Package ‘tidygeocoder’

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Type Package
Title Tidyverse-Style Interface for Geocoding
Version 0.2.4
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Description An intuitive tidyverse-style interface for geocoding. Obtains latitude and longitude coordinates in tibble format from addresses. The currently supported services are the US Census geocoder and Nominatim (OSM).

URL https://github.com/jessecambon/tidygeocoder
BugReports https://github.com/jessecambon/tidygeocoder/issues
Depends R (>= 2.10)
License MIT + file LICENSE
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**geocode**

**Description**
Takes a dataframe containing addresses as an input. Returns the dataframe with latitude and longitude coordinate columns using a user specified geocoder function.

**Usage**
```
geocode(.tbl, address, method = "census", lat = lat, long = long, ...)```

**Arguments**
- `dataframe`  
- name of column containing addresses in `.tbl`  
- the geocoder function you want to use
  - "census": `geo_census` - can only handle US street level addresses
  - "osm": `geo_osm` - more versatile than Census but has a usage limit
  - "cascade": `geo_cascade` - first tries to use census then tries osm
- name of latitude field
- name of longitude field
- arguments supplied to the relevant geocoder function

**Details**
See example usage in vignette("tidygeocoder")

**Value**
Input dataframe (.tbl) with latitude and longitude fields appended

**Examples**
```
sample_addresses %>% geocode(addr)
sample_addresses %>% geocode(addr, method='cascade', lat=latitude, long=longitude)
```
geo_cascade

**Description**

First attempts to use the US Census Geocoder (geo_census) method and then uses the Nomina-tim/OSM (geo_osm) method if the census method failed. Returns latitude and longitude coordinates and the method used to return results (OSM or Census)

**Usage**

```r
geo_cascade(address, lat = lat, long = long, verbose = FALSE)
```

**Arguments**

- `address`: single line address.
- `lat`: name of latitude field
- `long`: name of longitude field
- `verbose`: logical. If TRUE outputs logs.

**Value**

latitude and longitude coordinates and the geocoder method used (geo_method) in tibble format (3 columns)

**Examples**

```r
geo_cascade("1600 Pennsylvania Ave Washington, DC")
geo_cascade("Paris, France")
```

geo_census

**Description**

Obtain latitude and longitude coordinates from an address using the US Census geocoder. Only works for addresses within the US. Addresses must also be at the street level (ie. 60 Main St. Pawnee, IN not Pawnee, IN).

**Usage**

```r
geo_census(address, lat = lat, long = long, verbose = FALSE,
            benchmark = 4,
            API_URL = "https://geocoding.geo.census.gov/geocoder/locations/onelineaddress?")
```
Arguments

address  single line address. Street must be included.
lat      name of latitude field
long     name of longitude field
verbose  logical. If TRUE outputs logs.
benchmark parameter for the US Census Geocoder
API_URL  URL of Census API

Value

latitude and longitude coordinates in tibble format

Examples

geo_census("1600 Pennsylvania Ave Washington, DC")

geo_osm

Geocode addresses

Description

Obtains latitude and longitude coordinates from an address using the Nominatim (OSM) geocoder service. Can be used with non-US or non-street level addresses unlike the Census geocoder. This function calls the geocode_OSM function from the tmaptools package.

Usage

geo_osm(address, lat = lat, long = long, verbose = FALSE)

Arguments

address  single line address
lat      name of latitude field
long     name of longitude field
verbose  logical. If TRUE outputs logs.

Details

WARNING - This service has a usage limit and it will return missing coordinates once the usage limit is reached.

Value

latitude and longitude coordinates in tibble format
sample_addresses

Examples

geo_osm("1600 Pennsylvania Ave Washington, DC")
geo_osm("Paris, France",verbose=TRUE)

---

sample_addresses  Some sample addresses for testing

Description
Some sample addresses for testing

Usage
sample_addresses

Format
A tibble dataframe with single line addresses

name  Description of the address
addr  Single line address

Source
NA
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