Package ‘PostcodesioR’

July 26, 2016

Type Package

Title API wrapper around Postcodes.io (a free Postcode lookup API and geocoder for the UK)

Version 0.1.0

Description Free UK geocoding using data from Office for National Statistics. It is using several functions to get information about post codes, outward codes, reverse geocoding, nearest post codes/outward codes, validation, or randomly generate a post code.

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LazyData TRUE

Imports httr

RoxygenNote 5.0.1

Suggests knitr, rmarkdown

VignetteBuilder knitr

R topics documented:

bulk_postcode_lookup .......................................................... 2
nearest_postcode ............................................................... 2
outcode_reverse_geocoding ..................................................... 3
outward_code_lookup ............................................................ 4
postcodeautocomplete ........................................................... 4
postcode_lookup ................................................................. 5
postcode_query ................................................................. 5
postcode_validation ............................................................. 6
random_postcode ............................................................... 6
reverse_geocoding .............................................................. 7

Index 8
bulk_postcode_lookup  
_Bulk postcode lookup_

**Description**

Returns a list of matching postcodes and respective available data.

**Usage**

bulk_postcode_lookup(postcodes)

**Arguments**

postcodes  
Accepts a JSON object containing an array of postcodes. Accepts up to 100 postcodes.

nearest_postcode  
_Returns nearest outcodes for a given outcode._

**Description**

Optional Query Parameters

Returns nearest postcodes for a given postcode.

**Usage**

nearest_postcode(postcode)

nearest_postcode(postcode)

**Arguments**

postcode  
A string.

postcode  
A string.

**Details**

limit= (not required) Limits number of postcodes matches to return. Defaults to 10. Needs to be less than 100.

radius= (not required) Limits number of postcodes matches to return. Defaults to 5,000m. Needs to be less than 25,000m.

Optional Query Parameters

limit= (not required) Limits number of postcodes matches to return. Defaults to 10. Needs to be less than 100.

radius= (not required) Limits number of postcodes matches to return. Defaults to 100m. Needs to be less than 2,000m.
outcode_reverse_geocoding

Value

A list of geographical properties.
A list of geographic properties of the nearest postcode.

Examples

nearest_postcode("EC1Y 8LX")
nearest_postcode("EC1Y8LX")
nearest_postcode("EC1Y 8LX")

Description

Returns nearest outcodes for a given longitude and latitude.

Usage

outcode_reverse_geocoding(longitude, latitude)

Arguments

longitude A string. Needs to have at least two decimal points.
latitude A string. Needs to have at least two decimal points.

Details

Optional Query Parameters

limit= (not required) Limits number of postcodes matches to return. Defaults to 10. Needs to be less than 100.
radius= (not required) Limits number of postcodes matches to return. Defaults to 5,000m. Needs to be less than 25,000m.

Value

A list of geographical properties.

Examples

outcode_reverse_geocoding("-3.15", "51.47")
outcode_reverse_geocoding("-3.15807731271522", "51.4799900627036")
outward_code_lookup  Outward code lookup

Description
Geolocation data for the centroid of the outward code specified. The outward code represents the first half of any postcode (separated by a space).

Usage
outward_code_lookup(outcode)

Arguments
outcode  A string.

Value
The list of geographical properties.

Examples
outward_code_lookup("E1")

postcode_autocomplete  Postcode autocomplete

Description
Convenience method to return an list of matching postcodes.

Usage
postcode_autocomplete(postcode)

Arguments
postcode  A string.

Details
Optional Query Parameters
limit= (not required) Limits number of postcodes matches to return. Defaults to 10. Needs to be less than 100.

Value
A list of suggested postcodes. Defaults to 10.

Examples
postcode_autocomplete("E1")
**postcode_lookup**

**Postcode lookup**

**Description**
Lookup a postcode.

**Usage**
postcode_lookup(postcode)

**Arguments**
- **postcode**
  A string.

**Value**
A list. Returns all available data if found. Returns 404 if postcode does not exist.

**Examples**
- postcode_lookup("EC1Y8LX")
- postcode_lookup("EC1Y 8LX")

---

**postcode_query**

**Postcode query**

**Description**
Submit a postcode query and receive a complete list of postcode matches and all associated postcode data.

**Usage**
postcode_query(postcode)

**Arguments**
- **postcode**
  A string.

**Details**
Optional Query Parameters
- query= (not required) aliases to q=
- limit= (not required) Limits number of postcodes matches to return. Defaults to 10. Needs to be less than 100.

**Value**
A list of geographic properties.
Examples

postcode_query("EC1Y8LX")

postcode_validation

Description
Convenience method to validate a postcode.

Usage
postcode_validation(postcode)

Arguments
postcode A string.

Value
A list consisting of the HTTP response, and True or False (meaning valid or invalid respectively).

Examples
postcode_validation("EC1Y 8LX")

random_postcode

Description
Returns a random postcode and all available data for that postcode.

Usage
random_postcode()

Details
Optional Query Parameters
outcode= (not required) Filters random postcodes by outcode. Returns null if invalid outcode.

Value
A random post code with corresponding characteristics.

Examples
random_postcode()
**reverse_geocoding**

| reverse_geocoding | Reverse geocoding |

**Description**

Returns nearest postcodes for a given longitude and latitude.

**Usage**

```
reverse_geocoding(longitude, latitude)
```

**Arguments**

- **longitude**: A string. Needs to have at least three decimal points.
- **latitude**: A string. Needs to have at least three decimal points.

**Details**

Optional Query Parameters:
- `limit=` (not required) Limits number of postcodes matches to return. Defaults to 10. Needs to be less than 100.
- `radius=` (not required) Limits number of postcodes matches to return. Defaults to 100m. Needs to be less than 2,000m.
- `wideSearch=` (not required) Search up to 20km radius, but subject to a maximum of 10 results. Since lookups over a wide area can be very expensive, we’ve created this method to allow you choose to make the trade off between search radius and number of results. Defaults to false. When enabled, radius and limits over 10 are ignored.

**Value**

A list with available data.

**Examples**

```
reverse_geocoding("-3.158", "51.479")
```
Index

bulk_postcode_lookup, 2
nearest_postcode, 2
outcode_reverse_geocoding, 3
outward_code_lookup, 4
postcode_autocomplete, 4
postcode_lookup, 5
postcode_query, 5
postcode_validation, 6
random_postcode, 6
reverse_geocoding, 7