

Package ‘PeruAPIs’

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Type Package

Title Access Peruvian Data via Public APIs and Curated Datasets

Version 0.1.0

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Description Provides functions to access data from public RESTful APIs including

'Nager.Date', 'World Bank API', and 'REST Countries API', retrieving real-time or historical data related to Peru, such as holidays, economic indicators, and international demographic and geopolitical indicators. Additionally, the package includes curated datasets focused on Peru, covering topics such as administrative divisions, electoral data, demographics, biodiversity and educational classifications.

The package supports reproducible research and teaching by integrating reliable international APIs and structured datasets from public, academic, and government sources.

For more information on the APIs, see:

'Nager.Date' <<https://date.nager.at/Api>>,

'World Bank API' <<https://datahelpdesk.worldbank.org/knowledgebase/articles/889392>>,

and 'REST Countries API' <<https://restcountries.com/>>.

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Language en

URL <https://github.com/lightbluetitan/peruapis>,

<https://lightbluetitan.github.io/peruapis/>

BugReports <https://github.com/lightbluetitan/peruapis/issues>

Encoding UTF-8

LazyData true

Depends R (>= 4.1.0)

Imports utils, httr, jsonlite, dplyr, scales, tibble

Suggests ggplot2, testthat (>= 3.0.0), knitr, rmarkdown

RoxygenNote 7.3.2

Config/testthat.edition 3

VignetteBuilder knitr

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andean_migrants_health_df

Peruvian Andean migrants health study

Description

This dataset, andean_migrants_health_df, is a data frame containing health data from a random sample of Peruvians born in the Andes mountains, but who have since migrated to lower altitudes. The sample was collected to assess the long-term effects of altitude on blood pressure and other health indicators, providing valuable insights into the physiological adaptations of high-altitude populations.

Usage

```
data(andean_migrants_health_df)
```

Format

A data frame with 39 observations and 5 variables:

- age** Age of the subject (integer)
- years** Years since migration to lower altitude (integer)
- weight** Weight of the subject (numeric)
- height** Height of the subject (integer)
- BP** Blood pressure measurement (integer)

Details

The dataset name has been kept as 'andean_migrants_health_df' to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the PeruAPIs package and assists users in identifying its specific characteristics. The suffix 'df' indicates that the dataset is a data frame object. The original content has not been modified in any way.

Source

Data taken from the **s20x** package version 3.1-40

birds_peru_tbl_df *Bird species recorded in Peru*

Description

This dataset, birds_peru_tbl_df, is a tibble containing an updated list of bird species recorded in Peru, based on the most recent taxonomic revisions by the South American Checklist Committee (SACC). It provides comprehensive information about avian biodiversity in Peru, including taxonomic classification, common names in English and Spanish, and conservation status for each species.

Usage

```
data(birds_peru_tbl_df)
```

Format

A tibble with 1,914 observations and 6 variables:

- order_name** Taxonomic order of the bird species (character)
- family_name** Taxonomic family of the bird species (character)
- scientific_name** Scientific name of the bird species (character)
- english_name** Common name in English (character)
- spanish_name** Common name in Spanish (character)
- status** Conservation or taxonomic status of the species (character)

Details

The dataset name has been kept as 'birds_peru_tbl_df' to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the PeruAPIs package and assists users in identifying its specific characteristics. The suffix 'tbl_df' indicates that the dataset is a tibble object. The original content has not been modified in any way.

Source

Data taken from the **avesperu** package version 0.0.6

`get_country_info_pe` *Get Country Information for Peru*

Description

Retrieves comprehensive country information for Peru from the REST Countries API. This function fetches data including official and common names, geographical information, capital, area, population, and languages.

Usage

```
get_country_info_pe()
```

Details

This function makes a request to the REST Countries API v3.1 endpoint specifically for Peru using full text search. It handles API errors gracefully and returns NULL if the request fails or no data is found.

Value

A tibble with one row containing Peru's country information:

name_common Common name of the country
name_official Official name of the country
region Geographic region
subregion Geographic subregion
capital Capital city(ies)
area Total area in square kilometers
population Total population
languages Languages spoken (comma-separated)

Examples

```
# Get Peru information
pe_info <- get_country_info_pe()
print(pe_info)
```

get_peru_child_mortality

Get Peru's Under-5 Mortality Rate from World Bank

Description

Retrieves Peru's under-5 mortality rate, measured as the number of deaths of children under five years of age per 1,000 live births, for the years 2010 to 2022 using the World Bank Open Data API. The indicator used is SH.DYN.MORT.

