Package ‘DT’

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Type Package
Title A Wrapper of the JavaScript Library ‘DataTables’
Version 0.15
Maintainer Yihui Xie <xie@yihui.name>
Description Data objects in R can be rendered as HTML tables using the JavaScript library ‘DataTables’ (typically via R Markdown or Shiny). The ‘DataTables’ library has been included in this R package. The package name ‘DT’ is an abbreviation of ‘DataTables’.

URL https://github.com/rstudio/DT

BugReports https://github.com/rstudio/DT/issues
License GPL-3 | file LICENSE
Imports htmltools (>= 0.3.6), htmlwidgets (>= 1.3), jsonlite (>= 0.9.16), magrittr, crosstalk, promises
Suggests knitr (>= 1.8), rmarkdown, shiny (>= 1.2.0), testit
VignetteBuilder knitr
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Encoding UTF-8

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coerceValue

Coerce a character string to the same type as a target value

Description

Create a new value from a character string based on an old value, e.g., if the old value is an integer, call as.integer() to coerce the string to an integer.

Usage

coerceValue(val, old)

Arguments

val A character string.
old An old value, whose type is the target type of val.

Details

This function only works with integer, double, date, time (POSIXt or POSIXct), and factor values. The date must be of the format %Y-%m-%d%T%H:%M:%SZ. The factor value must be in the levels of old, otherwise it will be coerced to NA.

Value

A value of the same data type as old if possible.
Examples

```r
library(DT)
coerceValue("100", 1L)
coerceValue("1.23", 3.1416)
coerceValue("2018-02-14", Sys.Date())
coerceValue("2018-02-14T22:18:52Z", Sys.time())
coerceValue("setosa", iris$Species)
coerceValue("setosa2", iris$Species) # NA
coerceValue("FALSE", TRUE) # not supported
```

Description

This function creates an HTML widget to display rectangular data (a matrix or data frame) using the JavaScript library DataTables.

Usage

```r
datatable(
  data,
  options = list(),
  class = "display",
  callback = JS("return table;"),
  rownames,
  colnames,
  container,
  caption = NULL,
  filter = c("none", "bottom", "top"),
  escape = TRUE,
  style = "default",
  width = NULL,
  height = NULL,
  elementId = NULL,
  fillContainer = getOption("DT.fillContainer", NULL),
  autoHideNavigation = getOption("DT.autoHideNavigation", NULL),
  selection = c("multiple", "single", "none"),
  extensions = list(),
  plugins = NULL,
  editable = FALSE
)
```

