" )

if( requireNamespace("ggplot2", quietly = TRUE) ){
  myplot = ggplot2::qplot(Sepal.Length, Petal.Length,
    data = iris, color = Species,
    size = Petal.Width, alpha = I(0.7))
  doc = addPlot( doc = doc, fun = print,
    x = myplot #this argument MUST be named, print is expecting argument 'x'
  )
  doc = addParagraph( doc, value="graph example 2",
    stylename = "rPlotLegend" )
}

# Because we used "rPlotLegend" as legend in plot
# , addTOC will use this stylename to define
# entries in the generated TOC
doc = addTOC(doc, stylename = "rPlotLegend")

# Write the object in file "addTOC_example2.docx"
writeDoc( doc, "addTOC_example2.docx" )

```

as.FlexTable	<i>R tables as FlexTables</i>
--------------	-------------------------------

Description

Get a [FlexTable](#) object from an R object.

Usage

```
as.FlexTable(x, ...)
```

Arguments

x	object to get FlexTable from
...	further arguments passed to other methods

Value

a [FlexTable](#) object

See Also

[FlexTable](#)

as.FlexTable.sessionInfo	<i>get FlexTable from a sessionInfo object</i>
--------------------------	--

Description

Get a [FlexTable](#) object from a [sessionInfo](#) object.

Usage

```
## S3 method for class 'sessionInfo'  
as.FlexTable(x, locale = TRUE, ...)
```

Arguments

x	sessionInfo object to get FlexTable from
locale	show locale information?
...	further arguments, not used.

Value

a [FlexTable](#) object

Examples

```
#  
as.FlexTable( sessionInfo() )
```

as.html	<i>get HTML code</i>
---------	----------------------

Description

Get HTML code in a character vector.

Usage

```
as.html(object, ...)
```

Arguments

object	object to get HTML from
...	further arguments passed to other methods

Details

See [FlexTable](#) for examples.

Value

a character value

See Also

[FlexTable](#)

as.html.bsdoc	<i>get HTML code from a bsdoc object</i>
---------------	--

Description

get HTML code from a bsdoc document

Usage

```
## S3 method for class 'bsdoc'  
as.html(object, ...)
```

Arguments

object the bsdoc object
 ... further arguments passed to other methods

Value

a character value

See Also

[bsdoc](#)

as.html.FlexTable *get HTML code from a FlexTable*

Description

get HTML code from a FlexTable

Usage

```
## S3 method for class 'FlexTable'
as.html(object, ...)
```

Arguments

object the FlexTable object
 ... further arguments passed to other methods

Value

a character value

See Also

[FlexTable](#)

Examples

```
#
#####

# Create a FlexTable with data.frame mtcars, display rownames
# use different formatting properties for header and body
MyFTable = FlexTable( data = mtcars, add.rownames = TRUE,
  header.cell.props = cellProperties( background.color = "#00557F" ),
  header.text.props = textProperties( color = "white",
    font.size = 11, font.weight = "bold" ),
```

```

    body.text.props = textProperties( font.size = 10 )
  )
  # zebra stripes - alternate colored backgrounds on table rows
  MyFTable = setZebraStyle( MyFTable, odd = "#E1EEf4", even = "white" )

  # applies a border grid on table
  MyFTable = setFlexTableBorders(MyFTable,
    inner.vertical = borderProperties( color="#0070A8", style="solid" ),
    inner.horizontal = borderNone(),
    outer.vertical = borderProperties( color = "#006699",
    style = "solid", width = 2 ),
    outer.horizontal = borderProperties( color = "#006699",
    style = "solid", width = 2 )
  )

  # get HTML of the FlexTable
  as.html( MyFTable )

```

as.html.pot

get HTML code from a pot

Description

get HTML code from a pot

Usage

```

## S3 method for class 'pot'
as.html(object, ...)

```

Arguments

object	the pot object
...	further arguments passed to other methods

Value

a character value

See Also

[pot](#)

Examples

```

my_pot = pot("My tailor", textProperties(color="red") ) + " is " + pot("rich"
, textProperties(font.weight="bold") )
as.html( my_pot )

```

as.html.RScript	<i>get HTML code from a RScript object</i>
-----------------	--

Description

get HTML code from a RScript object

Usage

```
## S3 method for class 'RScript'  
as.html(object, ...)
```

Arguments

object	the RScript object
...	further arguments passed to other methods - not used.

Value

a character value

See Also

[RScript](#)

Examples

```
my_rscript = RScript( text = "ls()" )  
as.html( my_rscript )
```

borderProperties	<i>border properties object</i>
------------------	---------------------------------

Description

create a border properties object.

Usage

```
borderProperties(color = "black", style = "solid", width = 1)

## S3 method for class 'borderProperties'
chprop(object, color, style, width, ...)

## S3 method for class 'borderProperties'
print(x, ...)

## S3 method for class 'borderProperties'
as.character(x, ...)
```

Arguments

color	border color - single character value (e.g. "#000000" or "black")
style	border style - single character value : "none" or "solid" or "dotted" or "dashed"
width	border width - an integer value : 0>= value
object	borderProperties object to update
...	further arguments - not used
x	borderProperties object to print

Details

Get a modified version of a borderProperties with chprop.

See Also

[alterFlexTable](#), [setFlexTableBorders](#), [shortcut_properties](#)

Examples

```
borderProperties()
borderProperties(color="orange", style="solid", width=1)
borderProperties(color="gray", style="dotted", width=1)

# update borderProperties -----
x = borderProperties()
chprop(x, color="orange", style="dashed", width=1)
chprop(x, width=5)
```

bsdoc	<i>Create an object representation of a bootstrap html document</i>
-------	---

Description

Create a [bsdoc](#) object

Usage

```
bsdoc(title = "untitled",  
      list.definition = getOption("ReporteRs-list-definition"), keywords = "",  
      description = "", mathjax = FALSE)
```

Arguments

title	"character" value: title of the document.
list.definition	a list definition to specify how ordered and unordered lists have to be formatted. See list.settings . Default to <code>getOption("ReporteRs-list-definition")</code> .
keywords	"character" value: keywords metadata value to set in the html page
description	"character" value: description metadata value to set in the html page
mathjax	logical value: if TRUE activate mathjax

Details

Several methods can be used to send R output into an object of class [bsdoc](#).

- [addTitle.bsdoc](#) add titles
- [addParagraph.bsdoc](#) add text
- [addPlot.bsdoc](#) add plots
- [addFlexTable.bsdoc](#) add tables. See [FlexTable](#)
- [addImage.bsdoc](#) add external images
- [addRScript.bsdoc](#) add highlighted r script

Once object has content, user can write the docx into a ".html" file, see [writeDoc.bsdoc](#).

Value

an object of class [bsdoc](#).

Note

[bsdoc](#) objects are deprecated and will be deleted in the next version.

cellProperties	<i>Cell formatting properties</i>
----------------	-----------------------------------

Description

Create a `cellProperties` object that describes cell formatting properties. This objects are used by [FlexTable](#).

Usage

```
cellProperties(padding, border.width, border.style, border.color, border.bottom,
  border.left, border.top, border.right, border.bottom.color = "black",
  border.bottom.style = "solid", border.bottom.width = 1,
  border.left.color = "black", border.left.style = "solid",
  border.left.width = 1, border.top.color = "black",
  border.top.style = "solid", border.top.width = 1,
  border.right.color = "black", border.right.style = "solid",
  border.right.width = 1, vertical.align = "middle", padding.bottom = 0,
  padding.top = 0, padding.left = 0, padding.right = 0,
  background.color = "transparent", text.direction = "lrbt")
```

```
## S3 method for class 'cellProperties'
chprop(object, border.bottom, border.left, border.top,
  border.right, padding, border.bottom.color, border.bottom.style,
  border.bottom.width, border.left.color, border.left.style, border.left.width,
  border.top.color, border.top.style, border.top.width, border.right.color,
  border.right.style, border.right.width, vertical.align, padding.bottom,
  padding.top, padding.left, padding.right, background.color, text.direction,
  ...)
```

```
## S3 method for class 'cellProperties'
print(x, ...)
```

Arguments

<code>padding</code>	cell padding - 0 or positive integer value. Argument <code>padding</code> overwrites arguments <code>padding.bottom</code> , <code>padding.top</code> , <code>padding.left</code> , <code>padding.right</code> .
<code>border.width</code>	border width - 0 or positive integer value. Argument <code>border.width</code> overwrites arguments <code>border.bottom.width</code> , <code>border.top.width</code> , <code>border.left.width</code> , <code>border.right.width</code> .
<code>border.style</code>	border style - a single character value, expected value is one of "none", "solid", "dotted", "dashed". Argument <code>border.style</code> overwrites arguments <code>border.bottom.style</code> , <code>border.top.style</code> , <code>border.left.style</code> , <code>border.right.style</code> .
<code>border.color</code>	border color - a single character value specifying a valid color (e.g. "#000000" or "black"). Argument <code>border.color</code> overwrites arguments <code>border.bottom.color</code> , <code>border.top.color</code> , <code>border.left.color</code> , <code>border.right.color</code> .

<code>border.bottom</code>	<code>borderProperties</code> for bottom border. overwrite all <code>border.bottom.*</code> if specified.
<code>border.left</code>	<code>borderProperties</code> for left border. overwrite all <code>border.left.*</code> if specified.
<code>border.top</code>	<code>borderProperties</code> for top border. overwrite all <code>border.top.*</code> if specified.
<code>border.right</code>	<code>borderProperties</code> for right border. overwrite all <code>border.right.*</code> if specified.
<code>border.bottom.color</code>	border bottom color - a single character value specifying a valid color (e.g. "#000000" or "black").
<code>border.bottom.style</code>	border bottom style - a single character value, expected value is one of "none", "solid", "dotted", "dashed".
<code>border.bottom.width</code>	border bottom width - 0 or positive integer value
<code>border.left.color</code>	border left color - a single character value specifying a valid color (e.g. "#000000" or "black").
<code>border.left.style</code>	border left style - a single character value, expected value is one of "none", "solid", "dotted", "dashed".
<code>border.left.width</code>	border left width - 0 or positive integer value
<code>border.top.color</code>	border top color - a single character value specifying a valid color (e.g. "#000000" or "black").
<code>border.top.style</code>	border top style - a single character value, expected value is one of "none", "solid", "dotted", "dashed".
<code>border.top.width</code>	border top width - 0 or positive integer value
<code>border.right.color</code>	border right color - a single character value specifying a valid color (e.g. "#000000" or "black").
<code>border.right.style</code>	border right style - a single character value, expected value is one of "none", "solid", "dotted", "dashed".
<code>border.right.width</code>	border right width - 0 or positive integer value
<code>vertical.align</code>	cell content vertical alignment - a single character value , expected value is one of "center" or "top" or "bottom"
<code>padding.bottom</code>	cell bottom padding - 0 or positive integer value.
<code>padding.top</code>	cell top padding - 0 or positive integer value.
<code>padding.left</code>	cell left padding - 0 or positive integer value.
<code>padding.right</code>	cell right padding - 0 or positive integer value.

<code>background.color</code>	cell background color - a single character value specifying a valid color (e.g. "#000000" or "black").
<code>text.direction</code>	cell text rotation - a single character value, expected value is one of "lrb", "tbl", "btl".
<code>object</code>	cellProperties object to update
<code>...</code>	further arguments - not used
<code>x</code>	cellProperties object to print

Details

Default values are:

- `border.bottom.color` "black"
- `border.bottom.style` "solid"
- `border.bottom.width` 1
- `border.left.color` "black"
- `border.left.style` "solid"
- `border.left.width` 1
- `border.top.color` "black"
- `border.top.style` "solid"
- `border.top.width` 1
- `border.right.color` "black"
- `border.right.style` "solid"
- `border.right.width` 1
- `vertical.align` "middle"
- `padding.bottom` 1
- `padding.top` 1
- `padding.left` 1
- `padding.right` 1
- `background.color` "white"
- `text.direction` "lrb"

Get a modified version of a cellProperties with `chprop`.

See Also

[borderProperties](#), [FlexTable](#), [shortcut_properties](#)

Examples

