Package ‘swissdd’

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Type Package

Title Get Swiss Federal and Cantonal Vote Results from Opendata.swiss

Version 1.0.3

Description Builds upon the real time data service as well as the archive for national votes <https://opendata.swiss/api/3/action/package_show?id=echtzeitdaten-am-abstimmungstag-zu-eidgenoessischen-abstimmungsvorlagen> and cantonal votes <https://opendata.swiss/api/3/action/package_show?id=echtzeitdaten-am-abstimmungstag-zu-kantonalen-abstimmungsvorlagen>. It brings the results of Swiss popular votes, aggregated at the geographical level of choice, into R. Additionally, it allows to retrieve data from the Swissvotes-Database, one of the most comprehensive data platforms on Swiss referendums and initiatives <https://swissvotes.ch/page/dataset/swissvotes_dataset.csv>.

Imports purrr, dplyr, tidyr (>= 1.0.0), jsonlite, magrittr, tibble, curl

URL https://github.com/politanch/swissdd

BugReports https://github.com/politanch/swissdd/issues

License GPL-2

Encoding UTF-8

LazyData true

RoxygenNote 6.1.1

NeedsCompilation no

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R topics documented:

available_votedates

Description

available_votedates is a utility function to get the available votedates.

Usage

available_votedates(geolevel = "national")

Arguments

geolevel geographical level for which available votedates should be displayed. options "national" or "canton"

Details

available_votedates - get available votedates of federal and cantonal popular votes

Value

a vector of votedates (Format: YYYY-MM-DD)

Examples

# Get vector of all available dates
federal_votedates <- available_votedates()

cantonal_votedates <- available_votedates(geolevel="canton")
canton_json_to_dfr

Transform a opendata.swiss cantonal results json into a tibble

Description

canton_json_to_dfr Tranforms a single results json for a selected cantonal votedate into a tibble.

Usage
canton_json_to_dfr(votedate = NULL, geolevel = "municipality", dataurl = NULL, index = NULL)

Arguments

  votedate     date of the ballot. Default: most recent ballot available.
  geolevel     geographical level for which the results should be loaded. options."canton", "district"
                or "municipality"
  dataurl      list of datasets / metadata for the given dataset and its resources OR url of the
c                dcat dataset on opendata.swiss
  index        selection by index of the resource (last published = 1).

Value

  a tibble containing the results

Examples

  # get and transform the json for the most recent vote
  results <- canton_json_to_dfr()

  # get and transform the json for a single votedate at counting district level
  canton_json_to_dfr(votedate="2020-02-09", geolevel = "zh_counting_districts")

get_cantonalvotes

Get national results and counting status in real time or for selected
dates or a time range in the past

Description

get_cantonalvotes is one of the two main functions of swissvote package. It allows to retrieve
the results and the counting status for national ballots.
Usage

get_cantonalvotes(geolevel = "municipality", votedates = NULL,
                   from_date = NULL, to_date = NULL)

Arguments

geolevel geographical level for which the results should be loaded. options: "canton",
            "district","municipality" or "zh_counting_districts"

votedates dates of the ballots to be selected. Default: most recent ballot available. Format
            = "YYYY-MM-DD"

from_date starting point in time from which vote-results should be retrieved. Format =
            "YYYY-MM-DD"

to_date end point in time to which vote-results should be retrieved. Format = "YYYY-
            MM-DD"

Details

get_cantonalvotes - retrieve vote results for cantonal ballots at district- or municipality level for
selected dates or a given date range.

Value

a tibble containing the results

Examples

# select by range
results <- get_cantonalvotes(geolevel="district",from_date = "2019-01-01",to_date="2019-12-31")

# select specific votedate(s)
get_cantonalvotes(votedates="2019-02-10")

# get the results at counting district level
# yields the same result as the municipality level, with the
# exception of Winterthur and Zurich,
# where detailed counting district results are returned instead.
get_cantonalvotes(votedate="2019-09-22",geolevel = "zh_counting_districts")
get_nationalvotes

Get national results and counting status in real time or for selected
dates or a time range in the past

Description

get_nationalvotes is one of the two main functions of swissvote package. It allows to retrieve
the results and the counting status for national ballots.