Arguments

data a data object (either a matrix or a data frame)
<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>options</td>
<td>a list of initialization options (see <a href="https://datatables.net/reference/option/">documentation</a>); the character options wrapped in JS() will be treated as literal JavaScript code instead of normal character strings; you can also set options globally via <code>options(DT.options = list(...))</code>, and global options will be merged into this options argument if set</td>
</tr>
<tr>
<td>class</td>
<td>the CSS class(es) of the table; see <a href="https://datatables.net/manual/styling/classes">documentation</a></td>
</tr>
<tr>
<td>callback</td>
<td>the body of a JavaScript callback function with the argument <code>table</code> to be applied to the DataTables instance (i.e. <code>table</code>)</td>
</tr>
<tr>
<td>rownames</td>
<td>TRUE (show row names) or FALSE (hide row names) or a character vector of row names; by default, the row names are displayed in the first column of the table if exist (not NULL)</td>
</tr>
<tr>
<td>colnames</td>
<td>if missing, the column names of the data; otherwise it can be an unnamed character vector of names you want to show in the table header instead of the default data column names; alternatively, you can provide a named numeric or character vector of the form <code>newName1 = i1, newName2 = i2 or c('newName1' = 'oldName1', 'newName2' = 'oldName2',...)</code>, where <code>newName</code> is the new name you want to show in the table, and <code>i</code> or <code>oldName</code> is the index of the current column name</td>
</tr>
<tr>
<td>container</td>
<td>a sketch of the HTML table to be filled with data cells; by default, it is generated from <code>htmltools::tags$table()</code> with a table header consisting of the column names of the data</td>
</tr>
<tr>
<td>caption</td>
<td>the table caption; a character vector or a tag object generated from <code>htmltools::tags$caption()</code></td>
</tr>
<tr>
<td>filter</td>
<td>whether/where to use column filters; none: no filters; bottom/top: put column filters at the bottom/top of the table; range sliders are used to filter numeric/date/time columns, select lists are used for factor columns, and text input boxes are used for character columns; if you want more control over the styles of filters, you can provide a list to this argument of the form <code>list(position = 'top', clear = TRUE, plain = FALSE)</code>, where clear indicates whether you want the clear buttons in the input boxes, and plain means if you want to use Bootstrap form styles or plain text input styles for the text input boxes</td>
</tr>
<tr>
<td>escape</td>
<td>whether to escape HTML entities in the table: TRUE means to escape the whole table, and FALSE means not to escape it; alternatively, you can specify numeric column indices or column names to indicate which columns to escape, e.g. <code>1:5</code> (the first 5 columns), <code>c(1,3,4)</code>, or <code>c(-1,-3)</code> (all columns except the first and third), or <code>c('Species', 'Sepal.Length')</code>; since the row names take the first column to display, you should add the numeric column indices by one when using <code>rownames</code></td>
</tr>
<tr>
<td>style</td>
<td>the style name (<a href="https://datatables.net/manual/styling/">documentation</a>); currently only 'default', 'bootstrap', and 'bootstrap4' are supported. Note that DT doesn't contain the theme files so in order to display the style correctly, you have to link the necessary files in the header</td>
</tr>
<tr>
<td>width, height</td>
<td>Width/Height in pixels (optional, defaults to automatic sizing)</td>
</tr>
<tr>
<td>elementId</td>
<td>An id for the widget (a random string by default)</td>
</tr>
</tbody>
</table>
fillContainer  TRUE to configure the table to automatically fill it's containing element. If the table can't fit fully into it's container then vertical and/or horizontal scrolling of the table cells will occur.

autoHideNavigation TRUE to automatically hide navigational UI when the number of total records is less than the page size.

selection the row/column selection mode (single or multiple selection or disable selection) when a table widget is rendered in a Shiny app; alternatively, you can use a list of the form list(mode = 'multiple',selected = c(1,3,8),target = 'row',selectable = c(-2,-3)) to pre-select rows and control the selectable range; the element target in the list can be 'column' to enable column selection, or 'row+column' to make it possible to select both rows and columns (click on the footer to select columns), or 'cell' to select cells. See details section for more info.

extensions a character vector of the names of the DataTables extensions (https://datatables.net/extensions/index)

plugins a character vector of the names of DataTables plug-ins (https://rstudio.github.io/DT/plugins.html). Note that only those plugins supported by the DT package can be used here. You can see the available plugins by calling DT:::available_plugins()

editable FALSE to disable the table editor, or TRUE (or "cell") to enable editing a single cell. Alternatively, you can set it to "row" to be able to edit a row, or "column" to edit a column, or "all" to edit all cells on the current page of the table. In all modes, start editing by doubleclicking on a cell. This argument can also be a list of the form list(target = TARGET,disable = list(columns = INDICES)), where TARGET can be cell, row, column, or all, and INDICES is an integer vector of column indices. Use the list form if you want to disable editing certain columns.

Details

selection:

1. The argument could be a scalar string, which means the selection mode, whose value could be one of 'multiple' (the default), 'single' and 'none' (disable selection).
2. When a list form is provided for this argument, only parts of the "full" list are allowed. The default values for non-matched elements are list(mode = 'multiple',selected = NULL,target = 'row',selectable = NULL).
3. target must be one of 'row', 'column', 'row+column' and 'cell'.
4. selected could be NULL or "indices".
5. selectable could be NULL, TRUE, FALSE or "indices", where NULL and TRUE mean all the table is selectable. When FALSE, it means users can't select the table by the cursor (but they could still be able to select the table via dataTableProxy, specifying ignore.selectable = TRUE). If "indices", they must be all positive or non-positive values. All positive "indices" mean only the specified ranges are selectable while all non-positive "indices" mean those ranges are not selectable. The "indices" format is specified below.
6. The "indices" format of selected and selectable: when target is 'row' or 'column', it should be a plain numeric vector; when target is 'row+column', it should be a list, specifying rows and cols respectively, e.g., list(rows = 1, cols = 2); when target is 'cell', it should be a 2-col matrix, where the two values of each row stand for the row and column index.

