

Package ‘TableMonster’

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Depends xtable

Title Table Monster

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Description Provides a user friendly interface to generation of booktab style tables using 'xtable'.

URL <<https://www.youtube.com/watch?v=CM1TaNVnh58>>

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print.TableMonster *Easy Generation of 'booktab' tables*

Description

Provides a user friendly interface to generation of booktab style tables using xtable.

Usage

```
## S3 method for class 'TableMonster'
print(x, special = NULL, simple = FALSE, dbg = FALSE, ...)
```

Arguments

x	an object of class 'TableMonster' – see below
special	Optionally, one of the following: 'aos' or 'jrss-b', to produce tables compatible with the style guid of the Annals of Statistics or JRSS-B, respectively.
simple	Set to 'TRUE' to override the default treatment of multi-level tables
dbg	Set to 'TRUE' and the routine will output intermediate results to a file 'debug.rda' containing the computed results of the list 'add.to.row' which is passed to the function print.xtable.
...	1. Optionally, label, of type character, giving the name of the latex label name associated with the table for crossreference within the latex document. 2. Optionally special, a character string taking the value "jrss-b" or "aos". 3. Optionally rowcolor, a list of the form list(color="yellow", rownum=5), for highlighting a particular row. You must remember to \usepackage{xcolor} and include 'table' in your documentclass options, e.g. \documentclass[table]{beamer}, and of course, define the color 'yellow' in your preamble. Finally, any named arguments accepted by print.xtable are accepted.

Author(s)

Grant Izmirlian

References

<<https://www.youtube.com/watch?v=CM1TaNVnh58>>

Examples

```
## Example 1: A table with a single heading
##
library(TableMonster)
tst <- as.data.frame(cbind(rep(c("John","Joe","Mary","Jane","Alex"), 2),
                           rep(c("male","male","female","female","female"), 2),
                           rep(c(12345, 54321, 46943, 23123, 51234), 2)))
```

```

hdngs <- as.list(rep("", 3))
names(hdngs) <- c("Name", "Gender", "Student ID")

tmHeadings(tst) <- hdngs
tmCtypes(tst) <- rep("n",3)
tmDigits(tst) <- rep(0,3)
tmCaption(tst) <- "This is JUST a TEST"

class(tst) <- "TableMonster"

tst

print(tst, label="tbl:anexample")
print(tst, include.rownames=FALSE, sanitize.text.function=I)
print(tst, label="tbl:anexample", include.rownames=FALSE, sanitize.text.function=I)

## Example 2: A table with a two level heading
##
library(TableMonster)
gp <- rep(1:2,each=5)
m1 <- rnorm(10)
s1 <- (rchisq(10, df=1)/10)^0.5
z1 <- m1/s1
m2 <- rnorm(10)
s2 <- (rchisq(10, df=1)/10)^0.5
z2 <- m2/s2
m3 <- rnorm(10)
s3 <- (rchisq(10, df=1)/10)^0.5
z3 <- m3/s3

foo <- as.data.frame(list(variable=letters[sample(10)], group=gp, model1=m1, se1=s1, Z1=z1,
                        model2=m2, se2=s2, Z2=z2,
                        model3=m3, se3=s3, Z3=z3))

tmHeadings(foo) <- list('Variable'="", 'Group'="",
                       'Model 1'=list('Estimate'="", 'Std Err'="", 'Wald Test'=""),
                       'Model 2'=list('Estimate'="", 'Std Err'="", 'Wald Test'=""),
                       'Model 3'=list('Estimate'="", 'Std Err'="", 'Wald Test'=""))
tmCaption(foo) <- "This is TableMonster (TM)!!!"

tmCtypes(foo) <- c("c","c",rep("n",9))
tmDigits(foo) <- c(0, 0, rep(3, 9))

class(foo) <- "TableMonster"

print(foo, rowcolor=list(color="yellow", rownum=7))

```

Description

Gets the attribute 'caption' from a 'TableMonster' class object

Usage

```
tmCaption(x)
```

Arguments

x An object of class 'TableMonster'

Details

This is a required attribute for an object of class 'TableMonster'

Value

A character string

Author(s)

Grant Izmirlian

References

<<https://www.youtube.com/watch?v=CM1TaNVnh58>>

tmCaption<-

Assignment function for the 'caption' attribute

Description

Assignment function for the 'caption' attribute of an object of class 'TableMonster'

Usage

```
tmCaption(x) <- value
```

Arguments

x An object of class 'TableMonster'

value A character string

Details

This is a required attribute for an object of class 'TableMonster'