```

# cellProperties examples -----
cellProp01 = cellProperties( border.color = "gray", border.width = 2 )
cellProp02 = cellProperties(border.left.width = 0, border.right.width = 0
, border.bottom.width = 2, border.top.width = 0
, padding.bottom = 2, padding.top = 2
, padding.left = 2, padding.right = 2 )

# chprop usage example -----
cellProp = cellProperties()

cellProp01 = chprop( cellProp, border.bottom.color = "#8A949B" )
cellProp02 = chprop( cellProp, border.right.color = "#8A949B" )
cellProp03 = chprop( cellProp, border.left.color = "#8A949B" )
cellProp04 = chprop( cellProp, border.top.color = "#8A949B" )
cellProp05 = chprop( cellProp, border.color = "#8A949B" )

cellProp06 = chprop( cellProp, border.bottom.width = 2 )
cellProp07 = chprop( cellProp, border.left.width = 2 )
cellProp08 = chprop( cellProp, border.top.width = 2 )
cellProp09 = chprop( cellProp, border.right.width = 2 )
cellProp10 = chprop( cellProp, border.width = 2 )

cellProp11 = chprop( cellProp, padding.bottom = 5 )
cellProp12 = chprop( cellProp, padding.top = 5 )
cellProp13 = chprop( cellProp, padding.left = 5 )
cellProp14 = chprop( cellProp, padding.right = 5 )
cellProp15 = chprop( cellProp, padding = 5 )

cellProp16 = chprop( cellProp,
border.bottom = borderProperties( style = "dotted" ) )
cellProp17 = chprop( cellProp, border.left.style = "dotted" )
cellProp18 = chprop( cellProp, border.top.style = "dotted" )
cellProp19 = chprop( cellProp, border.right.style = "dotted" )
cellProp20 = chprop( cellProp, border.style = "dotted" )

cellProp21 = chprop( cellProp, vertical.align = "middle" )
cellProp22 = chprop( cellProp, background.color = "#517281" )

cellProp23 = chprop( cellProp, background.color = "#517281"
, border.color = "#F37257", border.width = 2 )

```

chprop

Change a formatting properties object

Description

Change a formatting properties object

Usage

```
chprop(object, ...)
```

Arguments

object	formatting properties object
...	further arguments passed to other methods

Details

See [chprop.textProperties](#) or [chprop.parProperties](#) or [chprop.cellProperties](#) for examples.

Value

a formatting properties object

See Also

[cellProperties](#), [textProperties](#), [parProperties](#)

chprop.FlexTable *format FlexTable*

Description

Format a FlexTable object.

Usage

```
## S3 method for class 'FlexTable'
chprop(object, value, i, j, to = "body", side = "top",
      ...)
```

Arguments

object	the FlexTable object
value	a formatting properties object (textProperties , parProperties , borderProperties , cellProperties)
i	vector (integer index, row.names values or boolean vector) for rows selection.
j	vector (integer index, col.names values or boolean vector) for columns selection.
to	specify on which part of the FlexTable to apply the value, must be one of the following values “body” (default) or “header” or “footer”
side	used only when value is a borderProperties , specify on which side to apply the properties. It must be one of “bottom”, “top”, “left”, “right”.
...	unused

Examples

```
my_ft <- vanilla.table( head( iris, n = 5 ) )
my_ft <- chprop( my_ft, textBoldItalic(), i = 1, to = "header" )
my_ft <- chprop( my_ft, parCenter(), j = 5 )
my_ft <- chprop( my_ft, borderSolid(color = "red"), i = 5, side = "bottom" )
```

CodeBlock

*Code Block Object***Description**

Code Block Object. A code block object is a block of text treated as verbatim text in a document object.

Usage

```
CodeBlock(file, text, text.properties = textProperties(color = "#A7947D"),
  par.properties = parProperties(text.align = "left", shading.color =
    "#5FB0B8"))
```

Arguments

file	script file. Not used if text is provided.
text	character vector. The text to parse. Not used if file is provided.
text.properties	default textProperties object
par.properties	default parProperties object

See Also

[addCodeBlock](#)

Examples

```
cb_example <- CodeBlock( text = "ls -a\nwhich -a ls" )
```

colorProperties *color properties object*

Description

create a color properties object.

Usage

```
colorProperties(value = "black")

## S3 method for class 'colorProperties'
print(x, ...)

## S3 method for class 'colorProperties'
as.character(x, ...)
```

Arguments

value	valid color
x	a colorProperties object
...	unused

declareTitlesStyles *Set manually headers' styles of a document object*

Description

Set manually titles' styles of a document object

Usage

```
declareTitlesStyles(doc, ...)
```

Arguments

doc	document object
...	further arguments passed to other methods

Details

declareTitlesStyles only works with docx documents.

See [declareTitlesStyles.docx](#) for examples.

Value

a document object

See Also

[docx](#), [styles.docx](#), [declareTitlesStyles.docx](#), [addTOC.docx](#)

declareTitlesStyles.docx

Set manually headers' styles of a docx object

Description

Set manually headers' styles of a docx object

Usage

```
## S3 method for class 'docx'
declareTitlesStyles(doc, stylenames, ...)
```

Arguments

doc	docx object to be used with declareTitlesStyles.
stylenames	existing styles (character vector) where first element represents the style to use for title 1, second element represents the style to use for title 2, etc.
...	further arguments, not used.

Details

Function addTitle need to know which styles are corresponding to which title level (1 ; 1.1 ; 1.1.1 ; etc.). When template is read, function docx try to guess what are theses styles. If he do not succeed, an error occurred saying 'You must defined header styles via declareTitlesStyles first.'. In that case, run styles(...) to see what are available styles, then declareTitlesStyles to indicate which available styles are meant to be used as header styles.

See Also

[docx](#), [styles.docx](#), [addTitle.docx](#), [declareTitlesStyles](#)

Examples

```
doc.filename = "addImage_example.docx"

options( "ReporteRs-fontsize" = 10 )
doc <- docx( )
styles( doc )
# [1] "Normal"           "Title1"           "Title2"
```

```

# [4] "Title3"           "Title4"           "Title5"
# [7] "Title6"           "Title7"           "Title8"
#[10] "Title9"           "Defaut"           ...
doc = declareTitlesStyles(doc
, stylenames = c("Titre1", "Titre2", "Titre3"
, "Titre4", "Titre5", "Titre6", "Titre7", "Titre8", "Titre9" ) )
doc = addTitle( doc, "title 1", 1 )

```

deleteBookmark	<i>delete a bookmark into a docx object</i>
----------------	---

Description

delete a bookmark into a docx object

Usage

```
deleteBookmark(doc, bookmark)
```

Arguments

doc	Object of class docx
bookmark	a character vector specifying bookmark id to delete

See Also

[docx](#)

deleteBookmarkNextContent	<i>delete first content after a bookmark into a docx object</i>
---------------------------	---

Description

delete first content after a bookmark into a docx object

Usage

```
deleteBookmarkNextContent(doc, bookmark)
```

Arguments

doc	Object of class docx
bookmark	a character vector specifying bookmark id to delete

See Also

[docx](#)

doc-list-settings *format ordered and unordered lists*

Description

Create a description used to format ordered and unordered lists in object documents.

Arguments

<code>ol.left</code>	left indent values (in inches) for each level of an ordered list. Length must be 9 as there are 9 elements to define (from level1 to level9).
<code>ol.hanging</code>	space values (in inches) between numbering label (argument <code>ol.format</code>) and content for each level of an ordered list. Length must be 9 as there are 9 elements to define (from level1 to level9).
<code>ol.format</code>	type of numbering for ordered levels, values can be 'decimal' or 'upperRoman' or 'lowerRoman' or 'upperLetter' or 'lowerLetter'. Length must be 9 as there are 9 elements to define (from level1 to level9).
<code>ol.pattern</code>	numbering pattern for ordered levels. A level numbering has the following syntax: "%1" (numbering of level1), "%2" (numbering of level2), ..., "%9" (numbering of level9).
<code>ul.left</code>	left indent values for each level of an unordered list. Length must be 9 as there are 9 elements to define (from level1 to level9). Length must be 9 as there are 9 elements to define (from level1 to level9).
<code>ul.hanging</code>	space values (in inches) between bullet symbol (argument <code>ul.format</code>) and content for each level of an unordered list. Length must be 9 as there are 9 elements to define (from level1 to level9).
<code>ul.format</code>	type of bullet for unordered levels, values can be 'disc' or 'circle' or 'square'. Length must be 9 as there are 9 elements to define (from level1 to level9).

Details

List settings are used to configure formatting of list in documents.

It can be set in R session options or as a parameter in [docx](#) or [pptx](#).

See Also

[addParagraph](#), [ReporteRs](#)

Examples

