

Package ‘owidR’

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Type Package

Title A Package for Importing Data from Our World in Data

Version 1.2.1

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Description Imports data from the Our World in Data website, offering easy to use functions for searching for datasets, downloading them into R and visualising them.

URL <<https://github.com/piersyork/owidR>>,
<<https://github.com/owid/covid-19-data/>>,
<<https://ourworldindata.org/>>

Imports dplyr, rvest, readr, leaflet, stringr, ggplot2, sf, magrittr,
forcats, jsonlite, htmltools, purrr, xml2, curl, ggrepel,
scales, rlang, grDevices, httr

Depends R (>= 3.5.0)

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|------|----------------------------------------|
| owid | <i>Get data from Our World in Data</i> |
|------|----------------------------------------|

Description

Get a dataset used in an OWID chart.

Usage

```
owid(chart_id = NULL, rename = NULL, tidy.date = TRUE, ...)
```

Arguments

| | |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| chart_id | The chart_id as returned by owid_search |
| rename | Rename the value column. Currently only works if there is just one value column. |
| tidy.date | If TRUE then a year column that should be a date column will automatically be detected and transformed. If FALSE then the Year column will be kept as is. Defaults to TRUE. |
| ... | Not to be used. |

Value

A tibble of an owid dataset with the added class 'owid'.

Examples

```
owid_search("emissions")
emissions <- owid("per-capita-ghg-emissions")
```

`owid_covid`*Get the Our World in Data covid-19 dataset*

Description

Get the Our World in Data covid-19 dataset

Usage

```
owid_covid()
```

Value

A dataframe with multiple variables on the covid-19 pandemic.

`owid_map`*Create a choropleth world map using data from Our World in Data.*

Description

A function to easily create a choropleth world map using data from Our World in Data.

Usage

```
owid_map(  
  data = data.frame(),  
  col = 4,  
  palette = "Reds",  
  mode = "plot",  
  year = NULL  
)
```

Arguments

| | |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <code>data</code> | A dataframe returned by <code>owid()</code> . This dataframe must have country names in the entity column, not all data returned by <code>owid()</code> will be like this. |
| <code>col</code> | Either the column number to be treated as the value or a character string specifying the name of the column. Defaults to 3, which is the first possible value column. |
| <code>palette</code> | The RColorBrewer palette to be used. |
| <code>mode</code> | If "plot", the output will be a ggplot2 map. If "view", the output will be a leaflet interactive map. |
| <code>year</code> | The year to be mapped. Defaults to NULL, which plots the most recent year with data available. |

Value

Either a ggplot2 map (for mode = "plot") or a leaflet map (for mode = "view").

Examples

```
mental <- owid("share-with-mental-and-substance-disorders")

# simple ggplot2 map
owid_map(mental)

# interactive map with blue palette
owid_map(mental, mode = "view", palette = "Blues")
```

owid_plot

Plot an owid dataset

Description

A wrapper around ggplot to provide an quick visualisation of owid data.

Usage

```
owid_plot(
  data = NULL,
  col = 4,
  summarise = TRUE,
  filter = NULL,
  years = NULL,
  show.all = FALSE
)
```

Arguments

| | |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| data | A tibble returned from 'owid()' |
| col | Either the column number to be treated as the value or a character string specifying the name of the value column. Defaults to 3, which is the first possible value column. |
| summarise | A logical value. If TRUE, plot takes the mean value. If FALSE, each entity is plotted, it is recommended to use this in conjunction with the filter argument to avoid too many entity's being plotted. |
| filter | The entity's to include in the plot. |
| years | The years to be included in the plot. |
| show.all | A logical value indicating weather all Entities should be included in the plot. |

Value

A ggplot object.

