Package: forestry (via r-universe)

August 24, 2024

Type Package

Title Reshape Data Tree

Version 0.1.0

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Description 'forestry' a series of utility functions to help with reshaping hierarchy of data tree, and reform the structure of data tree.

Suggests knitr, rmarkdown

VignetteBuilder knitr

License MIT + file LICENSE

Imports data.tree

Encoding UTF-8

LazyData true

RoxygenNote 7.0.2

Repository https://jienagu.r-universe.dev

RemoteUrl https://github.com/jienagu/forestry

RemoteRef HEAD

RemoteSha 8af83457c6f80127cce82a0825b70f5726c43b91

Contents

`add_child` *Add children node*

Description

Add children node

Usage

```
add_child(main_tree, x, assign_node)
```

Arguments

`main_tree`	the parent tree to be appended with children node
`x`	xth child
`assign_node`	appended node as child

Value

reshaped tree with children assigned

`assign_attr` *assign attributes to node; work with fix_items function*

Description

assign attributes to node; work with fix_items function

Usage

```
assign_attr(node_from, node_to)
```

Arguments

`node_from`	assigned attributes from
`node_to`	assigned attributes to

Value

a node assigned attributes

children_sort *Sort chidren nodes with certain order*

Description

Sort chidren nodes with certain order

Usage

```
children_sort(input_node, input_order, mismatch_last = T)
```

Arguments

input_node	input node
input_order	children node order
mismatch_last	TRUE: mismatched children nodes are at the bottom; FALSE: mismatched nodes are at the top

Value

tree with children nodes sorted with certian order

create_nodes *create a tree with assigned name, children and fields*

Description

create a tree with assigned name, children and fields

Usage

```
create_nodes(tree_name, add_children_count, ...)
```

Arguments

tree_name	assign name of tree
add_children_count	assign number of chidren to this tree
...	parameters that will be passed as fields of this tree

Value

a tree with assigned name, children and fields

Examples

```
create_nodes(tree_name = "tree1", add_children_count = 3, class = c("A", "B", "C"))
```

create_tree *create tree appended with each element of input list as a child*

Description

create tree appended with each element of input list as a child

Usage

```
create_tree(input_list, node_name)
```

Arguments

input_list	input list to be made for a tree
node_name	name of the tree

Value

a tree with each item of the list as each child

cumsum_across_level *cumulative calculation*

Description

cumulative calculation

Usage

```
cumsum_across_level(input_node, attri_name, level_num)
```

Arguments

input_node	tree
attri_name	name of this cummulative count field
level_num	calculate cummulative value cross the level

Value

tree with cummulative count

cumsum_by_level *calculate cumsum for input level*

Description

calculate cumsum for input level

Usage

```
cumsum_by_level(input_tree, level_num, attri_name)
```

Arguments

input_tree	input tree
level_num	level of tree for cumsum
attri_name	name of this cummulative count field

Value

tree with calculated cumsum for input level

exercise_df *Anonymized sample exercise data*

Description

Anonymized sample exercise data

Usage

```
data(exercise_df)
```

Format

a data frame ready to convert to a tree

Author(s)

Jiena Gu McLellan, 2020-05-26

Examples

```
data(exercise_df)
```

`fill_NA_level` *fill missing value of a field across a level with 0*

Description

fill missing value of a field across a level with 0

Usage

```
fill_NA_level(input_node, field_name, by_level, fill_with = 0)
```

Arguments

`input_node`	input node
`field_name`	field for this operation
`by_level`	across this level
`fill_with`	fill missing value with this value

Value

node with NA filled for the input field at input level

`fixnames` *numericalize children numeric name to convert JSON object to JSON array*

Description

numericalize children numeric name to convert JSON object to JSON array

Usage

```
fixnames(x)
```

Arguments

`x`	input

Value

unname numeric names list

fix_items *assign certain children nodes and fill NA for empty fields*

Description

assign certain children nodes and fill NA for empty fields

Usage

```
fix_items(fix_vector, input_node)
```

Arguments

fix_vector	children node names to be assigned
input_node	the node to be exapnded with children's names

Value

a node expanded with certain children nodes

pre_get_array *numericalize children numeric name to convert JSON object to JSON array*

Description

numericalize children numeric name to convert JSON object to JSON array

Usage

```
pre_get_array(x)
```

Arguments

x	input list

Value

unname numeric names list which is prepared to convert to JSON array

test_df *Anonymized sample data*

Description

Anonymized sample data

Usage

```
data(test_df)
```

Format

a data frame ready to convert to a tree

Author(s)

Jiena Gu McLellan, 2020-05-26

Examples

```
data(test_df)
```

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