```
#
numbering.pattern = c( "%1.", "%1. %2.", "%1. %2. %3.",
  "%4.", "%5.", "%6.", "%7.", "%8.", "%9." )

ordered.formats = rep( c( "decimal", "upperRoman", "upperLetter"), 3 )
```

```

unordered.formats = rep( c( "square", "disc", "circle"), 3 )

left.indent = seq( from = 0, by = 0.5, length.out = 9)

options("ReporteRs-list-definition" = list(
  ol.left = left.indent,
  ol.hanging = rep( 0.4, 9 ),
  ol.format = ordered.formats,
  ol.pattern = numbering.pattern,
  ul.left = left.indent,
  ul.hanging = rep( 0.4, 9 ),
  ul.format = unordered.formats
)
)

```

docx

Create Microsoft Word document object representation

Description

Create a [docx](#) object

Usage

```

docx(title = "untitled", template, empty_template = FALSE,
      list.definition = getOption("ReporteRs-list-definition"))

```

```

## S3 method for class 'docx'
dim(x)

```

```

## S3 method for class 'docx'
print(x, ...)

```

Arguments

title	"character" value: title of the document (in the doc properties).
template	"character" value, it represents the filename of the docx file used as a template.
empty_template	wether the content of the template should be clear or not.
list.definition	a list definition to specify how ordered and unordered lists have to be formatted. See list.settings . Default to <code>getOption("ReporteRs-list-definition")</code> .
x	a docx objet
...	unused

Details

Several methods can be used to send R output into an object of class `docx`.

- `addTitle` add titles
- `addParagraph` add text
- `addPlot` add plots
- `addFlexTable` add tables. See `FlexTable`
- `addImage` add external images
- `addTOC` add table of content
- `addPageBreak` add page break
- `addSection` add section (for landscape orientation)
- `addDocument` add an external docx file into a docx object.

R outputs (tables, plots, paragraphs and images) can be inserted (and not added at the end) in a document if a bookmark exists in the template file. See `bookmark`.

Once object has content, user can write the docx into a ".docx" file, see `writeDoc`.

`dim` returns page width and height and page margins of a docx object.

`print` print informations about an object of class docx.

Value

an object of class `docx`.

Note

Word 2007-2013 (*.docx) file formats are the only supported files.

Documents are manipulated in-memory ; a docx's document is not written to the disk unless the `writeDoc` method has been called on the object.

References

Wikipedia: Office Open XML

http://en.wikipedia.org/wiki/Office_Open_XML

See Also

`pptx`, `bookmark`

Examples

```
# set default font size to 10
options( "ReporteRs-fontsize" = 10 )

# Create a new document
doc <- docx( title = "title" )
```

```

# display available styles
styles( doc )

# add title
doc <- addParagraph( doc, "Document title", stylename = "TitleDoc" )

# add a paragraph
doc <- addParagraph( doc , "This document is generated with ReporteRs."
  , stylename="Citationintense")

# add page break
doc <- addPageBreak( doc )

# add a title
doc <- addTitle( doc, "Table of contents", level = 1 )

##### TOC DEMO #####
# add a table of content
doc <- addTOC( doc )

# add page break and then tables of contents for produced plots and tables
doc <- addPageBreak( doc )
doc <- addTitle( doc, "List of graphics", level = 1 )
doc <- addTOC( doc, stylename = "rPlotLegend" )
doc <- addTitle( doc, "List of tables", level = 1 )
doc <- addTOC( doc, stylename = "rTableLegend" )

# add page break
doc <- addPageBreak( doc )

##### TEXT DEMO #####

# add a title
doc <- addTitle( doc, "Text demo", level = 1 )

sometext = c( "Lorem ipsum dolor sit amet, consectetur adipiscing elit."
  , "In sit amet ipsum tellus. Vivamus dignissim arcu sit."
  , "Quisque dictum tristique ligula."
)
# add simple text with 'Normal' style
doc <- addParagraph( doc, value = sometext, stylename="Normal" )
# add simple text with 'BulletList' style
doc <- addParagraph( doc, value = sometext, stylename="BulletList" )

# Add "My tailor is rich" and "Cats and Dogs"
# format some of the pieces of text
pot1 = pot("My tailor", textProperties(color="red",
shading.color = "#CCCCCC" ) ) + " is " + pot("rich",
textProperties(font.weight="bold" ) )
pot2 = pot("Cats", textProperties(color="red" ) ) + " and " + pot("Dogs",
textProperties(color="blue" ) )
doc <- addParagraph(doc, set_of_paragraphs( pot1, pot2 ),

```



```

styleName = "Normal" )

doc <- addParagraph(doc, "Silentium tractibus per minimis ne excita
ut temptentur generalibus quam primordiis per clades post delictis
iuge exitium silentium per et.",
  par.properties = parProperties( padding.left = 25,
    padding.right = 25) )

doc <- addParagraph(doc,
  pot("Gallus necem refert singula modum quae est quae quorum leo.",
format = textItalic( ) ),
  par.properties = parProperties(list.style = "blockquote") )

ordered.list.level1 = parProperties(list.style = "ordered", level = 1 )
ordered.list.level2 = parProperties(list.style = "ordered", level = 2 )

doc <- addParagraph( doc, value = sometext,
  par.properties = ordered.list.level1 )
doc <- addParagraph( doc, value = sometext,
  par.properties = ordered.list.level2 )

##### PLOT DEMO #####
# load ggplot2
if( requireNamespace("ggplot2", quietly = TRUE) ){
  doc <- addTitle( doc, "Plot example", level = 1 )

  # create a ggplot2 plot
  myplot = ggplot2::qplot(Sepal.Length, Petal.Length, data = iris
    , color = Species, size = Petal.Width, alpha = I(0.7) )

  # Add myplot into object doc
  doc <- addPlot( doc = doc, fun = print, x = myplot )

  # Add a legend below the plot
  doc <- addParagraph( doc, value = "my first plot",
styleName = "rPlotLegend")
}

##### FLEXTABLE DEMO #####

doc <- addTitle( doc, "FlexTable example", level = 1 )

# Create a FlexTable with data.frame mtcars, display rownames
# use different formatting properties for header and body
MyFTable <- FlexTable( data = mtcars, add.rownames = TRUE,
header.cell.props = cellProperties( background.color = "#00557F" ),
header.text.props = textProperties( color = "white",
font.size = 11, font.weight = "bold" ),
body.text.props = textProperties( font.size = 10 )
)
# zebra stripes - alternate colored backgrounds on table rows

```

```

MyFTable <- setZebraStyle( MyFTable, odd = "#E1EEf4", even = "white" )

# applies a border grid on table
MyFTable <- setFlexTableBorders(MyFTable,
inner.vertical = borderProperties( color="#0070A8", style="solid" ),
inner.horizontal = borderNone(),
outer.vertical = borderProperties( color = "#006699",
style = "solid", width = 2 ),
outer.horizontal = borderProperties( color = "#006699",
style = "solid", width = 2 )
)

# add MyFTable into document
doc <- addFlexTable( doc, MyFTable )
doc <- addParagraph( doc, value = "my first table",
styleName = "rTableLegend")

# write the doc
writeDoc( doc, file = "document_example.docx")

# get docx page dimensions -----
doc = docx( title = "title" )
dim( doc )

```

docx-bookmark

docx bookmarks

Description

docx can generate Word documents using bookmarks as placeholders to insert contents. Read MS documentation about bookmark here:

<http://office.microsoft.com/en-us/word-help/add-or-delete-bookmarks-HP001226532.aspx#BM1>

Functions [addFlexTable](#), [addPlot](#), [addParagraph](#) and [addImage](#) can send respective outputs into these bookmarks.

These functions have an optional argument named bookmark.

When used with [addPlot](#), [addParagraph](#) and [addImage](#), content (plots, paragraphs or images) will replace the whole paragraph containing the bookmark.

When used with [addFlexTable](#) content (table) will be inserted after the paragraph containing the bookmark.

To be used with a docx object, bookmark must be placed into a single paragraph, if placed along 1 or more paragraphs side effects could occur and insertion of a content could fail.

You can insert the bookmark at the beginning of the paragraph (see the file `bookmark_example.docx` in the templates directory of the package for an example) or on a portion of a text in a paragraph.

See Also

[docx](#)

Examples

```

# Word document to write
docx.file = "document_new.docx"

# create document
doc = docx( title = "My example",
  template = file.path( system.file(package = "ReporteRs"),
    "templates/bookmark_example.docx" ) )

# replace bookmarks 'AUTHOR' and 'REVIEWER'
# by dummy values
doc = addParagraph( doc,
  value = c( "James Sonny Crockett", "Ricardo Rico Tubbs" ),
  stylename = "Normal", bookmark = "AUTHOR" )
doc = addParagraph( doc, value = c( "Martin Marty Castillo" ),
  stylename = "Normal", bookmark = "REVIEWER" )

MyFTable = FlexTable( data = mtcars[1:10, ]
  , add.rownames=TRUE
  )

# replace bookmarks 'DATA' and 'CONFINT' located in 'ttest_example.docx'
# by data.frame objects 'data' and 'conf.int'
doc = addFlexTable( doc
  , MyFTable
  , bookmark = "DATA1" )

# replace bookmarks 'DATA' and 'CONFINT' located in 'ttest_example.docx'
# by data.frame objects 'data' and 'conf.int'
doc = addFlexTable( doc
  , vanilla.table( iris[1:10,] )
  , bookmark = "DATA2" )

doc = addPlot( doc, vector.graphic = TRUE
  , fun = function(){
  sale5 <- c(6, 4, 9, 7, 6, 12, 8, 10, 9, 13)
  plot(sale5)
  abline(lsfrit(1:10, sale5))
  abline(lsfrit(1:10, sale5, intercept = FALSE), col = 4)
  }
  , bookmark = "PLOT")

doc = addParagraph( doc, value = c( "Header 1" )
  , stylename = "NAMESTYLE", bookmark = "COLNAME1" )

doc = addParagraph( doc, value = c( "Header 2" )
  , stylename = "NAMESTYLE", bookmark = "COLNAME2" )

```

```

doc = addParagraph( doc, value = c( "Header 3" )
, stylename = "NAMESTYLE", bookmark = "COLNAME3" )

doc = addParagraph( doc, value = c( "Row name 1" )
, stylename = "NAMESTYLE", bookmark = "ROWNAME1" )

doc = addParagraph( doc, value = c( "Row name 2" )
, stylename = "NAMESTYLE", bookmark = "ROWNAME2" )

doc = addParagraph( doc, value = c( "Hello World" )
, stylename = "DATASTYLE", bookmark = "ANYDATA" )

writeDoc( doc, docx.file )

```

FlexCell

Cell object for FlexTable

Description

Create a representation of a cell that can be inserted in a FlexRow. For internal usage.

Usage

```

FlexCell(value, colspan = 1, par.properties = parProperties(),
cell.properties = cellProperties())

```

Arguments

value	a content value - a value of type character or pot or set_of_paragraphs .
colspan	defines the number of columns the cell should span
par.properties	parProperties to apply to content
cell.properties	cellProperties to apply to content

See Also

[addFlexTable](#), [addHeaderRow](#), [addFooterRow](#)

Examples