7. Note that DT has its own selection implementation and doesn’t use the Select extension because the latter doesn’t support the server-side processing mode well. Please set this argument to ‘none’ if you really want to use the Select extension.

**Note**

You are recommended to escape the table content for security reasons (e.g. XSS attacks) when using this function in Shiny or any other dynamic web applications.

**References**

See [https://rstudio.github.io/DT/](https://rstudio.github.io/DT/) for the full documentation.

**Examples**

```r
library(DT)

# see the package vignette for examples and the link to website
vignette('DT', package = 'DT')

# some boring edge cases for testing purposes
m = matrix(nrow = 0, ncol = 5, dimnames = list(NULL, letters[1:5]))
datatable(m) # zero rows
datatable(as.data.frame(m))

m = matrix(1, dimnames = list(NULL, 'a'))
datatable(m) # one row and one column
datatable(as.data.frame(m))

m = data.frame(a = 1, b = 2, c = 3)
datatable(m)
datatable(as.matrix(m))

# dates
datatable(data.frame(
  date = seq(as.Date("2015-01-01"), by = "day", length.out = 5), x = 1:5
))
datatable(data.frame(x = Sys.Date()))
datatable(data.frame(x = Sys.time()))
```
**dataTableAjax**

Register a data object in a shiny session for DataTables

---

**Description**

This function stores a data object in a shiny session and returns a URL that returns JSON data based on DataTables Ajax requests. The URL can be used as the `url` option inside the `ajax` option of the table. It is basically an implementation of server-side processing of DataTables in R. Filtering, sorting, and pagination are processed through R instead of JavaScript (client-side processing).

**Usage**

```
dataTableAjax(session, data, rownames, filter = dataTablesFilter, outputId)
```

**Arguments**

- `session` the session object in the shiny server function (`function(input, output, session)`)
- `data` a data object (will be coerced to a data frame internally)
- `rownames` see `datatable()`; it must be consistent with what you use in `datatable()`, e.g., if the widget is generated by `datatable(rownames = FALSE)`, you must also use `dataTableAjax(rownames = FALSE)` here
- `filter` (for expert use only) a function with two arguments `data` and `params` (Ajax parameters, a list of the form `list(search = list(value = '/FOO/', regex = 'false'), length = 10, ...)`) that return the filtered table result according to the DataTables Ajax request
- `outputId` the output ID of the table (the same ID passed to `dataTableOutput()`; if missing, an attempt to infer it from `session` is made. If it can’t be inferred, a random id is generated.)

**Details**

Normally you should not need to call this function directly. It is called internally when a table widget is rendered in a Shiny app to configure the table option `ajax` automatically. If you are familiar with DataTables’ server-side processing, and want to use a custom filter function, you may call this function to get an Ajax URL.

**Value**

A character string (an Ajax URL that can be queried by DataTables).

**References**

[https://rstudio.github.io/DT/server.html](https://rstudio.github.io/DT/server.html)
Examples

DTApp = function(data, ..., options = list()) {
  library(shiny)
  library(DT)
  shinyApp(
    ui = fluidPage(
      title = 'Server-side processing of DataTables',
      fluidRow(
        DT::dataTableOutput('tbl')
      )
    ),
    server = function(input, output, session) {
      options$serverSide = TRUE
      options$ajax = list(url = dataTableAjax(session, data, outputId = 'tbl'))
      # create a widget using an Ajax URL created above
      widget = datatable(data, ..., options = options)
      output$tbl = DT::renderDataTable(widget)
    }
  )
}

if (interactive()) DTApp(iris)
if (interactive()) DTApp(iris, filter = 'top')

dataTableOutput

Helper functions for using DT in Shiny

Description

These two functions are like most fooOutput() and renderFoo() functions in the shiny package. The former is used to create a container for table, and the latter is used in the server logic to render the table.