Usage

```
get_peru_child_mortality()
```

Details

This function sends a GET request to the World Bank API. If the API request fails or returns an error status code, the function returns NULL with an informative message.

Value

A tibble with the following columns:

- **indicator**: Indicator name (e.g., "Mortality rate, under-5 (per 1,000 live births)")
- **country**: Country name ("Peru")
- **year**: Year of the data (integer)
- **value**: Mortality rate (per 1,000 live births)

Note

Requires internet connection.

Source

World Bank Open Data API: <https://data.worldbank.org/indicator/SH.DYN.MORT>

See Also

[GET](#), [fromJSON](#), [as_tibble](#)

Examples

```
if (interactive()) {
  get_peru_child_mortality()
}
```

get_peru_cpi

Get Peru's Consumer Price Index (2010 = 100) from World Bank

Description

Retrieves Peru's Consumer Price Index (CPI), with 2010 as the base year (index = 100), for the years 2010 to 2022 using the World Bank Open Data API. The indicator used is FP.CPI.TOTL.

Usage

```
get_peru_cpi()
```

Details

This function sends a GET request to the World Bank API. If the API request fails or returns an error status code, the function returns NULL with an informative message.

Value

A tibble with the following columns:

- **indicator**: Indicator name (e.g., "Consumer price index (2010 = 100)")
- **country**: Country name ("Peru")
- **year**: Year of the data (integer)
- **value**: Consumer Price Index (numeric, base year 2010 = 100)

Note

Requires internet connection.

Source

World Bank Open Data API: <https://data.worldbank.org/indicator/FP.CPI.TOTL>

See Also

[GET](#), [fromJSON](#), [as_tibble](#)

Examples

```
if (interactive()) {
  get_peru_cpi()
}
```

get_peru_energy_use	<i>Get Peru's Energy Use (kg of oil equivalent per capita) from World Bank</i>
---------------------	--

Description

Retrieves Peru's energy use per capita, measured in kilograms of oil equivalent, for the years 2010 to 2022 using the World Bank Open Data API. The indicator used is EG.USE.PCAP.KG.OE.

Usage

```
get_peru_energy_use()
```

Details

This function sends a GET request to the World Bank API. If the API request fails or returns an error status code, the function returns NULL with an informative message.

Value

A tibble with the following columns:

- **indicator**: Indicator name (e.g., "Energy use (kg of oil equivalent per capita)")
- **country**: Country name ("Peru")
- **year**: Year of the data (integer)
- **value**: Energy use in kilograms of oil equivalent per capita

Note

Requires internet connection.

Source

World Bank Open Data API: <https://data.worldbank.org/indicator/EG.USE.PCAP.KG.OE>

See Also

[GET](#), [fromJSON](#), [as_tibble](#)

Examples

```
if (interactive()) {  
  get_peru_energy_use()  
}
```

`get_peru_gdp`

Get Peru's GDP (current US\$) from World Bank

Description

Retrieves Peru's Gross Domestic Product (GDP) in current US dollars for the years 2010 to 2022 using the World Bank Open Data API. The indicator used is NY.GDP.MKTP.CD.

Usage

```
get_peru_gdp()
```

Details

This function sends a GET request to the World Bank API. If the API request fails or returns an error status code, the function returns NULL with an informative message.

Value

A tibble with the following columns:

- `indicator`: Indicator name (e.g., "GDP (current US\$)")
- `country`: Country name ("Peru")
- `year`: Year of the data (integer)
- `value`: GDP in current US dollars
- `value_label`: Formatted GDP with commas (e.g., "1,800,000,000,000")

Note

Requires internet connection.

Source

World Bank Open Data API: <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>

See Also

[GET](#), [fromJSON](#), [as_tibble](#), [comma](#)

Examples

```
if (interactive()) {  
  get_peru_gdp()  
}
```

get_peru_holidays *Get Official Public Holidays in Peru for a Given Year*

Description

Retrieves the list of official public holidays in Peru for a specific year using the Nager.Date public holidays API. This function returns a tibble containing the date of the holiday, the name in the local language (Spanish), and the English name. It is useful for academic, planning, and data analysis purposes. The information is retrieved directly from the Nager.Date API and reflects the current status of holidays for the requested year. The field names returned are consistent with the API structure.

Usage

```
get_peru_holidays(year)
```

Arguments

`year` An integer indicating the year (e.g., 2024 or 2025).

