Package ‘rhandsontable’

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Description An R interface to the 'Handsontable' JavaScript library, which is a minimalist Excel-like data grid editor. See <https://handsontable.com/> for details.
License MIT + file LICENSE
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rhandsontable-package rhandsontable

Description

R interface for creating tables using Handsontable, urlhttps://handsontable.com/

Details

For full documentation on the package, visit https://jrowen.github.io/rhandsontable/
editAddin

Edit a Data Frame.

Description

Interactively edit a data.frame or data.table. The resulting code will be emitted as a call to reload the data from a temp RDS file.

Usage

editAddin()

Details

This addin can be used to interactively edit. The intended way to use this is as follows:

1. Highlight a symbol naming a data.frame or data.table in your R session, e.g. mtcars.
2. Execute this addin, to interactively edit it.

When you’re done, the code performing this operation will be emitted at the cursor position.

This function borrows heavily from rstudio/addinexamples/subsetAddin

---

hot_cell

Handsontable widget

Description

Configure single cell. See Handsontable.js for details.

Usage

hot_cell(hot, row, col, comment = NULL, readOnly = NULL)

Arguments

- **hot**: rhandsontable object
- **row**: numeric row index
- **col**: column name or index
- **comment**: character comment to add to cell
- **readOnly**: logical making the cell read-only

See Also

hot_cols, hot_rows
Examples

```r
library(rhandsontable)
DF = data.frame(val = 1:10, bool = TRUE, big = LETTERS[1:10],
    small = letters[1:10],
    dt = seq(from = Sys.Date(), by = "days", length.out = 10),
    stringsAsFactors = FALSE)

rhandsontable(DF) %>%
  hot_cell(1, 1, comment = "Test comment") %>%
  hot_cell(2, 3, readOnly = TRUE)
```

---

**hot_col**  
*Handsontable widget*

Description

Configure single column.

Usage

```r
hot_col(
  hot,
  col,
  type = NULL,
  format = NULL,
  source = NULL,
  strict = NULL,
  readOnly = NULL,
  validator = NULL,
  allowInvalid = NULL,
  halign = NULL,
  valign = NULL,
  renderer = NULL,
  copyable = NULL,
  dateFormat = NULL,
  default = NULL,
  language = NULL,
  ...
)
```

Arguments

- **hot**  
rhandsontable object
- **col**  
vector of column names or indices
- **type**  
character specify the data type. Options include: numeric, date, checkbox, select, dropdown, autocomplete, password, and handsontable (not implemented yet)
hot_col
definitions:

**format** character specifying column format. See Cell Types at Handsontable.js for the formatting options for each data type. Numeric columns are formatted using Numbro.js.

**source** a vector of choices for select, dropdown and autocomplete column types

**strict** logical specifying whether values not in the source vector will be accepted

**readOnly** logical making the column read-only

**validator** character defining a Javascript function to be used to validate user input. See hot_validate_numeric and hot_validate_character for pre-build validators.

**allowInvalid** logical specifying whether invalid data will be accepted. Invalid data cells will be color red.

**halign** character defining the horizontal alignment. Possible values are htLeft, htCenter, htRight and htJustify

**valign** character defining the vertical alignment. Possible values are htTop, htMiddle, htBottom

**renderer** character defining a Javascript function to be used to format column cells. Can be used to implement conditional formatting.

**copyable** logical defining whether data in a cell can be copied using Ctrl + C

**dateFormat** character defining the date format. See Moment.js for details.

**default** default column value for new rows (NA if not specified; shiny only)

**language** locale passed to Numbro.js; default is 'en-US'.

... locale passed to handsontable

See Also

hot_cols, hot_rows, hot_cell

Examples

library(rhandsontable)
DF = data.frame(val = 1:10, bool = TRUE, big = LETTERS[1:10],
                small = letters[1:10],
                dt = seq(from = Sys.Date(), by = "days", length.out = 10),
                stringsAsFactors = FALSE)
rhandsontable(DF, rowHeaders = NULL) %>%
  hot_col(col = "big", type = "dropdown", source = LETTERS) %>%
  hot_col(col = "small", type = "autocomplete", source = letters,
          strict = FALSE)
Description

Configure multiple columns.