Usage

dataTableOutput(outputId, width = "100\%", height = "auto")

DTOutput(outputId, width = "100\%", height = "auto")

renderDataTable(
  expr,
  server = TRUE,
  env = parent.frame(),
  quoted = FALSE,
  funcFilter = dataTablesFilter,
  ...  
)
renderDT(
  expr,
  server = TRUE,
  env = parent.frame(),
  quoted = FALSE,
  funcFilter = dataTablesFilter,
  ...
)

Arguments

outputId  output variable to read the table from
width     the width of the table container
height    the height of the table container
expr      an expression to create a table widget (normally via datatable()), or a data
          object to be passed to datatable() to create a table widget
server    whether to use server-side processing. If TRUE, then the data is kept on the server
          and the browser requests a page at a time; if FALSE, then the entire data frame
          is sent to the browser at once. Highly recommended for medium to large data
          frames, which can cause browsers to slow down or crash.
env       The environment in which to evaluate expr.
quoted    Is expr a quoted expression (with quote())? This is useful if you want to save
          an expression in a variable.
funcFilter (for expert use only) passed to the filter argument of dataTableAjax()
...       ignored when expr returns a table widget, and passed as additional arguments
          to datatable() when expr returns a data object

References

https://rstudio.github.io/DT/shiny.html

Examples

if (interactive()) {
  library(shiny)
  library(DT)
  shinyApp(
    ui = fluidPage(fluidRow(column(12, DTOutput('tbl')))),
    server = function(input, output) {
      output$tbl = renderDT(
        iris, options = list(lengthChange = FALSE)
      )
    }
  )
}
dataTableProxy

*Manipulate an existing DataTables instance in a Shiny app*

**Description**

The function `dataTableProxy()` creates a proxy object that can be used to manipulate an existing DataTables instance in a Shiny app, e.g. select rows/columns, or add rows.

**Usage**

```r
dataTableProxy(
  outputId,
  session = shiny::getDefaultReactiveDomain(),
  deferUntilFlush = TRUE
)
```

```r
selectRows(proxy, selected, ignore.selectable = FALSE)
```

```r
selectColumns(proxy, selected, ignore.selectable = FALSE)
```

```r
selectCells(proxy, selected, ignore.selectable = FALSE)
```

```r
addRow(proxy, data)
```

```r
clearSearch(proxy)
```

```r
selectPage(proxy, page)
```

```r
updateCaption(proxy, caption)
```

```r
updateSearch(proxy, keywords = list(global = NULL, columns = NULL))
```

```r
showCols(proxy, show, reset = FALSE)
```

```r
hideCols(proxy, hide, reset = FALSE)
```

```r
colReorder(proxy, order, origOrder = FALSE)
```

```r
reloadData(
  proxy,
  resetPaging = TRUE,
  clearSelection = c("all", "none", "row", "column", "cell")
)
```

**Arguments**

- `outputId` the id of the table to be manipulated (the same id as the one you used in `dataTableOutput()`)
session the Shiny session object (from the server function of the Shiny app)

deferUntilFlush whether an action should be carried out right away, or should be held until after
the next time all of the outputs are updated

proxy a proxy object returned by dataTableProxy()

selected an integer vector of row/column indices, or a matrix of two columns (row and
column indices, respectively) for cell indices; you may use NULL to clear existing
selections

ignore.selectable when FALSE (the default), the "non-selectable" range specified by selection =
list(selectable= ) is respected, i.e., you can't select "non-selectable" range. Otherwise, it is ignored.