Value

A tibble with the following columns:

- `date`: Date of the holiday (class `Date`)
- `local_name`: Holiday name in the local language (Spanish)
- `name`: Holiday name in English

Source

Data obtained from the Nager.Date API: <https://date.nager.at/>

Examples

```
get_peru_holidays(2024)  
get_peru_holidays(2025)
```

get_peru_hospital_beds

Get Peru's Hospital Beds (per 1,000 people) from World Bank

Description

Retrieves Peru's number of hospital beds per 1,000 people for the years 2010 to 2022 using the World Bank Open Data API. The indicator used is SH.MED.BEDS.ZS.

Usage

```
get_peru_hospital_beds()
```

Details

This function sends a GET request to the World Bank API. If the API request fails or returns an error status code, the function returns NULL with an informative message.

Value

A tibble with the following columns:

- **indicator**: Indicator name (e.g., "Hospital beds (per 1,000 people)")
- **country**: Country name ("Peru")
- **year**: Year of the data (integer)
- **value**: Number of hospital beds per 1,000 people

Note

Requires internet connection.

Source

World Bank Open Data API: <https://data.worldbank.org/indicator/SH.MED.BEDS.ZS>

See Also

[GET](#), [fromJSON](#), [as_tibble](#)

Examples

```
if (interactive()) {  
  get_peru_hospital_beds()  
}
```

get_peru_life_expectancy

Get Peru's Life Expectancy at Birth (Total, Years) from World Bank

Description

Retrieves Peru's life expectancy at birth (total, years) for the years 2010 to 2022 using the World Bank Open Data API. The indicator used is SP.DYN.LE00.IN.

Usage

```
get_peru_life_expectancy()
```

Details

This function sends a GET request to the World Bank API. If the API request fails or returns an error status code, the function returns NULL with an informative message.

Value

A tibble with the following columns:

- **indicator**: Indicator name (e.g., "Life expectancy at birth, total (years)")
- **country**: Country name ("Peru")
- **year**: Year of the data (integer)
- **value**: Life expectancy at birth in years

Note

Requires internet connection.

Source

World Bank Open Data API: <https://data.worldbank.org/indicator/SP.DYN.LE00.IN>

See Also

[GET](#), [fromJSON](#), [as_tibble](#)

Examples

```
if (interactive()) {  
  get_peru_life_expectancy()  
}
```

```
get_peru_literacy_rate
Get Peru's Adult Literacy Rate
```

Description

Retrieves Peru's adult literacy rate (for the years 2010 to 2022 using the World Bank Open Data API. The indicator used is SE.ADT.LITR.ZS.

Usage

```
get_peru_literacy_rate()
```

Details

This function sends a GET request to the World Bank API. If the API request fails or returns an error status code, the function returns NULL with an informative message.

Value

A tibble with the following columns:

- `indicator`: Indicator name
- `country`: Country name ("Peru")
- `year`: Year of the data (integer)
- `value`: Literacy rate as a percentage

Note

Requires internet connection.

Source

World Bank Open Data API: <https://data.worldbank.org/indicator/SE.ADT.LITR.ZS>

See Also

[GET](#), [fromJSON](#), [as_tibble](#)

Examples

```
literacy_data <- get_peru_literacy_rate()
head(literacy_data)
```

get_peru_population *Get Peru's Total Population from World Bank*

Description

Retrieves Peru's total population for the years 2010 to 2022 using the World Bank Open Data API. The indicator used is SP.POP.TOTL.

Usage

```
get_peru_population()
```

Details

The function sends a GET request to the World Bank API. If the API request fails or returns an error status code, the function returns NULL with an informative message.

Value

A tibble with the following columns:

- **indicator**: Indicator name (e.g., "Population, total")
- **country**: Country name ("Peru")
- **year**: Year of the data (integer)
- **value**: Population as a numeric value
- **value_label**: Formatted population with commas (e.g., "51,000,000")

Note

Requires internet connection. The data is retrieved in real time from the World Bank API.

Source

World Bank Open Data API: <https://data.worldbank.org/indicator/SP.POP.TOTL>

See Also

[GET](#), [fromJSON](#), [as_tibble](#), [comma](#)

Examples

```
if (interactive()) {  
  get_peru_population()  
}
```

`get_peru_unemployment` *Get Peru's Unemployment Rate (Total) from World Bank*

Description

Retrieves Peru's total unemployment rate, measured as a percentage of the total labor force, for the years 2010 to 2022 using the World Bank Open Data API. The indicator used is SL.UEM.TOTL.ZS.

Usage

```
get_peru_unemployment()
```

Details

This function sends a GET request to the World Bank API. If the API request fails or returns an error status code, the function returns NULL with an informative message.

