

Package ‘TT’

October 12, 2022

Title Display Tree Structured Data using Datatable Widget (DT)

Version 0.98

Description Wrapper of datatable widget, allowing display of data.tree objects.
All arguments of the data.tree become columns and each node is a row.
Adds column with buttons allowing folding and unfolding the levels.

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Encoding UTF-8

LazyData true

RoxygenNote 7.1.2

Depends R (>= 2.10)

Imports DT, dplyr (>= 1.0.0), magrittr, purrr, data.tree, htmlwidgets

NeedsCompilation no

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col_order	<i>Example data for TT package</i>
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Description

character vector to demonstrate ordering option. See example of [treetable](#)

Usage

```
col_order
```

Format

character vector

formatCurrency	<i>Format table columns</i>
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Description

Simply wrapper on format... family functions of 'DT' package. For details see: [formatCurrency](#)
The wrappers are not affecting behavior of original format... functions

Usage

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

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

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

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

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

```

Arguments

table	a table object created from <code>datatable()</code>
columns	the indices of the columns to be formatted (can be character, numeric, logical, or a formula of the form <code>~ V1 + V2</code> , which is equivalent to <code>c('V1', 'V2')</code>)
currency	the currency symbol
interval	put a marker after how many digits of the numbers
mark	the marker after every <code>interval</code> 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

method	the method(s) to convert a date to string in JavaScript; see <code>DT::DateMethods</code> for a list of possible methods, and 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 <code>toLocaleDateString()</code> method, your browser may support <code>params = list('ko-KR', list(year = 'numeric', month = 'long', day = 'numeric'))</code>
prefix	string to put in front of the column values
suffix	string to put after the column values
valueColumns	indices of the columns from which the cell values are obtained; this can be different with the <code>columns</code> 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 <code>styleInterval()</code> ; 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. <code>`font-size` = '12px'</code>), and this function will automatically convert camelCase names to dash-separated names (e.g. 'fontWeight' will be converted to 'font-weight' internally)

Value

Return formatted 'HTML' widget of 'DataTables'

org

Example data for TT package

Description

'data.tree' object that can be used as an example to see how table widget looks like. Each node of 'data.tree' store attributes (dates) with some numbers.

Usage

org

Format

'data.tree' object with 7 attributes in each node, value of the leaf attributes is some random number, parents value is cumulative sum of children The attributes are:

- name of the node
- six consecutive months of the year (Jan-2021, Feb-2021 . . .)

treetable

Display tree structured data using 'datatable' widget

Description

Wrapper of 'datatable' widget, allowing display of 'data.tree' objects. All arguments of the 'data.tree' become columns and each node is a row. Adds column with buttons allowing folding and unfolding the levels.

Usage

```
treetable(data, color = "#0177A5", colnames = list(), ...)
```

Arguments

data	data.tree object. treetable will extract all arguments in alphabetical order - these will be a columns. For renaming and ordering of the columns see colnames.
color	base color (hue) to color the table. Each level will differ with saturation and luminosity.
colnames	if list() of characters provided, arguments of data.tree (columns) will be renamed. If vector() provided, columns will be renamed as for list input, additionally columns will be reordered according to vector level after renaming.
...	datatable parameters

Details

Package consist of treetable function (wrapper of 'datatable') that convert data.tree object to 'dataframe' and 'JS' callback function called after creating the table. Treetable function ads hidden columns used by 'JS' for formatting and folding/unfolding level rows. Hidden columns shall be completely transparent for user

Package also include 'DT::format...' functions wrappers, which are working exactly as originals, but are necessary to protect special (helper) columns used by 'JS' callback function for formatting.

Color formatting is done by 'kolorWheel' 'JS' script done by Zalka Erno

e-mail: ern0[at]linkbroker.hu

<http://linkbroker.hu/stuff/kolorwheel.js/>

Value

Return 'HTML' widget using the 'JavaScript' library 'DataTables'

References

<https://github.com/zielaskowski/tree-table>

See Also

[datatable](#)
[data.tree](#)

Examples

```
data("org")
data("col_order")
colnames <- factor(c("org",org$attributesAll),
                  levels = col_order)
treetable(org, color="#FFFFFF", colnames=colnames)

# still datatable works as expected when data.frame provided
treetable(data.frame(
  date = seq(as.Date("2015-01-01"), by = "day", length.out = 5), x = 1:5))
```

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