```

#
FlexCell( value = "Hello" )
FlexCell( value = "Hello", colspan = 3)
FlexCell( "Column 1",
cell.properties = cellProperties(background.color="#527578") )

```

```

# define a complex formatted text
mytext = pot("Hello", format = textProperties(color = "blue")
) + " " + pot( "world", format = textProperties(font.size = 9)
)
Fcell = FlexCell( mytext, colspan = 4 )

# define two paragraph and put them in a FlexCell
mytext1 = pot("Hello", format = textProperties(color = "blue") )
mytext2 = pot( "world", format = textProperties(font.size = 9) )
Fcell = FlexCell( set_of_paragraphs( mytext1, mytext2 ) )

```

FlexRow

Row object for FlexTable

Description

Create a representation of a row that can be inserted in a FlexTable. For internal usage.

Usage

```

FlexRow(values, colspan, text.properties = textProperties(),
        par.properties = parProperties(), cell.properties = cellProperties())

```

Arguments

values	Optional. a character vector to use as text content, the row will contain as many cells as there are in values.
colspan	integer Optional. vector specifying for each element the number of columns to span for each corresponding value (in values).
text.properties	Optional. textProperties to apply to each cell. Used only if values are not missing.
par.properties	Optional. parProperties to apply to each cell. Used only if values are not missing.
cell.properties	Optional. cellProperties to apply to each cell. Used only if values are not missing.

See Also

[FlexTable](#), [alterFlexRow](#) , [addHeaderRow](#), [addFooterRow](#)

Examples

```
#
## example with characters
headerRow = FlexRow( c("Column 1", "Column 2")
  , cell.properties = cellProperties(background.color="#527578") )
## example with FlexCell
headerRow = FlexRow()
headerRow[1] = FlexCell( "Column 1"
  , cell.properties = cellProperties(background.color="#527578") )
headerRow[2] = FlexCell( "Column 2"
  , cell.properties = cellProperties(background.color="#527578") )
```

FlexTable

*FlexTable creation***Description**

Create an object of class FlexTable.

FlexTable can be manipulated so that almost any formatting can be specified.

An API is available to let you manipulate (format, add text, merge cells, etc.) your FlexTable. A FlexTable is made of 3 parts: header, body and footer. To insert headers and footers rows with eventually merged cells, see [addHeaderRow](#) and [addFooterRow](#).

Formating can be done on cells, paragraphs and text (borders, colors, fonts, etc.) , see [alterFlexTable](#).

Usage

```
FlexTable(data, numrow, numcol, header.columns = TRUE, add.rownames = FALSE,
  body.cell.props = cellProperties(), body.par.props = parProperties(padding
  = 0), body.text.props = textProperties(),
  header.cell.props = cellProperties(),
  header.par.props = parProperties(padding = 0),
  header.text.props = textProperties(font.weight = "bold"))
```

Arguments

<code>data</code>	(a data.frame or matrix object) to add
<code>numrow</code>	number of row in the table body. Mandatory if data is missing.
<code>numcol</code>	number of col in the table body. Mandatory if data is missing.
<code>header.columns</code>	logical value - should the colnames be included in the table as table headers. If FALSE, no headers will be printed unless you use addHeaderRow .
<code>add.rownames</code>	logical value - should the row.names be included in the table.
<code>body.cell.props</code>	default cells formatting properties for table body
<code>body.par.props</code>	default paragraphs formatting properties for table body

<code>body.text.props</code>	default text formatting properties for table body
<code>header.cell.props</code>	default cells formatting properties for table headers
<code>header.par.props</code>	default paragraphs formatting properties for table headers
<code>header.text.props</code>	default text formatting properties for table headers

Details

The classical workflow would be to create a FlexTable, to add headers rows (see [addHeaderRow](#)) and eventually footers rows (see [addFooterRow](#)).

A FlexTable lets you add text in cells and modify cells, paragraphs and text properties. Text can be added with operator [`<-`. Text, paragraphs and cells properties can be also modified with operator [`<-`. (see [alterFlexTable](#)).

Below list of functions to use with FlexTable objects:

Text formatting

Apply a [textProperties](#) object to a subset of the FlexTable. Use the operator [`<-`. The [textProperties](#) object will be used to format all text from selected cells. See [alterFlexTable](#).

Text adding

Add text with operator [`<-`. Text can be added just after the last text in the cell or as a new paragraph. Format can also be specified. Text can also be a [pot](#) object if the text format is complex.

Paragraph formatting

Apply a [parProperties](#) object to a subset of the FlexTable. Use the operator [`<-`. The [parProperties](#) object will be used to format all paragraphs from selected cells. See [alterFlexTable](#).

Cell formatting

Apply a [cellProperties](#) object to a subset of the FlexTable. Use the operator [`<-`. The [cellProperties](#) object will be used to format selected cells. See [alterFlexTable](#).

Borders

Apply borders scheme to a FlexTable with function [setFlexTableBorders](#).

Set a border to a selection in a FlexTable with the operator [`<-` and an object of class [borderProperties](#). Don't forget to specify argument `side`. See [alterFlexTable](#).

Cell background colors

Applies background colors to cells. See [setFlexTableBackgroundColors](#).

Alternate row colors (zebra striping) with function [setZebraStyle](#).

Applies background colors to rows with function [setRowsColors](#).

Applies background colors to columns with function [setColumnsColors](#).

Cell merge

Span rows within columns with function [spanFlexTableRows](#).

Span columns within rows with function [spanFlexTableColumns](#).

Columns widths

Set columns widths with function [setFlexTableWidths](#).

See Also

[addHeaderRow](#), [addFooterRow](#), [setFlexTableWidths](#), [alterFlexTable](#), [setFlexTableBorders](#), [spanFlexTableRows](#), [spanFlexTableColumns](#), [setRowsColors](#), [setColumnsColors](#), [setZebraStyle](#), [setFlexTableBackgroundColors](#), [pot](#), [addFlexTable](#)

Examples

```
#
#####

# Create a FlexTable with data.frame mtcars, display rownames
# use different formatting properties for header and body
MyFTable = FlexTable( data = mtcars, add.rownames = TRUE,
  header.cell.props = cellProperties( background.color = "#00557F" ),
  header.text.props = textProperties( color = "white",
    font.size = 11, font.weight = "bold" ),
  body.text.props = textProperties( font.size = 10 )
)
# zebra stripes - alternate colored backgrounds on table rows
MyFTable = setZebraStyle( MyFTable, odd = "#E1EEF4", even = "white" )

# applies a border grid on table
MyFTable = setFlexTableBorders(MyFTable,
  inner.vertical = borderProperties( color="#0070A8", style="solid" ),
  inner.horizontal = borderNone(),
  outer.vertical = borderProperties( color = "#006699",
style = "solid", width = 2 ),
  outer.horizontal = borderProperties( color = "#006699",
style = "solid", width = 2 )
)
#####

# set default font size to 10
options( "ReporteRs-fontsize" = 10 )

# a summary of mtcars
dataset = aggregate( mtcars[, c("disp", "mpg", "wt")]
  , by = mtcars[, c("cyl", "gear", "carb")]
  , FUN = mean )
dataset = dataset[ order(dataset$cyl, dataset$gear, dataset$carb), ]

# set cell padding default to 2
baseCellProp = cellProperties( padding = 2 )

# Create a FlexTable with data.frame dataset
MyFTable = FlexTable( data = dataset
  , body.cell.props = baseCellProp
  , header.cell.props = baseCellProp
  , header.par.props = parProperties(text.align = "right" )
)
```



```

# set columns widths (inch)
MyFTable = setFlexTableWidths( MyFTable,
widths = c(0.5, 0.5, 0.5, 0.7, 0.7, 0.7) )

# span successive identical cells within column 1, 2 and 3
MyFTable = spanFlexTableRows( MyFTable, j = 1,
runs = as.character( dataset$cyl ) )
MyFTable = spanFlexTableRows( MyFTable, j = 2,
runs = as.character( dataset$gear ) )
MyFTable = spanFlexTableRows( MyFTable, j = 3,
runs = as.character( dataset$carb ) )

# overwrites some text formatting properties
MyFTable[dataset$wt < 3, 6] = textProperties( color="#003366")
MyFTable[dataset$mpg < 20, 5] = textProperties( color="#993300")

# overwrites some paragraph formatting properties
MyFTable[, 1:3] = parProperties(text.align = "center")
MyFTable[, 4:6] = parProperties(text.align = "right")

Footnote1 = Footnote( )

par1 = pot("About this reference", textBold( ) )
par2 = pot("Omni ab coalitos pro malivolus obsecrans graviter
cum perquisitor perquisitor pericula saepeque immunibus coalitos ut.",
textItalic(font.size = 8) )
Footnote1 = addParagraph( Footnote1, set_of_paragraphs( par1, par2 ),
parProperties(text.align = "justify"))

Footnote1 = addParagraph( Footnote1,
set_of_paragraphs( "list item 1", "list item 2" ),
parProperties(text.align = "left", list.style = "ordered"))

an_rscript = RScript( text = "ls()
x = rnorm(10)" )
Footnote1 = addParagraph( Footnote1, an_rscript )

MyFTable[1, 1, newpar = TRUE] = pot("a note",
footnote = Footnote1, format = textBold(color="gray") )

pot_link = pot(" (link example)", textProperties( color = "cyan" ),
hyperlink = "http://www.wikipedia.org/" )

MyFTable[1, 1, to = "header"] = pot_link

# applies a border grid on table
MyFTable = setFlexTableBorders( MyFTable, footer=TRUE
, inner.vertical = borderProperties( color = "#666666" )
, inner.horizontal = borderProperties( color = "#666666" )
, outer.vertical = borderProperties( width = 2, color = "#666666" )
, outer.horizontal = borderProperties( width = 2, color = "#666666" )
)

```

```

data = cor( cor(mtcars) )

pal = c( "#D73027", "#F46D43", "#FDAE61", "#FEE08B",
         "#D9EF8B", "#A6D96A", "#66BD63", "#1A9850" )
mycut = cut( data,
            breaks = c(-1,-0.75,-0.5,-0.25,0,0.25,0.5,0.75,1),
            include.lowest = TRUE, label = FALSE )
mycolors = pal[ mycut ]

MyFTable = FlexTable( round(data, 3), add.rownames = TRUE )

# set computed colors
MyFTable = setFlexTableBackgroundColors( MyFTable,
    j = seq_len(ncol(data)) + 1,
    colors = mycolors )

