

Package ‘gooJSON’

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Type Package

Title Google JSON Data Interpreter for R

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Description A suite of helper functions for obtaining data from the Google Maps API JSON objects. Calls Google Maps API and returns results as an R data frame.

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gooJSON-package

Google JSON Data Interpreter for R

Description

A suite of helper functions for obtaining data from the Google Maps API JSON objects. Calls Google Maps API and returns results as an R data frame.

Details

There are currently various packages for providing an R interface to the Google Maps API. However, this is the first package that returns data from geocode queries (place names, accuracy codes, coordinates, et cetera) passed as JSON objects. Both native calls to the API (R internet access required) and JSON files saved onto the users hard-drive are supported. Users must supply a Google Maps API key to directly query the API from R. Depends on the `rjson` package.

Author(s)

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See Also

[rjson](#)

goo2df

Google JSON object to Data Frame

Description

Intreprets a JSON object passed from a Google Maps API geocode query and returns a `data.frame()` R object.

Usage

```
goo2df(gjl, short.names = TRUE)
```

Arguments

`gjl` A JSON object containing the Google Maps API geocode query results, possibly passed from `fromJSON()`

`short.names` logical, should the result names be truncated? Defaults to TRUE. See details.

Details

If `short.names=TRUE` the variable names from the query are truncated to a reasonable size and value. If `FALSE`, then the verbose names from the JSON tree are used - which can be non-trivially long.

Value

A data frame with two columns:

CODE	The variable name
VALUE	The value of the variable indexed on the rows by CODE

Author(s)

Christopher Steven Marcum

See Also

[fromJSON](#)

Examples

```
uci.json<-fromJSON(file=system.file("extdata/uci.json",package="gooJSON"))
goo2df(uci.json)
##Not Run
#uci.add<-gooadd(address=list("3151 Social Science Plaza", "Irvine", "CA", "92697"))
#uci.map<-goomap(uci.add,key="YOUR KEY HERE")
#goo2df(uci.map)
```

gooadd

Create Google Address

Description

Parse a list of address parts into a format that the Google Maps API finds amiable.

Usage

```
gooadd(address = list("street", "city", "state"))
```

Arguments

address a list of strings, one for each part of an address. See details

Details

Geocode queries to the Google Maps API requires a particular structure where address parts are separated by commas. This function enforces compliance with the structure that the API expects. Valid locational arguments can include street address, city, county, zip code, country or other geographic entities. Partial addresses are valid (i.e., only city or an intersection). There is no need to declare names in the address list.

Value

string A character string containing the properly formed address.

Author(s)

Christopher Steven Marcum

Examples

```
gooad(address=list("3151 Social Science Plaza", "Irvine", "CA", "92697"))
```

goomap

Google Maps API Geocode Query

Description

Returns a JSON formatted list from a geocode query to the Google Maps API

Usage

```
goomap(gooad, key=NULL, options = c("oe=utf8", "sensor=false"))
```

Arguments

gooad	A string containing a properly formed address. See details.
key	Optionally, a string containing the user's Google Maps API key. See details.
options	A character vector containing optional parameters passed to the Google Maps API query. See details.

Details

Properly formed addresses can be obtained by using the gooad helper function. While usually less useful in practical applications, latitude and longitude queries are supported provided that they are separated by a comma.

A 'key' can be obtained from Google by visiting the <http://code.google.com/apis/maps/signup.html>.

Several search options are available for selecting and formatting output from the query. The default arguments return 'UTF-8' encrypted data and tells Google that user is not employing a GPS-enabled device to obtain the data, respectively. There are many more options available and users should consult the Google Maps API documentation for additional information.

Value

A variable length list in the form of a parsed JSON object.

Author(s)

Christopher Steven Marcum

References

<http://code.google.com/apis/maps/index.html>

See Also

[gooadd,rjson,fromJSON](#)

Examples

```
## Not run
## Not run: uci.add<-gooadd(address=list("3151 Social Science Plaza", "Irvine", "CA", "92697"))
## Not run: goomap(uci.add)
#Can use lat/lon coordinates directly
## Not run: goomap(paste(33.64689,-117.83897,sep=","))
```

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