data a single row of data to be added to the table; it can be a matrix or data frame
of one row, or a vector or list of row data (in the latter case, please be cautious
about the row name: if your table contains row names, here data must also
contain the row name as the first element)

page a number indicating the page to select

caption a new table caption (see the caption argument of datatable())

keywords a list of two components: global is the global search keyword of a single char-
acter string (ignored if NULL); columns is a character vector of the search key-
words for all columns (when the table has one column for the row names, this
vector of keywords should contain one keyword for the row names as well)

show a vector of column positions to show (the indexing starts at 0, but if row.names
are visible, they are the first column).

reset if TRUE, will only show/hide the columns indicated.

hide a vector of column positions to hide

order A numeric vector of column positions, starting from 0, and including the row.names
as a column, if they are include. Must contain a value for all columns, regard-
less of whether they are visible or not. Also for column reordering to work, the
datatable must have extension 'ColReorder' set as well as option 'colReorder'
set to TRUE).

origOrder Whether column reordering should be relative to the original order (the default
is to compare to current order)

resetPaging whether to reset the paging position

clearSelection which existing selections to clear: it can be any combinations of row, column,
and cell, or all for all three, or none to keep current selections (by default, all
selections are cleared after the data is reloaded)

Note

addRow() only works for client-side tables. If you want to use it in a Shiny app, make sure to use
renderDataTable(., server = FALSE). Also note that the column filters (if used) of the table
will not be automatically updated when a new row is added, e.g., the range of the slider of a column
will stay the same even if you have added a value outside the range of the original data column.
reloadData() only works for tables in the server-side processing mode, e.g. tables rendered with `renderDataTable(server = TRUE)`. The data to be reloaded (i.e. the one you pass to `dataTableAjax()`) must have exactly the same number of columns as the previous data object in the table.

References

https://rstudio.github.io/DT/shiny.html

### DT-imports

**Objects imported from other packages**

- **htmlwidgets**: `JS, saveWidget`
- **magrittr**: `%>%`

### editData

**Edit a data object using the information from the editor in a DataTable**

#### Description

These objects are imported from other packages. Follow the links to their documentation.

- **htmlwidgets**: `JS, saveWidget`
- **magrittr**: `%>%`

#### Usage

```
editData(data, info, proxy = NULL, rownames = TRUE, resetPaging = FALSE, ...)
```

#### Arguments

- **data**: The original data object used in the DataTable.
- **info**: The information about the edited cells. It should be obtained from `input$tableId_cell_edit` from Shiny, and is a data frame containing columns `row`, `column`, and `value`.
- **proxy**, `resetPaging`, `...` (Optional) If `proxy` is provided, it must be either a character string of the output ID of the table or a proxy object created from `dataTableProxy()`, and the rest of arguments are passed to `replaceData()` to update the data in a DataTable instance in a Shiny app.
- **rownames**: Whether row names are displayed in the table.

#### Value

The updated data object.
**formatCurrency**

### Description

Format numeric columns in a table as currency (formatCurrency()) or percentages (formatPercentage()), or round numbers to a specified number of decimal places (formatRound()), or a specified number of significant figures (formatSignif()). The function formatStyle() applies CSS styles to table cells by column.