# cosmetics
MyFTable = setFlexTableBackgroundColors( MyFTable, i = 1,
    colors = "gray", to = "header" )
MyFTable[1, , to = "header"] = textBold(color="white")

MyFTable = setFlexTableBackgroundColors( MyFTable, j = 1,
    colors = "gray" )
MyFTable[,1] = textBold(color="white")

MyFTable = setFlexTableBorders( MyFTable,
    inner.vertical = borderProperties( style = "dashed",
    color = "white" ),
    inner.horizontal = borderProperties( style = "dashed",
    color = "white" ),
    outer.vertical = borderProperties( width = 2, color = "white" ),
    outer.horizontal = borderProperties( width = 2, color = "white" )
)

data( iris )
iris = iris[1:10, c(5, 1:4)]

default_text = textProperties( font.size = 11 )
note_text = chprop(default_text,
    vertical.align = "superscript", color = "blue")

iris_ft = FlexTable( data = iris, header.columns = FALSE )
iris_ft = addHeaderRow( iris_ft,
    value = c("", "Measures" ), colspan = c( 4, 1 ) )
iris_ft = addHeaderRow( iris_ft,
    value = gsub( "\\.", " ", names( iris ) ) )
iris_ft[2, 2, newpar = TRUE ] = "Hi there"
iris_ft[2, 1, to="header"] = pot("* this is a note", note_text )

iris_ft = spanFlexTableRows( iris_ft, j = "Species",

```

```

runs = as.character( iris$Species ) )
iris_ft = setFlexTableBorders( iris_ft,
  inner.vertical = borderProperties( style = "none" ),
  inner.horizontal = borderProperties( width = 1 ),
  outer.vertical = borderProperties( width = 0 ),
  outer.horizontal = borderProperties( width = 2 ),
  footer = TRUE
)

```

Footnote

Create a Footnote

Description

A footnote is a set of paragraphs placed at the bottom of a page if document object is a [docx](#) object.

If in a docx object, footnote will be flagged by a number immediately following the portion of the text the note is in reference to.

Usage

```
Footnote(index.text.properties = textProperties(vertical.align =
  "superscript"))
```

Arguments

`index.text.properties`
[textProperties](#) to apply to note index symbol (only for docx object).

Value

an object of class [Footnote](#).

See Also

[docx](#), [pot](#)

Examples

```

## docx example
doc = docx( )

par1 = pot("About this reference", textBold( ) )
par2 = pot("Omni ab coalitos pro malivolus obsecrans graviter
cum perquisitor perquisitor pericula saepeque immunibus coalitos ut.",
textItalic(font.size = 8) )

Footnote1 = Footnote( )

```

```

Footnote1 = addParagraph( Footnote1, set_of_paragraphs( par1, par2 ),
parProperties(text.align = "justify"))
Footnote1 = addParagraph( Footnote1,
set_of_paragraphs( "list item 1", "list item 2" ),
parProperties(text.align = "left", list.style = "ordered"))
an_rscript = RScript( par.properties = parProperties(shading.color = "gray90"),
text = "ls()
x = rnorm(10)" )
Footnote1 = addParagraph( Footnote1, an_rscript,
parProperties(text.align = "left"))

Footnote2 = Footnote( )
Footnote2 = addParagraph( Footnote2, pot("This is another reference" ),
par.properties = parProperties(text.align = "center"))

doc = addTitle( doc, "Title example 1", level = 1 )

pot1 = "Hae duae provinciae " + pot("bello",
footnote = Footnote1 ) + " quondam piratico catervis mixtae
praedonum a Servilio pro consule missae sub
iugum factae sunt vectigales. et hae quidem regiones velut in prominenti
lingua positae ob orbe eoo monte Amano disparantur."

pot2 = pot("Latius iam disseminata licentia onerosus bonis Caesar
post haec adhibens modum orientis latera cuncta vexabat nec honoratis
nec urbium primatibus nec plebeis." ) + pot(" Here is another note.",
footnote = Footnote2)

# Add my.pars into the document doc
doc = addParagraph(doc, set_of_paragraphs( pot1, pot2 ) )

docx.file = "footnote.docx"

writeDoc( doc, file = docx.file )

```

is.color

color checking

Description

Check if character string is a valid color representation

Usage

```
is.color(x)
```

Arguments

x value(s) to be tested

Details

see <http://stackoverflow.com/questions/13289009/check-if-character-string-is-a-valid-color-representation/13290832#13290832>

See Also

[pptx, docx](#)

Examples

```
is.color( c(NA, "black", "blackk", "1", "#00", "#000000") )
```

knit_print.FlexTable *FlexTable custom printing function for knitr*

Description

FlexTable custom printing function for knitr

Usage

```
## S3 method for class 'FlexTable'
knit_print(x, ...)
```

Arguments

x	a FlexTable to be printed
...	further arguments, not used.

knit_print.pot *pot custom printing function for knitr*

Description

pot custom printing function for knitr

Usage

```
## S3 method for class 'pot'
knit_print(x, ...)
```

Arguments

x	a pot to be printed
...	further arguments, not used.

light.table	<i>get a simple FlexTable from a dataset</i>
-------------	--

Description

get a simple FlexTable from a dataset

Usage

```
light.table(dataset, add.rownames = FALSE, text.direction = "lrbt")
```

Arguments

dataset	the data to use
add.rownames	logical value - should the row.names be included in the table.
text.direction	header cell text rotation - a single character value, expected value is one of "lrbt", "tblr", "btlr".

See Also

[FlexTable](#)

Examples

```
light.table( iris)
```

list_bookmarks	<i>List Bookmarks from a Word Document</i>
----------------	--

Description

List all bookmarks available in a docx object.

Usage

```
list_bookmarks(x, body = TRUE, header = TRUE, footer = TRUE)
```

Arguments

x	a docx object
body	specifies to scan document body
header	specifies to scan document header
footer	specifies to scan document footer

Value

a character vector

See Also

[docx](#), [text_extract](#)

Examples

```
doc = docx( title = "My example", template = file.path(
  system.file(package = "ReporteRs"), "templates/bookmark_example.docx") )
list_bookmarks( doc )
```

parProperties

Paragraph formatting properties

Description

Create a parProperties object that describes paragraph formatting properties.

Usage

```
parProperties(text.align = "left", padding.bottom = 1, padding.top = 1,
  padding.left = 1, padding.right = 1, padding, list.style = "none",
  level = 1, border.bottom = borderNone(), border.left = borderNone(),
  border.top = borderNone(), border.right = borderNone(), shading.color)
```

```
## S3 method for class 'parProperties'
chprop(object, text.align, padding.bottom, padding.top,
  padding.left, padding.right, padding, list.style, level, border.bottom,
  border.left, border.top, border.right, shading.color, ...)
```

```
## S3 method for class 'parProperties'
print(x, ...)
```

Arguments

text.align	text alignment - a single character value, expected value is one of 'left', 'right', 'center', 'justify'.
padding.bottom	paragraph bottom padding - 0 or positive integer value.
padding.top	paragraph top padding - 0 or positive integer value.
padding.left	paragraph left padding - 0 or positive integer value.
padding.right	paragraph right padding - 0 or positive integer value.
padding	paragraph padding - 0 or positive integer value. Argument padding overwrites arguments padding.bottom, padding.top, padding.left, padding.right.

<code>list.style</code>	list style - a single character value, expected value is one of 'none' (default), 'unordered', 'ordered', 'blockquote'. This will not have any effect if used in a FlexTable.
<code>level</code>	list level if argument <code>list</code> is not 'none'. This will not have any effect if used in a FlexTable.
<code>border.bottom</code>	borderProperties for bottom border. overwrite all <code>border.bottom.*</code> if specified.
<code>border.left</code>	borderProperties for left border. overwrite all <code>border.left.*</code> if specified.
<code>border.top</code>	borderProperties for top border. overwrite all <code>border.top.*</code> if specified.
<code>border.right</code>	borderProperties for right border. overwrite all <code>border.right.*</code> if specified.
<code>shading.color</code>	shading color - a single character value specifying a valid color (e.g. "#000000" or "black").
<code>object</code>	<code>parProperties</code> object to update
<code>...</code>	further arguments - not used
<code>x</code>	<code>parProperties</code> object to print

Details

`parProperties` is used to control paragraph properties. It is used when adding plots or when adding content in a FlexTable.

Default values are:

- `text.align` "left"
- `padding.bottom` 1
- `padding.top` 1
- `padding.left` 1
- `padding.right` 1
- `list.style` 'none'
- `level` 1

Get a modified version of a `parProperties` with `chprop`.

Value

a `parProperties` object

See Also

[alterFlexTable](#), [addParagraph](#), [shortcut_properties](#)

Examples

```

# parProperties examples -----
parProperties( text.align = "center", padding = 5)

parProperties( text.align = "center",
  padding.top = 5,
  padding.bottom = 0,
  padding.left = 2,
  padding.right = 0
)

parProperties( list.style = "ordered", level = 2)

parProperties( list.style = "unordered", level = 2)

# chprop usage example -----
parProp = parProperties()

parProp01 = chprop( parProp, text.align = "center" )
parProp02 = chprop( parProp, padding.bottom = 2 )
parProp03 = chprop( parProp, padding.top = 2 )
parProp04 = chprop( parProp, padding.left = 2 )
parProp05 = chprop( parProp, padding = 2 )

parProp06 = chprop( parProp, padding = 2, text.align = "center" )

```

 pot

Piece of Text (formatted text)

Description

Create an object with a text to display and its formatting properties.

Usage

```
pot(value = "", format = textProperties(), hyperlink, footnote)
```

Arguments

value	text value or a value that has a format method returning character value.
format	formatting properties (an object of class textProperties).
hyperlink	a valid url to use as hyperlink when clicking on value.
footnote	a Footnote object.

Details

a pot (piece of text) is a convenient way to define a paragraph of text where some text are not all formatted the same.

A pot can be associated with an hyperlink.

A pot can be associated with a Footnote. Note that footnotes can not be inserted in a pptx object.

See Also

[addParagraph, Footnote](#) , [+.pot](#)

Examples

```
#

# "My tailor is rich" with formatting on some words
pot1 = pot("My tailor", textProperties(color = "red" )
) + " is " + pot("rich", textProperties(shading.color = "red",
font.weight = "bold" ) )

# "Cats and dogs" with formatting on some words
pot2 = pot("Cats", textProperties(color = "red" ) ) +
" and " +
pot("dogs", textProperties( color = "blue" ),
hyperlink = "http://www.wikipedia.org/" )
```

pot_img

Image to be concatenate with pot object

Description

Create an pot object that handle images.

Usage