Usage

get_nationalvotes(geolevel = "municipality", votedates = NULL,
   from_date = NULL, to_date = NULL)

Arguments

geolevel geographical level for which the results should be loaded. options: options:
   "national", "canton", "district", "municipality" or "zh_counting_districts"
votedates dates of the ballots to be selected. Default: most recent ballot available. Format
   = "YYYY-MM-DD"
from_date starting point in time from which vote-results should be retrieved. Format =
   "YYYY-MM-DD"
to_date end point in time to which vote-results should be retrieved. Format = "YYYY-
   MM-DD"

Details

get_nationalvotes - retrieve vote results for national ballots at district- or municipality level for
selected dates or a given date range.

Value

a tibble containing the results

Examples

# Selection by enddate only
get_nationalvotes(to_date="1983-12-04")

# Selection of a specific votedate
get_nationalvotes(votedates="2014-02-09")
get_swissvotes  

*Description*

`get_swissvotes` downloads additional data collected by *année politique suisse*. It allows for completely downloading their database. Please cite data.

*Usage*

```r
get_swissvotes(DB = T, savecitation = F, codebook = F)
```

*Arguments*

- `DB`  
  get database

- `savecitation`  
  by default = FALSE. Saves the citation within a .txt file in the working directory if TRUE.

- `codebook`  
  by default = FALSE. If TRUE navigates your browser to the codebook.

*Details*

`get_swissvotes` - retrieve data on votes. The unit of analysis are votes.

*Value*

a tibble containing the results

*Examples*

```r
# See codebook only
get_swissvotes(codebook=FALSE)
```
**similar_votes**

*Obtain similarities a vote result shares with other votes*

**Description**

similar_votes allows to obtain correlations of specified vote with other votes.

**Usage**

```r
similar_votes(federalvotes = NULL, id = NULL, corr = TRUE, from = NULL, to = NULL)
```

**Arguments**

- `federalvotes` tibble or data.frame that is returned by `get_swissvotes`.
- `id` identification number of the vote, needs four digits. Vote 626 (Zersiedelungsinitiative) needs 6260.
- `corr` set to TRUE by default. If FALSE return the variance-covariance matrix.
- `from` lower limit of correlations.
- `to` upper limit of correlations.

**Value**

a tibble containing the results

**Examples**

```r
fedvotes <- get_nationalvotes(geolevel = "canton", from_date = "2010-03-07", to_date="2019-02-10")

# Find correlating votes for the 'Zersiedelungsinitiative', 2019-02-10
results <- similar_votes(fedvotes, id=6260)

# Zersiedelungsinitiative, 2019-02-10, filter stronger correlations (>0.5)
results <- similar_votes(fedvotes, id=6260, from = 0.5)
```
swiss_json_to_dfr  Transform a opendata.swiss national results json into a tibble

Description

swiss_json_to_dfr Transforms the json containing the results of a selected federal votedate into a tibble.

Usage

swiss_json_to_dfr(votedate = NULL, geolevel = "municipality",
                   dataurl = NULL, index = NULL)

Arguments

votedate  date of the ballot. Default: most recent ballot available. To select multiple
          ballots use the ’get_swissvotes’-function. Format = YYYYMMDD
geolevel  geographical level for which the results should be loaded. options ”national”,
          ”canton”, ”district” or ”municipality”
dataurl   url of the dataset on opendata-swiss
index     selection by index of the resource (last published = 1).

Value

a tibble containing the results

Examples

# transform the json of the most recent vote
results <- swiss_json_to_dfr()

# transform the json of a selected votedate
swiss_json_to_dfr(votedate = "2019-02-10")
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