Author(s)

Grant Izmirlian

References

<<https://www.youtube.com/watch?v=CM1TaNVnh58>>

tmCtypes

Gets the attribute 'ctypes' from a 'TableMonster' class object

Description

Gets the attribute 'ctypes' from a 'TableMonster' class object

Usage

```
tmCtypes(x)
```

Arguments

x An object of class 'TableMonster'

Details

This is a required attribute for an object of class 'TableMonster'

Value

A character vector of length \# columns of the table having entries "n" or "c", meaning "numeric" or "character"

Author(s)

Grant Izmirlian

References

<<https://www.youtube.com/watch?v=CM1TaNVnh58>>

tmCtypes<- *Assignment function for the 'ctypes' attribute*

Description

Assignment function for the 'ctypes' attribute of an object of class 'TableMonster'

Usage

```
tmCtypes(x) <-value
```

Arguments

x	An object of class 'TableMonster'
value	A vector of length equal to the number of columns in the table containing entries "n" or "c" meaning that the corresponding column is of mode "numeric" or "character"

Details

This is a required attribute for an object of class 'TableMonster'

Author(s)

Grant Izmirlian

References

<<https://www.youtube.com/watch?v=CM1TaNVnh58>>

tmDigits *Gets the attribute 'digits' from a 'TableMonster' class object*

Description

Gets the attribute 'digits' from a 'TableMonster' class object

Usage

```
tmDigits(x)
```

Arguments

x	An object of class 'TableMonster'
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`tmDigits<-`

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Details

This is a required attribute for an object of class 'TableMonster'

Value

A numeric vector of length equal to the number of columns in the table

Author(s)

Grant Izmirlian

References

<https://www.youtube.com/watch?v=CM1TaNVnh58>

`tmDigits<-` *Assignment function for the 'digits' attribute*

Description

Assignment function for the 'digits' attribute of an object of class 'TableMonster'

Usage

```
tmDigits(x) <- value
```

Arguments

<code>x</code>	An object of class 'TableMonster'
<code>value</code>	A numeric vector of length equal to the number of columns in the table specifying the desired number of digits. Enter '0' for character columns.

Details

This is a required attribute for an object of class 'TableMonster'

Author(s)

Grant Izmirlian

References

<https://www.youtube.com/watch?v=CM1TaNVnh58>

tmHeadings	<i>Gets the attribute 'headings' from a 'TableMonster' class object</i>
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Description

Gets the attribute 'headings' from a 'TableMonster' class object

Usage

```
tmHeadings(x)
```

Arguments

x An object of class 'TableMonster'

Details

This is a required attribute for an object of class 'TableMonster'

Value

The 'headings' attribute of a 'TableMonster' object, a vector of character strings of length equal to the number of columns of the table.

Author(s)

Grant Izmirlian

References

<<https://www.youtube.com/watch?v=CM1TaNVnh58>>

tmHeadings<-	<i>Assignment function for the 'headings' attribute</i>
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Description

Assignment function for the 'headings' attribute for an object of class 'TableMonster'

Usage

```
tmHeadings(x) <- value
```


Arguments

x	An object of class 'TableMonster'
value	A vector of character strings of length equal to the number of columns in the table

Details

This is a required attribute for an object of class 'TableMonster'

Author(s)

Grant Izmirlian

References

<<https://www.youtube.com/watch?v=CM1TaNVnh58>>

tmTotals	<i>Gets the 'totals' attribute</i>
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Description

Gets the 'totals' attribute of an object of class 'TableMonster'

Usage

```
tmTotals(x)
```

Arguments

x	An object of class 'TableMonster'
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Details

This attribute is optional and is only used when you have a table in which you want to put a single row of column totals (or anything else) below the bottom line.

Value

A numeric or character vector of length equal to the number of columns in the table

Author(s)

Grant Izmirlian

References

<<https://www.youtube.com/watch?v=CM1TaNVnh58>>

tmTotals<- *Assignment function for the 'totals' attribute*

Description

Assignment function for the 'totals' attribute of an object of class 'TableMonster'

Usage

```
tmTotals(x) <- value
```

Arguments

x	An object of class 'TableMonster'
value	The 'totals' attribute, a numeric or character vector of length equal to the number of columns in the table.

Details

This attribute is optional and is only used when you have a table in which you want to put a single row of column totals (or anything else) below the bottom line.

Author(s)

Grant Izmirlian

References

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