```
pot_img(filename, width, height)
```

Arguments

filename	"character" value, complete filename of the external image
width	image width in inches
height	image height in inches

pptx

*Create Microsoft PowerPoint document object representation***Description**

Create a [pptx](#) object

Usage

```
pptx(title, template,
      list.definition = getOption("ReporteRs-list-definition"))

## S3 method for class 'pptx'
dim(x)

## S3 method for class 'pptx'
print(x, ...)
```

Arguments

title	"character" value: title of the document (in the doc properties).
template	"character" value, it represents the filename of the pptx file used as a template.
list.definition	a list definition to specify how ordered and unordered lists have to be formatted. See list.settings . Default to <code>getOption("ReporteRs-list-definition")</code> .
x	Object of class <code>pptx</code>
...	further arguments, not used.

Details

To send R output in a pptx document, a slide (see [addSlide.pptx](#)) have to be added to the object first (because output is being written in slides).

Several methods can be used to send R output into an object of class [pptx](#).

- [addTitle.pptx](#) add titles
- [addParagraph.pptx](#) add text
- [addPlot.pptx](#) add plots
- [addFlexTable.pptx](#) add [FlexTable](#)
- [addDate.pptx](#) add a date (most often in the bottom left area of the slide)
- [addFooter.pptx](#) add a comment in the footer (most often in the bottom center area of the slide)
- [addPageNumber.pptx](#) add a page number (most often in the bottom right area of the slide)
- [addImage.pptx](#) add external images

Once object has content, user can write the pptx into a ".pptx" file, see [writeDoc](#).

dim returns slide width and height, position and dimension of the next available shape in the current slide.

print print informations about an object of class pptx.

Value

an object of class [pptx](#).

Note

Power Point 2007-2013 (*.pptx) file formats are the only supported files.

Document are manipulated in-memory ; a pptx's document is not written to the disk unless the [writeDoc](#) method has been called on the object.

References

Wikipedia: Office Open XML

http://en.wikipedia.org/wiki/Office_Open_XML

See Also

[docx](#)

Examples

```
# set default font size to 10
options( "ReporteRs-fontsize" = 11 )

# Word document to write
pptx.file = "presentation_example.pptx"

# Create a new document
doc = pptx( title = "title" )

# display layouts names
slide.layouts( doc )

# add a slide with layout "Title Slide"
doc = addSlide( doc, slide.layout = "Title Slide" )

#set the main title
doc = addTitle( doc, "Presentation title" )
#set the sub-title
doc = addSubtitle( doc , "This document is generated with ReporteRs.")

##### TEXT DEMO #####

# add a slide with layout "Title and Content" then add content
```

```

doc = addSlide( doc, slide.layout = "Two Content" )

# add a title
doc = addTitle( doc, "Text demo" )
sometext = c( "Lorem ipsum dolor sit amet, consectetur adipiscing elit."
, "In sit amet ipsum tellus. Vivamus dignissim sit amet auctor."
, "Quisque dictum tristique ligula."
)

# add simple text
doc = addParagraph( doc, value = sometext )

# Add "My tailor is rich" and "Cats and Dogs"
# format some of the pieces of text
pot1 = pot("My tailor"
, textProperties(color="red" ) ) + " is " + pot("rich"
, textProperties(font.weight="bold" ) )
pot2 = pot("Cats"
, textProperties(color="red" )
) + " and " + pot("Dogs"
, textProperties(color="blue" ) )
doc = addParagraph(doc, set_of_paragraphs( pot1, pot2 ) )

##### PLOT DEMO #####
if( requireNamespace("ggplot2", quietly = TRUE) ){
  doc = addSlide( doc, slide.layout = "Title and Content" )
  doc = addTitle( doc, "Plot examples" )

  myplot = ggplot2::qplot(Sepal.Length, Petal.Length
, data = iris, color = Species
, size = Petal.Width, alpha = I(0.7)
)
  # Add titles and then 'myplot'
  doc = addPlot( doc, function( ) print( myplot ) )
}

##### FLEXTABLE DEMO #####
doc = addSlide( doc, slide.layout = "Title and Content" )
doc = addTitle( doc, "FlexTable example" )

# Create a FlexTable with data.frame mtcars, display rownames
# use different formatting properties for header and body
MyFTable = FlexTable( data = mtcars, add.rownames = TRUE,
header.cell.props = cellProperties( background.color = "#00557F" ),
header.text.props = textProperties( color = "white",
font.size = 11, font.weight = "bold" ),
body.text.props = textProperties( font.size = 10 )
)
# zebra stripes - alternate colored backgrounds on table rows
MyFTable = setZebraStyle( MyFTable, odd = "#E1EEF4", even = "white" )

# applies a border grid on table
MyFTable = setFlexTableBorders(MyFTable,

```

```

inner.vertical = borderProperties( color="#0070A8", style="solid" ),
inner.horizontal = borderNone(),
outer.vertical = borderProperties( color = "#006699",
  style = "solid", width = 2 ),
outer.horizontal = borderProperties( color = "#006699",
  style = "solid", width = 2 )
)

# add MyFTable into document
doc = addFlexTable( doc, MyFTable )

# write the doc
writeDoc( doc, file = pptx.file )

# get pptx page dimensions -----
doc = pptx( title = "title" )
doc = addSlide( doc, "Title and Content" )
dim(doc)

```

print.bsdoc

Print method for bsdoc objects.

Description

print a [bsdoc](#) object. If R session is interactive, the document is rendered in an HTML page and loaded into a WWW browser.

Usage

```
## S3 method for class 'bsdoc'
print(x, ...)
```

Arguments

x	a bsdoc object
...	further arguments, not used.

Examples

```
# Create a new document
doc = bsdoc( )
print( doc )
```

print.FlexTable	<i>Print FlexTables</i>
-----------------	-------------------------

Description

print a [FlexTable](#) object. If R session is interactive, the FlexTable is rendered in an HTML page and loaded into a WWW browser.

Usage

```
## S3 method for class 'FlexTable'  
print(x, ...)
```

Arguments

x	a FlexTable object
...	further arguments, not used.

print.Footnote	<i>print a Footnote</i>
----------------	-------------------------

Description

print a Footnote

Usage

```
## S3 method for class 'Footnote'  
print(x, ...)
```

Arguments

x	a Footnote object
...	further arguments, not used.

print.pot	<i>Print pot objects</i>
-----------	--------------------------

Description

print a `pot` object. Within RStudio, the pot is rendered in the viewer.

Usage

```
## S3 method for class 'pot'  
print(x, ...)
```

Arguments

x	a <code>pot</code> object
...	further arguments, not used.

renderFlexTable	<i>FlexTable output for shiny</i>
-----------------	-----------------------------------

Description

Creates a reactive FlexTable that is suitable for assigning to a `tableOutput` slot.

Usage

```
renderFlexTable(expr, ..., env = parent.frame(), quoted = FALSE)
```

Arguments

expr	An expression that returns a FlexTable object.
...	not used
env	The environment in which to evaluate expr.
quoted	Is expr a quoted expression (with <code>quote()</code>)? This is useful if you want to save an expression in a variable.

RScript

RScript object

Description

Colored RScript object

Usage

```
RScript(file, text, comment.properties = textProperties(color = "#A7947D"),
  roxygencomment.properties = textProperties(color = "#5FB0B8"),
  symbol.properties = textProperties(color = "black"),
  operators.properties = textProperties(color = "black"),
  keyword.properties = textProperties(color = "#4A444D"),
  string.properties = textProperties(color = "#008B8B", font.style =
    "italic"), number.properties = textProperties(color = "blue"),
  functioncall.properties = textProperties(color = "blue"),
  argument.properties = textProperties(color = "#666666"),
  package.properties = textProperties(color = "green"),
  formalargs.properties = textProperties(color = "#424242"),
  eqformalargs.properties = textProperties(color = "#424242"),
  assignement.properties = textProperties(color = "black"),
  slot.properties = textProperties(color = "#F25774"),
  default.properties = textProperties(color = "black"),
  par.properties = parProperties())
```

Arguments

<code>file</code>	R script file. Not used if text is provided.
<code>text</code>	character vector. The text to parse. Not used if file is provided.
<code>comment.properties</code>	comment txtProperties object
<code>roxygencomment.properties</code>	roxygencomment txtProperties object
<code>symbol.properties</code>	symbol txtProperties object
<code>operators.properties</code>	operators txtProperties object
<code>keyword.properties</code>	keyword txtProperties object
<code>string.properties</code>	string txtProperties object
<code>number.properties</code>	number txtProperties object

```

functioncall.properties
    functioncall txtProperties object
argument.properties
    argument txtProperties object
package.properties
    package txtProperties object
formalargs.properties
    formalargs txtProperties object
eqformalargs.properties
    eqformalargs txtProperties object
assignement.properties
    assignement txtProperties object
slot.properties
    slot txtProperties object
default.properties
    default txtProperties object
par.properties a parProperties object

```

See Also

[addRScript](#)

Examples

```

an_rscript = RScript( text = "ls()
x = rnorm(10)" )

```

setColumnsColors	<i>applies background colors to columns of a FlexTable</i>
------------------	--

Description

applies background colors to columns of a FlexTable

Usage

```
setColumnsColors(object, j, colors)
```

Arguments

object	a FlexTable object
j	vector (integer index, col.names values or boolean vector) for columns selection.
colors	background colors to apply (e.g. "#000000" or "black")

See Also

[setRowsColors](#), [FlexTable](#), [setZebraStyle](#)

Examples

```
#
# Create a FlexTable object with first 10 lines of data.frame mtcars
# add row.names as first column
MyFTable = FlexTable( data = mtcars[1:10, ]
  , add.rownames=TRUE
)
MyFTable = setColumnsColors( MyFTable, j=3:4, colors = "red" )
```

setFlexTableBackgroundColors

applies background colors to cells of a FlexTable

Description

applies background colors to cells of a FlexTable

Usage

```
setFlexTableBackgroundColors(object, i, j, colors, to = "body")
```

Arguments

object	a FlexTable object
i	vector (integer index, row.names values or boolean vector) for rows selection.
j	vector (integer index, col.names values or boolean vector) for columns selection.
colors	background colors to apply (e.g. "#000000" or "black"). a character vector of colors with as many elements as defined by the selection.
to	specify on which part of the FlexTable to apply colors, must be one of the following values "body" (default) or "header" or "footer"

See Also

[FlexTable](#), [is.color](#)

Examples

```
#
data = cor( cor(mtcars) )

pal = c( "#D73027", "#F46D43", "#FDAE61", "#FEE08B",
  "#D9EF8B", "#A6D96A", "#66BD63", "#1A9850" )
mycut = cut( data,
```