Usage

hot_cols(
  hot,
  colWidths = NULL,
  columnSorting = NULL,
  manualColumnMove = NULL,
  manualColumnResize = NULL,
  fixedColumnsLeft = NULL,
  ...
)

Arguments

hot rhandsontable object
colWidths a scalar or numeric vector of column widths
columnSorting logical enabling row sorting. Sorting only alters the table presentation and the original dataset row order is maintained. The sorting will be done when a user click on column name
manualColumnMove logical enabling column drag-and-drop reordering
manualColumnResize logical enable column width resizing
fixedColumnsLeft a scalar indicating the number of columns to freeze on the left
...

See Also

hot_col, hot_rows, hot_cell

Examples

library(rhandsontable)
DF = data.frame(val = 1:10, bool = TRUE, big = LETTERS[1:10],
  small = letters[1:10],
  dt = seq(from = Sys.Date(), by = "days", length.out = 10),
  stringsAsFactors = FALSE)
rhandsontable(DF) %>%
  hot_cols(columnSorting = TRUE)
**Description**

Configure the options for the right-click context menu

**Usage**

```r
hot_context_menu(
  hot,
  allowRowEdit = TRUE,
  allowColEdit = TRUE,
  allowReadOnly = FALSE,
  allowComments = FALSE,
  allowCustomBorders = FALSE,
  customOpts = NULL,
  ...
)
```

**Arguments**

- **hot**: rhandsontable object
- **allowRowEdit**: logical enabling row editing
- **allowColEdit**: logical enabling column editing. Note that Handsontable does not support column add/remove when column types are defined (i.e. useTypes == TRUE in rhandsontable).
- **allowReadOnly**: logical enabling read-only toggle
- **allowComments**: logical enabling comments
- **allowCustomBorders**: logical enabling custom borders
- **customOpts**: list
- **...**: ignored

**Examples**

```r
library(rhandsontable)
DF = data.frame(val = 1:10, bool = TRUE, big = LETTERS[1:10],
                 small = letters[1:10],
                 dt = seq(from = Sys.Date(), by = "days", length.out = 10),
                 stringsAsFactors = FALSE)
rhandsontable(DF) %>%
  hot_context_menu(allowRowEdit = FALSE, allowColEdit = FALSE)
```
**hot_heatmap**  
*Handsontable widget*

**Description**  
Add heatmap to table.

**Usage**  
```r  
hot_heatmap(hot, cols, color_scale = c("#ED6D47", "#17F556"), renderer = NULL)  
```

**Arguments**

- **hot**  
rhandsontable object
- **cols**  
numeric vector of columns to include in the heatmap. If missing all columns are used.
- **color_scale**  
character vector that includes the lower and upper colors
- **renderer**  
character defining a Javascript function to be used to determine the cell colors. If missing, rhandsontable:::renderer_heatmap is used.

**Examples**  
```r  
MAT = matrix(rnorm(50), nrow = 10, dimnames = list(LETTERS[1:10], letters[1:5]))  
rhandsontable(MAT) %>%  
  hot_heatmap()  
```

---

**hot_row**  
*Handsontable widget*

**Description**  
Configure properties of all cells in a given row(s). Note that hot_row is not to be confused with hot_rows. See Handsontable.js for details.

**Usage**  
```r  
hot_row(hot, row, readOnly = NULL)  
```

**Arguments**

- **hot**  
rhandsontable object
- **row**  
numeric vector of row indexes
- **readOnly**  
logical making the row(s) read-only
hot_rows

See Also

hot_cols, hot_cell, hot_rows

Examples

library(rhandsontable)
MAT = matrix(rnorm(50), nrow = 10, dimnames = list(LETTERS[1:10], letters[1:5]))

rhandsontable(MAT, width = 300, height = 150) %>%
  hot_row(c(1,3:5), readOnly = TRUE)

Description

Configure row settings that pertain to the entire table. Note that hot_rows is not to be confused with hot_row. See Handsontable.js for details.

