

Package ‘nCov2019’

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Title Exploring 'COVID'-19 Statistics

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Description Provides easy-to-use programming API to access real time and historical data of 'COVID'-19 cases, vaccine and therapeutics data, and a Shiny app to help users exploring the data. Fetching data using API provided by <<https://disease.sh>> .

Depends R (>= 3.6.0)

Imports downloader, ggplot2, jsonlite, RColorBrewer

Suggests cowplot, dplyr, DT, ggplotify, grDevices, maps, magick, shiny, shinyBS, shinydashboard, shinycssloaders, remotes, utils, plotly, prettydoc, knitr, rmarkdown, reshape2, ggrepel, shadowtext, tidyr

VignetteBuilder knitr

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URL <https://github.com/YuLab-SMU/nCov2019>

Encoding UTF-8

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NeedsCompilation no

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<code>convert</code>	<i>convert</i>
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Description

Convert users' own data into class of `nCov2019History` data. Then it could be used in `nCov2019`.

Usage

```
convert(data)
```

Arguments

`data` users' own data, it should contain these 6 column: "country", "province", "date", "cases", "deaths", "recovery"

Value

a 'nCov2019History' object

<code>get_global_data</code>	<i>Query the global data online</i>
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Description

Query the global data online

Usage

```
get_global_data()
```

Value

A 'global_summary' object

Examples

```
## Not run:  
x <- get_global_data()  
  
## End(Not run)
```

get_history_data *Query the historical data online*

Description

Query the historical data online

Usage

```
get_history_data()
```

Value

A 'nCov2019History' object

Examples

```
## Not run:  
x <- get_history_data()  
  
## End(Not run)
```

get_latest_data *Query the latest data online*

Description

Query global latest statistic for all contries

Usage

```
get_latest_data()
```

Value

A 'nCov2019' object

Author(s)

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`get_nCov2019`*Query the latest data*

Description

Query the latest data online; deprecated, use `get_latest_data()` in the further.

Usage

```
get_nCov2019()
```

Value

The latest statistic data

Examples

```
## Not run:  
x <- get_nCov2019()  
  
## End(Not run)
```

`get_therapeutics_data` *Query the therapeutics info online*

Description

Query the therapeutics info online

Usage

```
get_therapeutics_data()
```

Value

A 'vaccine_therapeutics' object

Examples

```
## Not run:  
x <- get_therapeutics_data()  
  
## End(Not run)
```

get_vaccine_data *Query the vaccine info online*

Description

Query the vaccine info online

Usage

```
get_vaccine_data()
```

Value

A 'vaccine_therapeutics' object

Examples

```
## Not run:  
x <- get_vaccine_data()  
  
## End(Not run)
```

load_nCov2019 *Query the latest data*

Description

Query the historical data online;deprecated, use load_nCov2019() in the further.

Usage

```
load_nCov2019()
```

Value

The historical statistic data

Examples

```
## Not run:  
x <- load_nCov2019()  
  
## End(Not run)
```

open_dashboard	<i>Shiny app</i>
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Description

A dashboard app for nCov2019 package

Usage

```
open_dashboard()
```

```
dashboard()
```

Value

No return value, open shiny app

Examples

```
## Not run:  
dashboard()  
# or  
open_dashboard()  
  
## End(Not run)
```

plot.nCov2019	<i>plot.nCov2019</i>
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Description

plot map with ggplots, it is the core of plot.nCov2019 and Plot.nCov2019History.

Usage

```
## S3 method for class 'nCov2019'  
plot(  
  x,  
  region = "Global",  
  continuous_scale = FALSE,  
  palette = "Reds",  
  date = NULL,  
  title = "COVID19",  
  type = "cases",  
  ...  
)
```

```
## S3 method for class 'nCov2019History'
plot(
  x,
  region = "Global",
  continuous_scale = TRUE,
  palette = "Reds",
  date = NULL,
  from = NULL,
  to = NULL,
  width = 600,
  height = 600,
  filename = "nCov2019.gif",
  fps = 2,
  type = "cases",
  ...
)
```

Arguments

x	data for plot, it should be class of nCov2019 or nCov2019History.
region	If Global or a specified region.
continuous_scale	logical, Whether to use continuous fill color, if TRUE(the default), use continuous type, otherwise use discrete type.
palette	If a string, will use that named palette. If a number, will index into the list of palettes of appropriate type. The list of available palettes can found in the Palettes section.
date	Specify the date.
title	Title of the map.
type	Specify the type of Statistics.
...	Additional parameters.
from	start date to plot
to	end date to plot. Both from and to should be specify, otherwise they will be ignored. If both from and to are specify, an animation will be created.
width	width of the plot, only works for animation
height	height of the plot, only works for animation
filename	name of output file.
fps	fps of the animation, only works for animation

Value

A 'ggplot' object

query

Query COVID-19 related statistic data

Description

The main function for query nCov2019 related statistic data,

Usage

```
query()
```

Value

result contains 5 types of data:

- global: The global overall summary statistic
- latest: The global latest statistic for all countries
- historical: The historical statistic for all countries
- vaccine: The current vaccine development progress
- therapeutics: The current therapeutics development progress

Examples

```
## Not run:  
res <- query()  
names(res)  
  
## End(Not run)
```


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