```

breaks = c(-1,-0.75,-0.5,-0.25,0,0.25,0.5,0.75,1),
include.lowest = TRUE, label = FALSE )
mycolors = pal[ mycut ]

MyFTable = FlexTable( round(data, 3), add.rownames = TRUE )

# set computed colors
MyFTable = setFlexTableBackgroundColors( MyFTable,
  j = seq_len(ncol(data)) + 1,
  colors = mycolors )

# cosmetics
MyFTable = setFlexTableBackgroundColors( MyFTable, i = 1,
  colors = "gray", to = "header" )
MyFTable[1, , to = "header"] = textBold(color="white")

MyFTable = setFlexTableBackgroundColors( MyFTable, j = 1,
  colors = "gray" )
MyFTable[,1] = textBold(color="white")

MyFTable = setFlexTableBorders( MyFTable,
  inner.vertical = borderProperties( style = "dashed",
  color = "white" ),
  inner.horizontal = borderProperties( style = "dashed",
  color = "white" ),
  outer.vertical = borderProperties( width = 2, color = "white" ),
  outer.horizontal = borderProperties( width = 2, color = "white" )
)

```

setFlexTableBorders *change grid lines of a FlexTable*

Description

apply borders scheme to a FlexTable. A border scheme is a set of 4 different borders: inner vertical and horizontal, outer vertical and horizontal.

Usage

```

setFlexTableBorders(object, inner.vertical = borderProperties(),
  inner.horizontal = borderProperties(),
  outer.vertical = borderProperties(),
  outer.horizontal = borderProperties(), body = TRUE, header = TRUE,
  footer = FALSE)

```

Arguments

object a FlexTable object
inner.vertical a [borderProperties](#) object

```

inner.horizontal      a borderProperties object
outer.vertical       a borderProperties object
outer.horizontal      a borderProperties object
body                 a logical value (default to TRUE), specifies to apply scheme to table body
header               a logical value (default to TRUE), specifies to apply scheme to table header
footer               a logical value (default to FALSE), specifies to apply scheme to table footer

```

See Also[FlexTable](#)**Examples**

```

#
# Create a FlexTable object with first 10 lines of data.frame mtcars
# add row.names as first column
MyFTable = FlexTable( data = mtcars[1:10, ]
  , add.rownames=TRUE
)
MyFTable = setFlexTableBorders( MyFTable,
  inner.vertical = borderProperties( style = "dashed" ),
  inner.horizontal = borderProperties( style = "dashed" ),
  outer.vertical = borderProperties( width = 2 ),
  outer.horizontal = borderProperties( width = 2 ) )

```

setFlexTableWidths *set columns widths of a FlexTable*

Description

set columns widths of a FlexTable in inches.

Usage

```
setFlexTableWidths(object, widths)
```

Arguments

```

object      a FlexTable object
widths     a numeric vector specifying columns widths in inches.

```

See Also[FlexTable](#)

Examples

```
#  
# Create a FlexTable object with first 10 lines of data.frame iris  
MyFTable = FlexTable( data = iris[1:10, ] )  
MyFTable = setFlexTableWidths( MyFTable, widths = c(1,1,1,1,3))
```

setRowsColors	<i>applies background colors to rows of a FlexTable</i>
---------------	---

Description

applies background colors to rows of a FlexTable

Usage

```
setRowsColors(object, i, colors)
```

Arguments

object	a FlexTable object
i	vector (integer index, row.names values or boolean vector) for rows selection.
colors	background colors to apply (e.g. "#000000" or "black")

See Also

[FlexTable](#), [setColumnsColors](#), [setZebraStyle](#)

Examples

```
#  
# Create a FlexTable object with first 10 lines of data.frame mtcars  
# add row.names as first column  
MyFTable = FlexTable( data = mtcars[1:10, ]  
  , add.rownames=TRUE  
  )  
MyFTable = setRowsColors( MyFTable, i=1:4, colors = "red" )
```

setZebraStyle	<i>FlexTable rows zebra striping</i>
---------------	--------------------------------------

Description

applies background color to alternate rows (zebra striping). Set a color if row index is odd and another if row index is even.

Usage

```
setZebraStyle(object, odd, even)
```

Arguments

object	a FlexTable object
odd	background color applied to odd row indexes - single character value (e.g. "#000000" or "black")
even	background color applied to even row indexes - single character value (e.g. "#000000" or "black")

See Also

[FlexTable](#)

Examples

```
#  
# Create a FlexTable object with first 10 lines of data.frame mtcars  
# add row.names as first column  
MyFTable = FlexTable( data = mtcars[1:10, ]  
  , add.rownames=TRUE  
  )  
# Zebra striped table  
MyFTable = setZebraStyle( MyFTable, odd = "#8A949B", even = "#FAFAFA" )
```

set_of_paragraphs	<i>Set of paragraphs of text</i>
-------------------	----------------------------------

Description

Create a container of paragraphs of text ([pot](#) objects).

Usage

```
set_of_paragraphs(...)
```

Arguments

... pot objects, one per paragraph.

Details

each pot are representing a paragraph. A paragraph consists of one or more pieces of text and ends with an end of line. Objects of class `set_of_paragraphs` are to be used with [addParagraph](#).

See Also

[addParagraph](#), [addParagraph.docx](#), [addParagraph.pptx](#), [pot](#)

Examples

```
pot1 = pot("My tailor", textProperties(color="red") ) + " is " + pot("rich"
, textProperties(font.weight="bold") )
pot2 = pot("Cats", textProperties(color="red") ) + " and " + pot("Dogs"
, textProperties(color="blue") )
my.pars = set_of_paragraphs( pot1, pot2 )
```

slide.layouts

Get layout names of a document object

Description

Get layout names that exist into a document

Usage

```
slide.layouts(doc, ...)
```

Arguments

doc document object
... further arguments passed to other methods

Details

slide.layouts only works with pptx documents. See [slide.layouts.pptx](#) for examples.

See Also

[pptx](#), [slide.layouts.pptx](#), [addSlide.pptx](#)

slide.layouts.pptx *Get layout names of a pptx document*

Description

Get layout names that exist into the template used when pptx has been created.

Usage

```
## S3 method for class 'pptx'  
slide.layouts(doc, layout, ...)
```

Arguments

doc	Object of class pptx to extract layout names from.
layout	optional single string value, one of the layout names
...	further arguments, not used.

Details

Available names are layout names of the template document (e.g. Title and Content , Two Content, etc.). If layout is specified, the layout representation will be produced in a plot. This can be useful to check available shapes.

See Also

[pptx](#), [addSlide.pptx](#), [slide.layouts](#)

Examples

```
doc.filename = "addFlexTable_example.pptx"  
  
options( "ReporteRs-fontsize" = 24 )  
doc = pptx( title = "title" )  
# get layouts names  
layouts = slide.layouts(doc)  
layouts  
# loop over layout names to plot each slide style  
for(i in layouts ){  
  slide.layouts(doc, i )  
  title(sub = i )  
  if( interactive() ) readline(prompt = "show next slide layout")  
}
```

spanFlexTableColumns *Span columns within rows*

Description

Span columns within rows.

Usage

```
spanFlexTableColumns(object, i, from, to, runs)
```

Arguments

object	a FlexTable object
i	vector (integer index, row.names values or boolean vector) for rows selection.
from	index of the first column to span (its content will be the visible one).
to	index of the last column to span.
runs	a vector of size numcol of FlexTable. If provided, successive runs of equal values will indicate to merge corresponding columns.

Note

Overlappings of horizontally merged cells and vertically merged cells are forbidden.

See Also

[spanFlexTableRows](#), [FlexTable](#)

Examples

```
#  
mydata = iris[46:55, ]  
MyFTable = FlexTable( data = mydata )  
  
# merge columns 2 to 4 in line 3  
MyFTable = spanFlexTableColumns( MyFTable, i = 2, from = 2, to = 4 )  
  
# merge cells in line 4 when successive values of  
# a given character vector are identical. Note  
# the character vector length is the same  
# than the number of columns of the FlexTable.  
MyFTable = spanFlexTableColumns( MyFTable, i = 4,  
  runs = c( "a", "b", "b", "c", "d" ) )
```

spanFlexTableRows	<i>Span rows within columns</i>
-------------------	---------------------------------

Description

Span rows within columns.

Usage

```
spanFlexTableRows(object, j, from, to, runs)
```

Arguments

object	a FlexTable object
j	vector (integer index, col.names values or boolean vector) for columns selection.
from	index of the first row to span (its content will be the visible one).
to	index of the last row to span.
runs	a vector of size numrow of FlexTable. If provided, successive runs of equal values will indicate to merge corresponding rows.

Note

Overlappings of horizontally merged cells and vertically merged cells are forbidden.

See Also

[FlexTable](#), [spanFlexTableColumns](#)

Examples

```
#
mydata = iris[46:55, ]
MyFTable = FlexTable( data = mydata )

# merge line 5 to 7 in column 1
MyFTable = spanFlexTableRows( MyFTable, j = 3, from = 5, to = 7 )

# merge cells in column "Species" when successive values
# of Species are identical. Note
# the character vector length is the same
# than the number of lines of the FlexTable.
MyFTable = spanFlexTableRows( MyFTable, j = "Species",
  runs = as.character( mydata$Species ) )
```

styles	<i>Get styles names of a document object</i>
--------	--

Description

Get styles names that exist into a document

Usage

```
styles(doc, ...)  
  