### Usage

```r
formatCurrency(  
  table,  
  columns,  
  currency = "$",  
  interval = 3,  
  mark = ",",  
  digits = 2,  
  dec.mark = getOption("OutDec"),  
  before = TRUE
)

formatString(table, columns, prefix = "", suffix = "")

formatPercentage(  
  table,  
  columns,  
  digits = 0,  
  interval = 3,  
  mark = ",",  
  dec.mark = getOption("OutDec")
)

formatRound(  
  table,  
  columns,  
  digits = 2,  
  interval = 3,  
  mark = ",",  
  dec.mark = getOption("OutDec")
)

formatSignif(  
  table,  
  columns,  
  digits = 2,
)
formatCurrency

interval = 3,
mark = ",",
dec.mark = getOption("OutDec")
)

formatDate(table, columns, method = "toDateString", params = NULL)

formatStyle(
  table,
  columns,
  valueColumns = columns,
  target = c("cell", "row"),
  fontWeight = NULL,
  color = NULL,
  backgroundColor = NULL,
  background = NULL,
  ...
)

Arguments

table a table object created from `datatable()

columns the indices of the columns to be formatted (can be character, numeric, logical, or a formula of the form ~ V1 + V2, which is equivalent to c('V1', 'V2'))
currency the currency symbol
interval put a marker after how many digits of the numbers
mark the marker after every interval decimals in the numbers
digits the number of decimal places to round to
dec.mark a character to indicate the decimal point
before whether to place the currency symbol before or after the values
prefix string to put in front of the column values
suffix string to put after the column values
method the method(s) to convert a date to string in JavaScript; see `DT:::DateMethods` for a list of possible methods, and [https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Date](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Date) for a full reference
params a list parameters for the specific date conversion method, e.g., for the `toLocaleDateString()` method, your browser may support `params = list('ko-KR', list(year = 'numeric', month = 'long', day = 'numeric'))`
valueColumns indices of the columns from which the cell values are obtained; this can be different with the columns argument, e.g., you may style one column based on the values of a different column
target the target to apply the CSS styles to (the current cell or the full row)
fontWeight the font weight, e.g., 'bold' and 'normal'
color the font color, e.g., 'red' and '#ee00aa'
backgroundColor

the background color of table cells

background

the background of table cells

... other CSS properties, e.g. 'border', 'font-size', 'text-align', and so on; if you want to condition CSS styles on the cell values, you may use the helper functions such as `styleInterval()`; note the actual CSS property names are dash-separated, but you can use camelCase names in this function (otherwise you will have to use backticks to quote the names, e.g. `font-size = '12px'`), and this function will automatically convert camelCase names to dash-separated names (e.g. 'fontWeight' will be converted to 'font-weight' internally)

Note

The length of arguments other than `table` should be 1 or the same as the length of columns.

References

See https://rstudio.github.io/DT/functions.html for detailed documentation and examples.

Examples

```r
library(DT)
m = cbind(matrix(rnorm(120, 1e5, 1e6), 40), runif(40), rnorm(40, 100))
colnames(m) = head(LETTERS, ncol(m))
m

# format the columns A and C as currency, and D as percentages
datatable(m) %>% formatCurrency(c('A', 'C')) %>% formatPercentage('D', 2)

# the first two columns are Euro currency, and round column E to 3 decimal places
datatable(m) %>% formatCurrency(1:2, '\U20AC') %>% formatRound('E', 3)

