

Package ‘navigatr’

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Type Package

Title Navigation Menu for Pipe-Friendly Data Processing

Version 0.1.2

Description Provides a navigation menu to enable pipe-friendly data processing for hierarchical data structures.

By activating the menu items, you can perform operations on each item while maintaining the overall structure in attributes.

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Encoding UTF-8

Imports cli, dplyr, pillar, purrr, rlang, tidyselect, vctrs

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Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

URL <https://github.com/UchidaMizuki/navigatr>,
<https://uchidamizuki.github.io/navigatr/>

BugReports <https://github.com/UchidaMizuki/navigatr/issues>

NeedsCompilation no

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R topics documented:

activate	2
is_item	3
is_menu	4
itemise	4
new_menu	5
rekey	6

activate	<i>Activate/deactivate a menu item</i>
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Description

Activates a menu item with the same syntax as `dplyr::pull()`. Activating a menu item allows you to perform operations on the active item. `activate()` turns a `navigatr_menu` object into an `navigatr_item` object, and `deactivate()` turns it back.

Usage

```
activate(.data, ..., .add = FALSE)

## S3 method for class 'navigatr_menu'
activate(.data, ..., .add = FALSE)

## S3 method for class 'navigatr_item'
activate(.data, ..., .add = FALSE)

deactivate(x, ..., deep = TRUE)

## S3 method for class 'navigatr_menu'
deactivate(x, ..., deep = TRUE)

## S3 method for class 'navigatr_item'
deactivate(x, ..., deep = TRUE)
```

Arguments

<code>.data</code>	A <code>navigatr_menu</code> object.
<code>...</code>	In <code>activate()</code> , one or more variables passed to <code>dplyr::pull()</code> . In <code>deactivate()</code> , unused (for extensibility).
<code>.add</code>	Whether to add new variables to the path indices. If <code>FALSE</code> (default value), the menu will be deactivated first by <code>deactivate()</code> .
<code>x</code>	A <code>navigatr_menu</code> object.
<code>deep</code>	If <code>TRUE</code> (default value), deactivate recursively.

Value

In `activate()`, An `navigatr_item` object. If it inherits from class `navigatr_menu`, the menu will be displayed hierarchically. Otherwise, the active data will be displayed. In `deactivate()`, A `navigatr_menu` object.

Examples

```
library(dplyr)

mn1 <- new_menu(key = c("band_members", "band_instruments"),
               value = list(band_members, band_instruments))

mn1 %>%
  activate(band_members) %>%
  filter(band == "Beatles")

# Items can also be specified as integers
mn1 %>%
  activate(2)

mn1 %>%
  activate(-1) %>%
  deactivate()

# To activate items in a nested menu, specify multiple variables
mn2 <- new_menu(key = c("key1", "key2"),
               value = list(mn1, mn1))
mn2 %>%
  activate(key1, band_members)
```

is_item

Test if an object is an item

Description

Test if an object is an item

Usage

```
is_item(x)
```

Arguments

x An object.

Value

TRUE if the object inherits from the `navigatr_item` class.

is_menu	<i>Test if the object is a menu</i>
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Description

Test if the object is a menu

Usage

```
is_menu(x)
```

Arguments

x	An object.
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Value

TRUE if the object inherits from the `navigatr_menu` class.

itemise	<i>Update items</i>
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Description

Update items

Usage

```
itemise(.data, ...)
```

```
itemize(.data, ...)
```

```
## S3 method for class 'navigatr_menu'
```

```
itemise(.data, ...)
```

```
## S3 method for class 'navigatr_item'
```

```
itemise(.data, ...)
```

Arguments

.data	A <code>navigatr_menu</code> or <code>navigatr_item</code> object.
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...	For <code>navigatr_menu</code> objects, use <code>key_name = item_value</code> . For <code>navigatr_item</code> objects, new item value.
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Value

A `navigatr_menu` or `navigatr_item` object.

`new_menu`*Build a new navigation menu*

Description

To build a new navigation menu, give `new_menu()` unique keys and a list of their corresponding values. The top row shows the menu items (keys on the left, value summaries on the right). The summaries are `pillar::obj_sum` outputs, so you can change the printing methods. Each menu item can be accessed by `activate()`.

Usage

```
new_menu(  
  key = character(),  
  value = list(),  
  attrs = data_frame(.size = 1),  
  ...,  
  class = character()  
)
```

Arguments

<code>key</code>	A unique character vector. If the key is not a character vector, it is converted to a character vector by <code>as.character()</code> .
<code>value</code>	A list of values corresponding to the keys. If the value is not a list, it is converted to a list by <code>as.list()</code> .
<code>attrs</code>	A data frame for additional attributes of items (an empty data frame by default). When an item becomes active, the <code>attrs</code> will be added to its attributes.
<code>...</code>	Additional arguments passed to <code>vctrs::new_data_frame()</code> .
<code>class</code>	A character vector of subclasses passed to <code>vctrs::new_data_frame()</code> .

Value

A `navigatr_menu` object, a subclass of class `data.frame`.

See Also

`activate()`

Examples

```
library(dplyr)  
  
band <- new_menu(key = c("band_members", "band_instruments"),  
                value = list(band_members, band_instruments))  
band
```

```
# You can also build a nested menu
bands <- new_menu(key = c("key1", "key2"),
                  value = list(band, band))
bands
```

rekey

Rename key names

Description

Rename key names

Usage

```
rekey(.data, ...)
```

```
## S3 method for class 'navigatr_menu'
rekey(.data, ...)
```

```
## S3 method for class 'navigatr_item'
rekey(.data, ...)
```

Arguments

`.data` A `navigatr_menu` or `navigatr_item` object.

`...` For `navigatr_menu` objects, use `new_name = old_name`. For `navigatr_item` objects, a scalar character of the new key name.

Value

A `navigatr_menu` or `navigatr_item` object.

Index

activate, 2
activate(), 5
as.character(), 5
as.list(), 5

deactivate(activate), 2
deactivate(), 2
dplyr::pull(), 2

is_item, 3
is_menu, 4
itemise, 4
itemize(itemise), 4

new_menu, 5

pillar::obj_sum, 5

rekey, 6

vctrs::new_data_frame(), 5