## S3 method for class 'docx'  
styles(doc, ...)
```

Arguments

doc	document object
...	further arguments passed to other methods

Details

With docx document, styles will be paragraph styles of the base document (e.g. Normal, Title1, etc.). Names of the returned character vector are labels associated with styles names.

See Also

[docx](#), [styles](#)

Examples

```
doc = docx( title = "title" )  
styles(doc)
```

textNormal	<i>shortcuts for formatting properties</i>
------------	--

Description

Shortcuts for textProperties, parProperties, borderProperties and cellProperties.

Usage

textNormal(...)
textBold(...)
textItalic(...)
textBoldItalic(...)
parRight(...)
parLeft(...)
parCenter(...)
parJustify(...)
borderDotted(...)
borderDashed(...)
borderNone(...)
borderSolid(...)
cellBorderNone(...)
cellBorderBottom(...)
cellBorderTop(...)
cellBorderTB(...)

Arguments

... further arguments passed to original functions.

Examples

textNormal()
textBold()
textItalic()
textBoldItalic()
parRight()
parLeft()
parLeft()
parLeft()
borderDotted()
borderDashed()

```
borderNone()
borderSolid()
cellBorderNone()
cellBorderBottom()
cellBorderTop()
cellBorderTB()
```

textProperties	<i>Text formatting properties</i>
----------------	-----------------------------------

Description

Create a textProperties object that describes text formatting properties.

Usage

```
textProperties(color = "black", font.size = getOption("ReporteRs-fontsize"),
  font.weight = "normal", font.style = "normal", underlined = FALSE,
  font.family = getOption("ReporteRs-default-font"),
  vertical.align = "baseline", shading.color)
```

```
## S3 method for class 'textProperties'
print(x, ...)
```

```
## S3 method for class 'textProperties'
as.character(x, ...)
```

```
## S3 method for class 'textProperties'
chprop(object, color, font.size, font.weight,
  font.style, underlined, font.family, vertical.align, shading.color, ...)
```

Arguments

color	font color - a single character value specifying a valid color (e.g. "#000000" or "black").
font.size	font size (in point) - 0 or positive integer value.
font.weight	single character value specifying font weight (expected value is normal or bold).
font.style	single character value specifying font style (expected value is normal or italic).
underlined	single logical value specifying if the font is underlined.
font.family	single character value specifying font name (it has to be an existing font in the OS).
vertical.align	single character value specifying font vertical alignments. Expected value is one of the following : default 'baseline' or 'subscript' or 'superscript'
shading.color	shading color - a single character value specifying a valid color (e.g. "#000000" or "black").

x	textProperties object to print
...	further arguments - not used
object	textProperties object to update

Details

Default values are:

- color "black"
- font.size `getOption("ReporteRs-fontsize")`
- font.weight "normal"
- font.style "normal"
- underlined FALSE
- font.family `getOption("ReporteRs-default-font")`
- vertical.align "baseline"

Get a modified version of a textProperties with `chprop`.

Value

a textProperties object

See Also

[pot](#), [alterFlexTable](#), [shortcut_properties](#)

Examples

```
# textProperties examples -----
textProperties( font.size = 12 )

textProperties(color="red",
  font.weight = "bold",
  font.style = "italic",
  underlined = TRUE
)

textProperties( shading.color = "red" )
print( textProperties (color="red", font.size = 12) )

# chprop usage example -----
textProp = textProperties()

textProp01 = chprop( textProp, color = "red" )
textProp02 = chprop( textProp, font.size = 12 )
textProp03 = chprop( textProp, font.weight = "bold" )
textProp04 = chprop( textProp, font.style = "italic" )
textProp05 = chprop( textProp, underlined = TRUE )
## Not run:
```

```
textProp06 = chprop( textProp, font.family = "Arial" )

## End(Not run)
textProp07 = chprop( textProp, vertical.align = "superscript" )

textProp08 = chprop( textProp, font.size = 12,
font.weight = "bold", shading.color = "red" )
```

text_extract

Simple Text Extraction From a Word Document

Description

Provides a simple method to get text from a docx document. It returns a character vector containing all chunk of text found in the document.

Usage

```
text_extract(x, body = TRUE, header = TRUE, footer = TRUE, bookmark)
```

Arguments

x	docx object
body	specifies to scan document body
header	specifies to scan document header
footer	specifies to scan document footer
bookmark	a character value ; id of the Word bookmark to scan.

Value

a character vector

See Also

[docx](#), [list_bookmarks](#)

Examples

```
doc = docx( title = "My example", template = file.path(
  system.file(package = "ReporteRs"), "templates/bookmark_example.docx" ) )
text_extract( doc )
text_extract( doc, header = FALSE, footer = FALSE )
text_extract( doc, bookmark = "author" )
```

toc.options	<i>Set TOC options for a document object</i>
-------------	--

Description

Set custom table of contents options for a document object

Usage

```
toc.options(doc, ...)
```

Arguments

doc	document object
...	further arguments passed to other methods

Details

toc.options only works with docx documents.
See [toc.options.docx](#) for examples.

Value

a document object

See Also

[docx](#), [addTOC.docx](#)

toc.options.docx	<i>Set TOC options</i>
------------------	------------------------

Description

set options for custom table of contents of a docx object.

Usage

```
## S3 method for class 'docx'
toc.options(doc, list.separator, ...)
```

Arguments

doc	Object of class docx
list.separator	list separator (should be the same than in computer's regional settings)
...	further arguments passed to other methods - not used.

Details

This function is to be used if TOC cannot be built. It is occurring when list separator used when building the TOC is different from the list separator in your computer's regional settings.

See entry 302865 of Microsoft knowledge database for more information.

See Also

[docx](#), [addTOC.docx](#)

Examples

```
doc = docx( title = "title" )
doc = toc.options( doc, list.separator = "," )
```

vanilla.table	<i>get a simple FlexTable from a dataset</i>
---------------	--

Description

get a simple FlexTable from a dataset

Usage

```
vanilla.table(dataset, add.rownames = FALSE, text.direction = "lrtb")
```

Arguments

dataset	the data to use
add.rownames	logical value - should the row.names be included in the table.
text.direction	header cell text rotation - a single character value, expected value is one of "lrtb", "tblr", "btlr".

See Also

[FlexTable](#)

Examples

```
vanilla.table( iris)
```

writeDoc	<i>Write a document object</i>
----------	--------------------------------

Description

Write a document object into a file

Usage

```
writeDoc(doc, ...)  
  
## S3 method for class 'docx'  
writeDoc(doc, file, ...)  
  
## S3 method for class 'pptx'  
writeDoc(doc, file, ...)  
  
## S3 method for class 'bsdod'  
writeDoc(doc, file, ...)
```

Arguments

doc	document object
...	unused
file	single character value, name of the html file to write.

See Also

[docx](#), [pptx](#)

Examples

```
doc <- docx()  
writeDoc( doc, "ex_write_doc.docx")  
  
doc <- pptx()  
doc <- addSlide(doc, "Title and Content")  
writeDoc( doc, "ex_write_doc.pptx")
```

[<-.FlexRow *modify FlexRow content*

Description

add or replace FlexCell into a FlexRow object

Usage

```
## S3 replacement method for class 'FlexRow'
x[i] <- value
```

Arguments

x the FlexRow object
i a single integer value.
value an object of class [FlexCell](#)

See Also

[FlexTable](#), [addFlexTable](#), [FlexRow](#) , [addHeaderRow](#), [addFooterRow](#)

Examples

```
#
## example with FlexCell
headerRow = FlexRow()
headerRow[1] = FlexCell( "Column 1"
, cell.properties = cellProperties(background.color="#527578") )
headerRow[2] = FlexCell( "Column 2"
, cell.properties = cellProperties(background.color="#527578") )
```

[<-.FlexTable *alter FlexTable content and format*

Description

add text or format a FlexTable object.

Usage

```
## S3 replacement method for class 'FlexTable'
x[i, j, text.properties,
newpar = FALSE, byrow = FALSE, to = "body", side = "top"] <- value
```

Arguments

x	the FlexTable object
i	vector (integer index, row.names values or boolean vector) for rows selection.
j	vector (integer index, col.names values or boolean vector) for columns selection.
text.properties	formatting properties (an object of class <code>textProperties</code>). Used only when value is a <code>data.frame</code> , a <code>matrix</code> or a vector. It will be used to format added text.
newpar	logical value specifying whether or not the content should be added as a new paragraph (therefore added on a new line).
byrow	logical. If <code>FALSE</code> (the default) content is added by columns, otherwise content is added by rows.
to	specify on which part of the FlexTable to apply the value, must be one of the following values "body" (default) or "header" or "footer"
side	used only when value is a <code>borderProperties</code> , specify on which side to apply the properties. It must be one of "bottom", "top", "left", "right".
value	see details.

Details

Use `ft_object[1:4, 2:3] <- value` to perform the operation on the body subset of the FlexTable.

Use `ft_object[] <- value` to perform the operation on the whole part (body, header or footer) of the FlexTable.

Use `ft_object[1, 2, to = "header"] <- value` to perform the operation on the header subset of the FlexTable.

Use `ft_object[1, 2, , to = "footer"] <- value` to perform the operation on the footer subset of the FlexTable.

To **format content**, argument value (the right side of the `<-`) should be one of the following:

- *for table cells*: an object of class `cellProperties`
- *for paragraphs contained in table cells*: an object of class `parProperties`
- *for text contained in table cells*: an object of class `textProperties`
- *for borders of table cells*: an object of class `borderProperties`

To **add content**, there are two options:

- *option 1*: value should be a `data.frame` or a `matrix` or a vector with as many elements as defined by the selection.
- *option 2*: value is a `pot` object, its value will be added in all cells defined by the selection.

If dealing with `borderProperties` objects, use also argument `side` to specify on which side of cells to apply border properties.

See Also

[FlexTable](#), [borderProperties](#), [cellProperties](#), [parProperties](#), [textProperties](#)

Examples

```
#
# Create a FlexTable object with first 10 lines of data.frame mtcars
# add row.names as first column
MyFTable = FlexTable( data = mtcars[1:10, ]
  , add.rownames=TRUE
)
# modify the text formatting properties for the row.names column
MyFTable[ , 1] = textProperties( font.style="italic", font.size = 9)
# align text to right for the row.names column
MyFTable[ , 1] = parProperties( text.align = "right" )

# change cell formatting properties for various columns
MyFTable[ c(3,6:9), c( "mpg", "disp", "hp", "drat", "wt",
"qsec" ) ] = cellProperties( background.color="#CCCCCC")
# add text to elements of the column cyl
MyFTable[, "cyl", text.properties = textProperties(
  vertical.align="superscript", font.size = 9) ] = " miles/gallon"

data( iris )
iris = iris[1:10, c(5, 1:4)]

default_text = textProperties( font.size = 11 )
note_text = chprop(default_text,
vertical.align = "superscript", color = "blue")

iris_ft = FlexTable( data = iris, header.columns = FALSE )
iris_ft = addHeaderRow( iris_ft,
value = c("", "Measures" ), colspan = c( 4, 1 ) )
iris_ft = addHeaderRow( iris_ft,
value = gsub( "\\.", " ", names( iris ) ) )
iris_ft[2, 2, newpar = TRUE ] = "Hi there"
iris_ft[2, 1, to="header"] = pot("* this is a note", note_text )

iris_ft = spanFlexTableRows( iris_ft, j = "Species",
runs = as.character( iris$Species ) )
iris_ft = setFlexTableBorders( iris_ft,
  inner.vertical = borderProperties( style = "none" ),
  inner.horizontal = borderProperties( width = 1 ),
  outer.vertical = borderProperties( width = 0 ),
  outer.horizontal = borderProperties( width = 2 ),
  footer = TRUE
)
)
```

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