Usage

hot_rows(hot, rowHeights = NULL, fixedRowsTop = NULL)

Arguments

hot  rhandsontable object
rowHeights  a scalar or numeric vector of row heights
fixedRowsTop  a scaler indicating the number of rows to freeze on the top

See Also

hot_cols, hot_cell

Examples

library(rhandsontable)
MAT = matrix(rnorm(50), nrow = 10, dimnames = list(LETTERS[1:10], letters[1:5]))

rhandsontable(MAT, width = 300, height = 150) %>%
  hot_cols(colWidths = 100, fixedColumnsLeft = 1) %>%
  hot_rows(rowHeights = 50, fixedRowsTop = 1)
**hot_table**

*Handsontable widget*

**Description**

Configure table. See Handsontable.js for details.

**Usage**

```r
hot_table(
  hot,
  contextMenu = TRUE,
  stretchH = "none",
  customBorders = NULL,
  highlightRow = NULL,
  highlightCol = NULL,
  enableComments = FALSE,
  overflow = NULL,
  rowHeaderWidth = NULL,
  ...
)
```

**Arguments**

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>hot</code></td>
<td>rhandsontable object</td>
</tr>
<tr>
<td><code>contextMenu</code></td>
<td>logical enabling the right-click menu</td>
</tr>
<tr>
<td><code>stretchH</code></td>
<td>character describing column stretching. Options are 'all', 'right', and 'none'</td>
</tr>
<tr>
<td><code>customBorders</code></td>
<td>json object</td>
</tr>
<tr>
<td><code>highlightRow</code></td>
<td>logical enabling row highlighting for the selected cell</td>
</tr>
<tr>
<td><code>highlightCol</code></td>
<td>logical enabling column highlighting for the selected cell</td>
</tr>
<tr>
<td><code>enableComments</code></td>
<td>logical enabling comments in the table</td>
</tr>
<tr>
<td><code>overflow</code></td>
<td>character setting the css overflow behavior. Options are auto (default), hidden and visible</td>
</tr>
<tr>
<td><code>rowHeaderWidth</code></td>
<td>numeric width (in px) for the rowHeader column</td>
</tr>
<tr>
<td><code>...</code></td>
<td>passed to Handsontable.js constructor</td>
</tr>
</tbody>
</table>

**See Also**

`rhandsontable`
**Examples**

```r
library(rhandsontable)
DF = data.frame(val = 1:10, bool = TRUE, big = LETTERS[1:10],
                  small = letters[1:10],
                  dt = seq(from = Sys.Date(), by = "days", length.out = 10),
                  stringsAsFactors = FALSE)

rhandsontable(DF) %>%
  hot_table(highlightCol = TRUE, highlightRow = TRUE)
```

**Description**

Convert handsontable data to R object. Can be used in a shiny app to convert the input json to an R dataset.

**Usage**

```r
hot_to_r(...)```

**Arguments**

... passed to rhandsontable::toR

**See Also**

rHandsontableOutput

---

**hot_validate_character**

*Handsontable widget*

**Description**

Add numeric validation to a column

**Usage**

```r
hot_validate_character(hot, cols, choices, allowInvalid = FALSE)```
Arguments

- **hot**: rhandsontable object
- **cols**: vector of column names or indices
- **choices**: a vector of acceptable numeric choices. It will be evaluated after min and max if specified.
- **allowInvalid**: logical specifying whether invalid data will be accepted. Invalid data cells will be color red.

