# Package: TableMonster (via r-universe)

September 18, 2024

**Version** 1.7

**Depends** xtable

**Title** Table Monster

**Author** Grant Izmirlian Jr <izmirlig@mail.nih.gov>

**Maintainer** Grant Izmirlian Jr <izmirlig@mail.nih.gov>

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

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

**License** GPL (>= 2)

**NeedsCompilation** no

**Date/Publication** 2018-04-26 21:49:08 UTC

**Repository** https://izmirlig.r-universe.dev

**RemoteUrl** https://github.com/cran/TableMonster

**RemoteRef** HEAD

**RemoteSha** 14ea7130e7467ae565c21ae7528a8f7b91db717d

## Contents

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 charcter 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))
```

---

`tmCaption` *Gets the attribute 'caption' from a 'TableMonster' class object*

---

## 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' |

## 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

| | |
|---|---|
| `x` | An object of class 'TableMonster' |
| `value` | 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` *Gets the attribute 'headings' from a 'TableMonster' class object*

## 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<-` *Assignment function for the 'headings' attribute*

## 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 *Gets the 'totals' attribute*

---

### Description

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

### Usage

```
tmTotals(x)
```

### Arguments

| | |
|---|---|
| x | An object of class 'TableMonster' |

### Details

This attribute is optional an 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 an 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

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

# Index