

Package ‘texer’

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Type Package

Title LaTeX representations of R objects

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Description This package contains functions that convert R objects in to LaTeX code useful for printing. These functionality becomes especially handy writing Sweave documents, e.g. package vignettes.

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booktabs-methods *Methods of the ‘booktabs’ style function*

Description

Individual methods for the ‘booktabs’ style.

Methods

object = "data.frame" The method first defines the formats for the columns of the dataframe. They are assigned by a call to `columnFormat`. They may be also defined manually by specifying 'tag=value' where 'tag' is a name of the class of the column and 'value' is a character string, one of "l", "r", "c".

In the next step the data frame is printed with corresponding LaTeX markup.

object = "table" The method for tables coerces the table to a data frame and calls the appropriate method.

booktabs

"Booktabs" style for R-to-L^AT_EX conversions

Description

This is a generic function for converting R objects into LaTeX representations using book-like layout. It relies on "booktabs" L^AT_EX package.

Usage

```
booktabs(object, ...)
```

Arguments

<code>object</code>	an R object to be converted to L ^A T _E X
<code>...</code>	Other arguments passed from and to other methods

Details

This is a generic function which selects the proper method based on the class of the `object` argument.

Value

Nothing of interest. The function is used for its byproduct: a L^AT_EX code representing the `object`

Author(s)

Michal Bojanowski (m.j.bojanowski@fss.uu.nl)

See Also

For other styles in this package see: `fullgrid`

Examples

```
# a sample dataframe
d <- data.frame( x=8:12,y=I(letters[8:12]),
  f=c("eight", "nine", "ten", "eleven", "twelve") )
d
booktabs(d, rnames=TRUE)    # LaTeX-ready
rm(d)
```

columnFormat	<i>Column formatting for 'tabular' environment</i>
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Description

This function creates a vector of column formatting symbols for \LaTeX `tabular` environment

Usage

```
columnFormat(d, default = "character", ...)
```

Arguments

<code>d</code>	dataframe
<code>default</code>	default class assumed for unknown classes
<code>...</code>	arguments in the form <code>className=format</code> where <code>format</code> is one of "r", "l" or "c"

Details

Value

Character vector of column formats.

Author(s)

Michal Bojanowski (m.j.bojanowski@fss.uu.nl)

Examples

```
d <- data.frame( x=8:12,y=I(letters[8:12]),
  f=c("eight", "nine", "ten", "eleven", "twelve") )
d
sapply(d, class)
# defaults
columnFormat(d)
# defaults except factors
columnFormat(d, factor="c")
rm(d) # clean-up
```

fullgrid-methods	<i>Methods for the ‘fullgrid’ style function</i>
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Description

Individual methods for the ‘fullgrid’ style.

Methods

object = "data.frame" The method first defines the formats for the columns of the dataframe. They are assigned by a call to `columnFormat`. They may be also defined manually by specifying ‘tag=value’ where ‘tag’ is a name of the class of the column and ‘value’ is a character string, one of "l", "r", "c".

In the next step the data frame is printed with corresponding LaTeX markup.

object = "table" The method for tables coerces the table to a data frame and calls the appropriate method.

fullgrid	<i>“Full grid” style for R-to-L^AT_EX conversions</i>
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Description

This is a generic function that converts object to LaTeX representation. The representation uses a full grid layout: in principle all possible table lines are present.

Usage

```
fullgrid(object, ...)
```

Arguments

<code>object</code>	object to be converted
<code>...</code>	arguments from/to other methods

Details

This is a generic function which selects the proper method based on the class of the `object` argument.

Value

Nothing, only L^AT_EX code is printed.

Author(s)

Michał Bojanowski (m.j.bojanowski@fss.uu.nl)

See Also

For other styles see: `booktabs`

Examples

```
d <- data.frame( x=8:12,y=I(letters[8:12]),
  f=c("eight", "nine", "ten", "eleven", "twelve") )
fullgrid(d) # LaTeX ready
rm(d)
```

texer-package

LaTeX representations of R objects

Description

This package contains functions that convert R objects in to LaTeX code usefull for printing. These functionality becomes especially handy writing **Sweave** documents, e.g. package vignettes.

Details

The functions in this package, like `booktabs` or `fullgrid` are to be called on R objects, like dataframes or tables, to produce LaTeX output. These function correspond to “styles” in which the R objects are represented.

Changes

Version 0.1 (2006-06-25)

- First beta version of the package 0.1 released. Still there are gaps in the documentation.

Version 0.2 (2006-08-26)

- Added 'texer' function as a general interface to all styles.
- The documentation is now more or less complete.

Author(s)

Michal Bojanowski (m.j.bojanowski@uu.nl)

See Also

There are similar functions in other packages. For example `latex` or `toLatex`

Examples

```
# a sample dataframe
d <- data.frame( x=8:12,y=I(letters[8:12]),
  f=c("eight", "nine", "ten", "eleven", "twelve") )
d
texer( d, "booktabs") # LaTeX-ready

# calling individual styles
booktabs(d, rnames=TRUE)
fullgrid(d)

rm(d) # clean-up
```

`texer`*Unified interface to styles defined in TeXeR package*

Description

This function provides a unified interface to styles defined in package TeXeR.

Usage

```
texer(object, style = "booktabs", ...)
```

Arguments

<code>object</code>	object to be processed
<code>style</code>	character, name of the style to be used. Currently either "booktabs" or "fullgrid"
<code>...</code>	other arguments passed to selected style method

Details

This function is essentially a wrapper that calls appropriate method given in the `style` argument with optional arguments given through `...`

Value

Textual representation of the `object`. Nothing of interest is returned.

Author(s)

Michał Bojanowski <m.j.bojanowski@fss.uu.nl>

See Also

Individual styles: `booktabs`, `fullgrid`

Examples

```
d <- data.frame( x=8:12,y=I(letters[8:12]),
  f=c("eight", "nine", "ten", "eleven", "twelve") )
texer(d, "booktabs")
texer(d, "fullgrid", rnames=TRUE, factor="c")
rm(d)
```

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