# render vapor pressure with only two significant figures.
datatable(pressure) %>% formatSignif('pressure', 2)

# apply CSS styles to columns
datatable(iris) %>%
  formatStyle('Sepal.Length', fontWeight = styleInterval(5, c('bold', 'weight'))) %>%
  formatStyle('Sepal.Width',
    color = styleInterval(3.4, c('red', 'white'))),
  backgroundColor = styleInterval(3.4, c('yellow', 'gray'))
)
```

replaceData

Replace data in an existing table
**Description**

Replace the data object of a table output and avoid regenerating the full table, in which case the state of the current table will be preserved (sorting, filtering, and pagination) and applied to the table with new data.

**Usage**

replaceData(proxy, data, ..., resetPaging = TRUE, clearSelection = "all")

**Arguments**

- **proxy**: a proxy object created by dataTableProxy()
- **data**: the new data object to be loaded in the table
- **...**: other arguments to be passed to dataTableAjax()
- **resetPaging**, **clearSelection**: passed to reloadData()

**Note**

When you replace the data in an existing table, please make sure the new data has the same number of columns as the current data. When you have enabled column filters, you should also make sure the attributes of every column remain the same, e.g. factor columns should have the same or fewer levels, and numeric columns should have the same or smaller range, otherwise the filters may never be able to reach certain rows in the data.

---

**styleInterval**  
*Conditional CSS styles*

**Description**

A few helper functions for the formatStyle() function to calculate CSS styles for table cells based on the cell values. Under the hood, they just generate JavaScript and CSS code from the values specified in R.

**Usage**

styleInterval(cuts, values)

styleEqual(levels, values, default = NULL)

styleValue()

styleColorBar(data, color, angle = 90)
**Arguments**

- **cuts**: a vector of cut points (sorted increasingly)
- **values**: a vector of CSS values
- **levels**: a character vector of data values to be mapped (one-to-one) to CSS values
- **default**: a string or NULL used as the the default CSS value for values other than levels. If NULL, the CSS value of non-matched cells will be left unchanged.
- **data**: a numeric vector whose range will be used for scaling the table data from 0-100 before being represented as color bars. A vector of length 2 is acceptable here for specifying a range possibly wider or narrower than the range of the table data itself.
- **color**: the color of the bars
- **angle**: a number of degrees representing the direction to fill the gradient relative to a horizontal line and the gradient line, going counter-clockwise. For example, 90 fills right to left and -90 fills left to right.

**Details**

The function `styleInterval()` maps intervals to CSS values. Its argument `values` must be of length `n + 1` where `n = length(cuts)`. The right-closed interval `(cuts[i-1], cuts[i])` is mapped to `values[i]` for `i = 2, 3, ..., n`; `values[1]` is for the interval `(-Inf, cuts[1])`, and `values[n + 1]` is for `(cuts[n], +Inf)`. You can think of the order of cuts and values using this diagram: `-Inf -> values[1] -> cuts[1] -> values[2] -> cuts[2] -> ... -> values[n] -> cuts[n] -> values[n + 1] -> +Inf`.

The function `styleEqual()` maps data values to CSS values in the one-to-one manner, i.e. `values[i]` is used when the table cell value is `levels[i]`.

The function `styleColorBar()` can be used to draw background color bars behind table cells in a column, and the width of bars is proportional to the column values.

The function `styleValue()` uses the column value as the CSS values.

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**tableHeader**  
*Generate a table header or footer from column names*

**Description**

Convenience functions to generate a table header (`<thead></thead>`) or footer (`<tfoot></tfoot>`) given the column names. They are basically wrappers of `htmltools::tags$th` applied to the column names.

**Usage**

```r
tableHeader(names, escape = TRUE)
tableFooter(names, escape = TRUE)
```
**Arguments**

- **names**
  A character vector of the column names of the table (if it is an object with column names, its column names will be used instead)

- **escape**
  Whether to escape the names (see *datatable*).

**Value**

A tag object generated by `htmltools::tags`.

**Examples**

```r
library(DT)
tableHeader(iris) # or equivalently,
tableHeader(colnames(iris))
tableFooter(iris) # footer

library(htmltools)
tags$table(tableHeader(iris), tableFooter(iris))
```
Index

%>% (DT-imports), 12
%>%, 12
addRow (dataTableProxy), 10
clearSearch (dataTableProxy), 10
colReorder (dataTableProxy), 10
datatable, 3, 7, 9, 11, 14, 18
dataTableAjax, 7, 9, 16
dataTableOutput, 8, 10
dataTableProxy, 5, 10, 12
DT-imports, 12
DTOutput (dataTableOutput), 8
editData, 12
formatCurrency, 13
formatDate (formatCurrency), 13
formatPercentage (formatCurrency), 13
formatRound (formatCurrency), 13
formatSignif (formatCurrency), 13
formatString (formatCurrency), 13
formatStyle, 16
formatStyle (formatCurrency), 13
hideCols (dataTableProxy), 10
JS, 4, 12
JS (DT-imports), 12
options, 4
reloadData, 16
reloadData (dataTableProxy), 10
renderDataTable (dataTableOutput), 8
renderDT (dataTableOutput), 8
replaceData, 12, 15
saveWidget, 12
saveWidget (DT-imports), 12
selectCells (dataTableProxy), 10
selectColumns (dataTableProxy), 10
selectPage (dataTableProxy), 10
selectRows (dataTableProxy), 10
showCols (dataTableProxy), 10
styleColorBar (styleInterval), 16
styleEqual (styleInterval), 16
styleInterval, 15, 16
styleValue (styleInterval), 16
tableFooter (tableHeader), 17
tableHeader, 17
updateCaption (dataTableProxy), 10
updateSearch (dataTableProxy), 10