Package 'geosmdata2'

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Type Package

| Title Get data from Open Street Map |
|---|
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| Description This package is a wrapper for some functions to access information on OpenStreetMap. |
| License GPL-2 |
| LazyData TRUE |
| Imports osmar,sp |
| Depends RCurl,rjson,stringr,XML |
| RoxygenNote 5.0.0 |
| NeedsCompilation no |
| R topics documented: |
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CircSearch

function CircSearch

Description

Performs circum search

Usage

```
CircSearch(what,lat,lon,radius)
```

Arguments

what Map feature
lat Latitude
lon Longitude
radius Radius

Author(s)

```
Jan-Philipp Kolb < Jan-Philipp_Kolb@gmx.net>
```

References

http://wiki.openstreetmap.org/wiki/Overpass_API#Around

Examples

```
gc <- geocode_osm(place="Venice beach",output="all")
cafes_venice <- CircSearch(what="cafe",lat=gc$lat,lon=gc$lon,radius=10000)</pre>
```

CountNodes

function to count nodes in an osm xml object

Description

function to count nodes

Usage

CountNodes(object2)

Arguments

object2 a xml object

Author(s)

Jan-Philipp Kolb < Jan-Philipp_Kolb@gmx.net>

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Examples

```
ambulance_station <- get_osm_nodes(object2="ambulance_station",place="Berlin")
CountNodes(ambulance_station)</pre>
```

extract_info_op

function extract_info_op

Description

Extract information from OpenStreetMap object

Usage

```
extract_info_op(OSM.Data,value)
```

Arguments

OSM.Data an osm object. value a map feature.

Value

.

Author(s)

```
Jan-Philipp Kolb < Jan-Philipp_Kolb@gmx.net>
```

Examples

```
schools <- get_osm_nodes(object2="school",place="Meppen")
info <- extract_info_op(OSM.Data=schools,value="school")</pre>
```

```
extract_position_op
```

function extract_position_op

Description

Extract position from OpenStreetMap object

Usage

```
extract_position_op(OSM.Data,value)
```

Arguments

OSM.Data an osm object. value a map feature.

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Value

.

Author(s)

```
Jan-Philipp Kolb < Jan-Philipp_Kolb@gmx.net>
```

Examples

```
bikeways <- get_osm_ways(object2="cycleway",place="San Francisco")
info <- extract_position_op(OSM.Data=bikeways,value="cycleway")</pre>
```

geocode_osm

function geocode_osm

Description

Returns info from http://nominatim.openstreetmap.org/

Usage

```
geocode_osm(place,output)
```

Arguments

place Place which should be geocoded output Complete result or just the geocode

Author(s)

```
Jan-Philipp Kolb < Jan-Philipp_Kolb@gmx.net>
```

References

```
https://github.com/malexan/nominatim/blob/master/geocode.r
```

```
geocode_osm(place="Mannheim B2,1")
```

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get_osm_area

function get_osm_area

Description

Returns info on ways from http://www.overpass-api.de/api/

Usage

```
get_osm_area(object2,place)
```

Arguments

object2 Value for map feature you are searching for

place Place for the map features

Author(s)

```
Jan-Philipp Kolb <Jan-Philipp_Kolb@gmx.net>
```

Examples

```
roads <- get_osm_area(object2="pedestrian",place="Rom")</pre>
```

get_osm_nodes

function get_osm_nodes

Description

Returns info on nodes from http://www.overpass-api.de/api/

Usage

```
get_osm_nodes(object2,place)
```

Arguments

object2 Value for map feature you are searching for

place Place for the map features

Author(s)

```
Jan-Philipp Kolb < Jan-Philipp_Kolb@gmx.net>
```

See Also

```
get_osm_relation, http://www.r-project.org
```

```
cafes <- get_osm_nodes("cafe",place="Emeryville")
# brewery <- get_osm_nodes("brewery",place="Ingolstadt")</pre>
```

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```
get_osm_nodes_around function get_osm_nodes_around
```

Description

Returns info on nodes from http://www.overpass-api.de/api/

Usage

```
get_osm_nodes_around(place,radius)
```

Arguments

place Point or place radius around point

Author(s)

```
Jan-Philipp Kolb < Jan-Philipp_Kolb@gmx.net>
```

See Also

```
get_osm_nodes, http://www.r-project.org
```

Examples

```
info <- get_osm_nodes_around("Mannheim",radius=5)</pre>
```

get_osm_relation

function get_osm_relation

Description

Returns info on nodes from http://www.overpass-api.de/api/

Usage

```
get_osm_relation(object2,place)
```

Arguments

object2 Value for map feature you are searching for

place Place for the map features

Author(s)

```
Jan-Philipp Kolb <Jan-Philipp_Kolb@gmx.net>
```

```
bike_routes <- get_osm_relation(object2="bicycle",place="Mannheim")</pre>
```

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get_osm_ways

function get_osm_ways

Description

Returns info on ways from http://www.overpass-api.de/api/

Usage

```
get_osm_ways(object2,place)
```

Arguments

object2

Value for map feature you are searching for

place

Place for the map features

Author(s)

```
Jan-Philipp Kolb < Jan-Philipp_Kolb@gmx.net>
```

Examples

```
# roads <- get_osm_ways(object2="secondary",place="Sandhofen")
bike_routes <- get_osm_ways(object2="cycleway",place="Berkeley")</pre>
```

osm_df

data frame map features OpenStreetMap

Description

Overview of all available map features at OpenStreetMap $http://wiki.openstreetmap.org/wiki/Map_Features$

Usage

```
data(osm_df)
```

Author(s)

```
Jan-Philipp Kolb < Jan-Philipp_Kolb@gmx.net>
```

```
data(osm_df)
```

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plotbui

function plotbui

Description

Converts osmar object in polygons

Usage

```
plotbui(ua)
```

Arguments

ua

the osmar file which the polygons are to be read from.

Value

```
an instance of get_osm.
```

Author(s)

```
Jan-Philipp Kolb < Jan-Philipp_Kolb@gmx.net>
```

Examples

```
data("uaBerlin")
pol_Berlin <- plotbui(uaBerlin)</pre>
```

uaBerlin

Dataset uaBerlin

Description

Is the result of a download of OSM data using the osmar project

Usage

```
data("uaBerlin")
```

Author(s)

```
Jan-Philipp Kolb < Jan-Philipp_Kolb@gmx.net>
```

```
data("uaBerlin")
```

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