See Also

- hot_validate_numeric

Examples

```r
library(rhandsontable)
DF = data.frame(val = 1:10, bool = TRUE, big = LETTERS[1:10],
                 small = letters[1:10],
                 dt = seq(from = Sys.Date(), by = "days", length.out = 10),
                 stringsAsFactors = FALSE)
rhandsontable(DF) %>%
  hot_validate_character(col = "big", choices = LETTERS[1:10])
```

---

**Description**

Add numeric validation to a column

**Usage**

```r
hot_validate_numeric(
  hot,
  cols,
  min = NULL,
  max = NULL,
  choices = NULL,
  exclude = NULL,
  allowInvalid = FALSE
)
```
**renderRHandsontable**

**Description**

Shiny bindings for rhandsontable

**Usage**

`renderRHandsontable(expr, env = parent.frame(), quoted = FALSE)`

**Arguments**

- `expr`: an expression that generates an rhandsontable.
- `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.

**See Also**

`rHandsontableOutput, hot_to_r`
rhandsontable

**Handsontable widget**

**Description**

Create a Handsontable.js widget.

**Usage**

```r
rhansontable(
  data,
  colHeaders,
  rowHeaders,
  comments = NULL,
  useTypes = TRUE,
  readOnly = NULL,
  selectCallback = FALSE,
  width = NULL,
  height = NULL,
  digits = 4,
  debug = NULL,
  search = FALSE,
  ...
)
```

**Arguments**

- **data**
  - a data.frame or matrix
- **colHeaders**
  - a vector of column names. If missing `colnames` will be used. Setting to NULL will omit.
- **rowHeaders**
  - a vector of row names. If missing `rownames` will be used. Setting to NULL will omit.
- **comments**
  - matrix or data.frame of comments; NA values are ignored
- **useTypes**
  - logical specifying whether column classes should be mapped to equivalent Javascript types. Note that Handsontable does not support column add/remove when column types are defined (i.e. `useTypes == TRUE` in rhandsontable).
- **readOnly**
  - logical specifying whether the table is editable
- **selectCallback**
  - logical enabling the afterSelect event to return data. This can be used with shiny to tie updates to a selected table cell.
- **width**
  - numeric table width
- **height**
  - numeric table height
- **digits**
  - numeric passed to `jsonlite::toJSON`
- **debug**
  - numeric Javascript log level
- **search**
  - logical specifying if the data can be searched (see [https://jrowen.github.io/rhandsontable/#Customizing](https://jrowen.github.io/rhandsontable/#Customizing) and Shiny example in inst/examples/rhandsontable_search)
- **...**
  - passed to `hot_table` and to the `params` property of the widget
Details

For full documentation on the package, visit https://jrowen.github.io/rhandsontable/

See Also

hot_table, hot_cols, hot_rows, hot_cell

Examples

```r
library(rhandsontable)
DF = data.frame(val = 1:10, bool = TRUE, big = LETTERS[1:10],
                 small = letters[1:10],
                 dt = seq(from = Sys.Date(), by = "days", length.out = 10),
                 stringsAsFactors = FALSE)
rhandsontable(DF, rowHeaders = NULL)
```

Description

The following functions are imported and then re-exported from the rhandsontable package to enable use of the magrittr pipe operator with no additional library calls

rHandsontableOutput Handsontable widget

Description

Shiny bindings for rhandsontable

Usage

```r
rHandsontableOutput(outputId, width = "100\%", height = "100\%")
```

Arguments

- `outputId`: output variable to read from
- `width`, `height`: must be a valid CSS unit in pixels or a number, which will be coerced to a string and have "px" appended.

See Also

renderRHandsontable
set_data

**Handsontable widget**

**Description**
Set data inside a Handsontable instance without recreating the widget. Send the new values as a vector of rows, a vector of columns, and a vector of values. If different length vectors are supplied then the shorter ones are recycled to match the length of the longest.

**Usage**

```r
set_data(id, row, col, val, session, zero_indexed = F)
```

**Arguments**

- **id**: The id of the table to interact with.
- **row**: Integer vector of row indexes.
- **col**: Integer vector the column indexes.
- **val**: Vector of values to set at each row-col pair.
- **session**: The session that is associated with your shiny server function. The table is only interactive when used in shiny so we only use set_data when the table is in shiny.
- **zero_indexed**: Default FALSE. Set to TRUE if you are supplying row and col indexes that are already 0-based.
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