Value

A tibble with the following columns:

- `indicator`: Indicator name (e.g., "Unemployment, total")
- `country`: Country name ("Peru")
- `year`: Year of the data (integer)
- `value`: Unemployment rate as a numeric value (percentage)

Note

Requires internet connection.

Source

World Bank Open Data API: <https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS>

See Also

[GET](#), [fromJSON](#), [as_tibble](#)

Examples

```
if (interactive()) {  
  get_peru_unemployment()  
}
```

iscd_education_tbl_df *Peru's educational programs under ISCED classification*

Description

This dataset, `iscd_education_tbl_df`, is a tibble containing Peru's educational programs classified according to the International Standard Classification of Education (ISCED). It provides comprehensive information about educational codes, classifications, academic levels, and program specifications used in Peru's educational system, facilitating standardized comparison and analysis of educational data.

Usage

```
data(iscd_education_tbl_df)
```

Format

A tibble with 8,357 observations and 8 variables:

Education_COD Education classification code (character)

Education Education category description (character)

Specific_COD Specific classification code (character)

Specific Specific category description (character)

AcademicLevel Academic level description (character)

AcademicLevel_COD Academic level code (character)

EducationProgram Education program name (character)

EducationProgram_Lemma Education program lemmatized form (character)

Details

The dataset name has been kept as '`iscd_education_tbl_df`' to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the `PeruAPIs` package and assists users in identifying its specific characteristics. The suffix '`tbl_df`' indicates that the dataset is a tibble object. The original content has not been modified in any way.

Source

Data taken from the **CINE** package version 0.1.3

PeruAPIs

*PeruAPIs: Access Peruvian Data via Public APIs and Curated Datasets***Description**

This package provides functions to access data from public RESTful APIs including 'Nager.Date', 'World Bank API', and 'REST Countries API', retrieving real-time or historical data related to Peru, such as holidays, economic indicators, and international demographic and geopolitical indicators. Additionally, the package includes curated datasets focused on Peru, covering topics such as administrative divisions, electoral data, demographics, biodiversity and educational classifications.

Details

PeruAPIs: Access Peruvian Data via Public APIs and Curated Datasets
Access Peruvian Data via Public APIs and Curated Datasets.

Author(s)

Maintainer: Renzo Caceres Rossi <arenzocaceresrossi@gmail.com>

See Also

Useful links:

- <https://github.com/lightbluetitan/peruapis>

peru_blank_votes_df *Peru blank votes***Description**

This dataset, `peru_blank_votes_df`, is a data frame containing data on the blank votes in the 2006 Peruvian general election. It provides information about voting patterns and their relationship with the Human Development Index (HDI), offering insights into electoral behavior and socioeconomic factors in Peru's democratic process.

Usage

```
data(peru_blank_votes_df)
```

Format

A data frame with 194 observations and 2 variables:

votes Number of blank votes (numeric)

HDI Human Development Index (numeric)

Details

The dataset name has been kept as 'peru_blank_votes_df' to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the PeruAPIs package and assists users in identifying its specific characteristics. The suffix 'df' indicates that the dataset is a data frame object. The original content has not been modified in any way.

Source

Data taken from the **PLreg** package version 0.4.1

peru_coastline_df *Peruvian coastline coordinates*

Description

This dataset, `peru_coastline_df`, is a data frame containing the coastline of Peru represented as a spatial object. It provides geographical coordinates that define the outline of Peru's Pacific coast, which can be used for mapping, spatial analysis, and visualization purposes.

Usage

```
data(peru_coastline_df)
```

Format

A data frame with 23,481 observations and 2 variables:

Long Longitude coordinates of coastline points (numeric)

Lat Latitude coordinates of coastline points (numeric)

Details

The dataset name has been kept as 'peru_coastline_df' to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the PeruAPIs package and assists users in identifying its specific characteristics. The suffix 'df' indicates that the dataset is a data frame object. The original content has not been modified in any way.

Source

Data taken from the **Tivy** package version 0.1.1

view_datasets_PeruAPIs

View Available Datasets in PeruAPIs

Description

This function lists all datasets available in the 'PeruAPIs' package. If the 'PeruAPIs' package is not loaded, it stops and shows an error message. If no datasets are available, it returns a message and an empty vector.

Usage

```
view_datasets_PeruAPIs()
```

Value

A character vector with the names of the available datasets. If no datasets are found, it returns an empty character vector.

Examples

```
if (requireNamespace("PeruAPIs", quietly = TRUE)) {  
  library(PeruAPIs)  
  view_datasets_PeruAPIs()  
}
```

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