Examples

```
human_rights <- owid("human-rights-scores")

# Plot average score over time
owid_plot(human_rights)

# Plot score for a selection of countries
owid_plot(human_rights, summarise = FALSE,
          filter = c("United Kingdom", "Sweden", "North Korea", "South Korea"))
```

owid_search

Search the data sources used in OWID charts

Description

Search the data sources used in OWID charts

Usage

```
owid_search(term)
```

Arguments

term A search term

Value

A matrix of chart titles and chart ids

Examples

```
# returns the titles and chart_ids of all charts containing the word 'emissions'
owid_search("emissions")
```

`owid_source`*Get source information on an OWID dataset*

Description

A function to get source information from an OWID dataset and display it in the R console.

Usage

```
owid_source(data)
```

Arguments

`data` A tibble returned from `owid()`.

Value

Displays the information in an easy to read format in the R console, also returns a list of data information.

Examples

```
rights <- owid("human-rights-scores")
owid_source(rights)
```

`pal_owid`*Colour palettes based on the colours used by Our World in Data*

Description

Colour palettes based on the colours used by Our World in Data

Usage

```
pal_owid(alpha)
```

Arguments

`alpha` Transparency level, a real number in (0, 1).

Value

A ggproto object to be used in the context of `ggplot2`.

| | |
|-----------------|----------------------------------------|
| scale_fill_owid | <i>Our World in Data Colour Scales</i> |
|-----------------|----------------------------------------|

Description

Our World in Data Colour Scales

Usage

```
scale_fill_owid(alpha = 1, ...)
```

```
scale_colour_owid(alpha = 1, ...)
```

```
scale_color_owid(alpha = 1, ...)
```

Arguments

| | |
|-------|----------------------------------------------------------|
| alpha | Transparency level, a real number in (0, 1). |
| ... | additional parameters for discrete_scale |

Value

A ggproto object to be used in the context of ggplot2.

Examples

```
library(ggplot2)
library(dplyr)
library(ggrepel)

# make an Our World in Data style chart

venom <- owid("incidence-of-venomous-animal-contact")

colnames(venom) <- c("entity", "code", "year", "venom")

# venom %>%
#   filter(entity %in% c("India", "Australia", "United States", "Guyana")) %>%
#   group_by(entity) %>%
#   mutate(label = ifelse(year == max(year), entity, NA)) %>%
#   ggplot(aes(x = year,
#              y = venom,
#              colour = entity)) +
#   geom_line() +
#   geom_point(size = 1) +
#   geom_text_repel(aes(label = label),
#                  hjust = 0, xlim = Inf,
#                  na.rm = TRUE, segment.colour = "grey") +
```

```
# coord_cartesian(clip = "off") +
# scale_colour_owid() +
# scale_y_continuous(limits = c(0, 1000)) +
# labs(title = "Incidence of venomous animal contact, 1990 to 2017") +
# theme_owid(import_fonts = FALSE) + # set true to use same fonts as owid
# theme(plot.margin = margin(10, 80, 5, 10), legend.position = "none",
#       panel.grid.major.x = element_blank(), axis.title = element_blank())
```

| | |
|------------|--------------------------------------------------------|
| theme_owid | <i>ggplot2 Theme in the Style of Our World in Data</i> |
|------------|--------------------------------------------------------|

Description

ggplot2 Theme in the Style of Our World in Data

Usage

```
theme_owid(import_fonts = TRUE)
```

Arguments

`import_fonts` Import the fonts used by Our World in Data

Value

A ggplot2 theme to be added to a ggplot2 plot.

| | |
|------------|-------------------------------------------|
| view_chart | <i>View an OWID chart in your browser</i> |
|------------|-------------------------------------------|

Description

A function that opens the original OWID chart in your browser.

Usage

```
view_chart(x)
```

Arguments

`x` Either a tibble returned by `owid()`, or a `chart_id`.

Value

Opens the chart in your browser.

Examples

```
firearm_suicide <- owid("suicide-rate-by-firearm")
view_chart(firearm_suicide)
```

| | |
|----------------|----------------------------|
| world_map_data | <i>Get world map data.</i> |
|----------------|----------------------------|

Description

Function that returns a simple feature collection of class sf. Map data is from naturalearthdata.com. Designed to be used internally.

Usage

```
world_map_data()
```

Value

An object of class sf.

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