Package 'naijR'

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Type Package

Title Operations to Ease Data Analyses Specific to Nigeria

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Depends R (>= 3.6)

Imports RColorBrewer (>= 1.1.2), magrittr (>= 1.5), mapdata (>= 2.3.0), maps (>= 3.3.0), rgdal (>= 1.4.4), rlang (>= 0.4.0), lifecycle (>= 0.2.0)

Suggests covr, knitr, readxl, rmarkdown, testthat

Description A set of convenience functions as well as geographical/political data about Nigeria, aimed at simplifying work with data and information that are specific to the country.

License GPL-3

LazyData TRUE

Encoding UTF-8

RoxygenNote 7.1.1

VignetteBuilder knitr

RdMacros lifecycle

NeedsCompilation no

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R topics documented:

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fix_mobile   *Fix mobile numbers*

Description

Fixes up local mobile phone numbers to a uniform text format.

Usage

```
fix_mobile(x)
```

Arguments

x   A character vector of numerical strings.

Details

This format is specific to that used in a given location - for now the function is useful only for Nigeria mobile numbers, which come in the format expressed by the regex pattern `"^0[7-9][0-1][0-9]{8}$"`.

Value

The updated vector, usually the column of a data frame.

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is_state   *Test an Object for States*

Description

Test an Object for States

Usage

```
is_state(x, test = c("all", "selected"), allow.na = TRUE)
```

Arguments

x	A character vector to be tested.
test	The type of test to be carried out - on the vector as a whole i.e. `all` (the default argument) or on the individual elements i.e. `selected`.
allow.na	logical. If `TRUE`, all NAs are ignored in the result.

Value

A logical vector.

`lgas_ng`	*List Local Government Areas*

Description

List Local Government Areas

Usage

```
lgas_ng(ng.state = NA_character_)
```

Arguments

ng.state   Character; State(s) in the Federation of Nigeria. Default is `NA_character_`.

Value

If length of `ng.state == 1L`, a character vector containing the names of Local Government Areas; otherwise a named list whose elements are character vectors of the LGAs in each state.

Examples

```
how_many_lgas <- function(state) {
  require(naijR)
  stopifnot(state %in% states())
  cat(sprintf("No. of LGAs in %s State:", state),
    length(lgas_ng(state)),
    fill = TRUE)
}
how_many_lgas("Sokoto")
how_many_lgas("Ekiti")
```

`lgas_nigeria`	*Local Government Areas of Nigeria*

Description

A dataset containing the 774 Local Government Areas of Nigeria

Usage

```
lgas_nigeria
```

Format

A dataframe with 774 rows and 2 columns

lga Local Government Area

state State of the Federation

---

map_ng   *Map of Nigeria*

Description

Maps of the Federal Republic of Nigeria that are based on the basic plotting idiom utilised by
maps:map and its variants.

Usage

```
map_ng(
  region = character(),
  data = NULL,
  x = NULL,
  y = NULL,
  breaks = NULL,
  categories = NULL,
  col = NULL,
  fill = FALSE,
  title = NULL,
  caption = NULL,
  show.neighbours = FALSE,
  show.text = FALSE,
  leg.x = 13L,
  leg.y = 7L,
  leg.title,
  leg.orient = c("vertical", "horizontal"),
  ...
)
```

Arguments

region	A character vector of a list of Nigerian States to be displayed.
data	An object containing data, principally the variables required to plotted in a map.
x	Numeric object or factor (or coercible to one). See *Details*.
y	Numeric. See *Details*
breaks	Numeric. A vector of length >= 1. If a single value i.e. scalar, it denote the expected number of breaks. Internally, the function will attempt to compute approprate category sizes or fail if out-of bounds. Where length is >= 3L, it is expected to be an arithmetic sequence that represents category bounds as for cut (applicable only to choropleth maps).

categories	The legend for the choropleth-plotted categories. If not defined, internally created labels are used.
col	Colour to be used for the plot.
fill	Logical. Whether to colour the plotted map region(s). When drawing a choropleth map `fill == TRUE` is implied.
title	Character vector of length 1.
caption	Character vector of length 1.
show.neighbours	
	Logical; `TRUE` to display borders of neighbouring countries.
show.text	Logical. Apply labels to the regions of the map.
leg.x	Numeric. Position of the legend.
leg.y	Numeric. Position of the legend.
leg.title	Character. The legend Title
leg.orient	The orientation of the legend i.e. whether horizontal or vertical.
...	Further arguments for function [map](#)

Details

The default value for `region` is to print all States. `NULL` will print an outline map, i.e. without internal boundaries. `data` enables the extraction of data for plotting from an object of class `data.frame`. Columns containing States are identified. The argument also provided context for quasiquotation when providing the `x` and `y` arguments. For `x` and `y`, when both arguments are supplied, they are taken to be point coordinates and are plotted as such. If only `x` is supplied, it is presumed that the intention is to make a choropleth map, and thus, numeric vector arguments are converted into factors i.e. number classes. Otherwise factors or any object that can be coerced to a factor should be used. For plain plots, the `col` argument works the same as with [map](#) and variants. For choropleth maps, the colour provided represents a (sequential) colour palette based on RColorBrewer::brewer.pal. The possible colour options can be checked with getOption("choropleth.colours") and this can also be modified by the user.

Value

An object of class `map`, invisibly; as a side-effect, results in the drawing of a map of Nigeria.

An object of class `maps` containing the data used to draw the map and which can be used for additional calls to [map](#) or other similar functions (e.g. graphics::plot.default).

Note

When adjusting the default colour choiced for choropleth maps, it is advisable to use one of the sequential palettes. For a list of of available palettes, especially for more advanced use, review RColorBrewer::display.brewer.all

Examples

```
## Not run:
map_ng() # Draw a map with default settings
map_ng(states("sw"))
map_ng("Kano")

## End(Not run)
```

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naijR   *naijR: Operations to Ease Data Analyses Specific to Nigeria*

Description

The naijR package is essentially an R package about Nigeria and for Nigeria.

Details

naijR contains a number of functions that facilitate the management of data sets of interest including data cleaning and wrangling, as well as making available a number of facilities for geo-spatial data visuatlisation.

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states   *Display States of the Federal Republic of Nigeria*

Description

Display States of the Federal Republic of Nigeria

Usage

```
states(gpz = NULL, all = TRUE)
```

Arguments

gpz   Geopolitical zone. Default is NULL; optionally "nc","ne","nw","se","ss" and "sw" (see Details).

all   logical; whether to include FCT in the result

Details

gpz A geo-political zone, in the Nigerian context, is a national subdivision that groups contiguous states. Historically, they arise from subnational administrative divisions known as 'regions' that existed at the time of the country's independence. There are 6 zones - North-Central, North-East, North-West, South-East, South-South and South-West.

Value

The States of Nigeria as a whole or by zones, as a character vector

Examples

```
states()  # lists names of all States
states("se")  # lists States in South-East zone
```

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