

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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URL <http://postcodes.io/docs>, <https://github.com/erzk>

LazyData TRUE

Imports httr

RoxygenNote 5.0.1

Suggests knitr,
rmarkdown

VignetteBuilder knitr

R topics documented:

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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.
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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.

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")
```

outcode_reverse_geocoding

Outcode reverse geocoding

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	<i>Postcode lookup</i>
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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	<i>Postcode query</i>
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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 *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 *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	<i>Reverse geocoding</i>
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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")
```

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