

Package ‘geojsonlint’

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Title Tools for Validating 'GeoJSON'

Description Tools for linting 'GeoJSON'. Includes tools for interacting with the online tool <<http://geojsonlint.com>>, the 'Javascript' library 'geojsonhint' (<<https://www.npmjs.com/package/geojsonhint>>), and validating against a 'GeoJSON' schema via the 'Javascript' library (<<https://www.npmjs.com/package/is-my-json-valid>>). Some tools work locally while others require an internet connection.

Version 0.2.0

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URL <https://github.com/ropenscilabs/geojsonlint>

BugReports <http://www.github.com/ropenscilabs/geojsonlint/issues>

LazyData true

VignetteBuilder knitr

Depends R (>= 2.10)

Imports httr (>= 1.1.0), jsonlite (>= 0.9.19), jsonvalidate (>= 1.0.0), V8

Suggests testthat, knitr, rmarkdown (>= 0.9.6), covr

RoxygenNote 5.0.1

NeedsCompilation no

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geojsonlint-package	GeoJSON Linting
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Description

GeoJSON Linting

Package API

- [geojson_hint](#) - Checks validity of geojson using the Javascript library geojsonhint
- [geojson_lint](#) - Checks validity of geojson using the web service at <http://geojsonlint.com>
- [geojson_validate](#) - Checks validity of geojson using a GeoJSON schema and the Javascript library is-my-json-valid

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as.location	<i>Convert a path or URL to a location object.</i>
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Description

Convert a path or URL to a location object.

Usage

```
as.location(x, ...)
```

Arguments

x Input.
 ... Ignored.

Examples

```
## Not run:
# A file
file <- system.file("examples", "zillow_or.geojson", package = "geojsonlint")
as.location(file)

# A URL
url <- "https://raw.githubusercontent.com/glynnbird/usstatesgeojson/master/california.geojson"
as.location(url)

## End(Not run)
```

 canada_cities

This is the same data set from the maps library, named differently

Description

This database is of Canadian cities of population greater than about 1,000. Also included are province capitals of any population size.

Format

A list with 6 components, namely "name", "country.etc", "pop", "lat", "long", and "capital", containing the city name, the province abbreviation, approximate population (as at January 2006), latitude, longitude and capital status indication (0 for non-capital, 1 for capital, 2 for provincial

 geojson_hint

Validate GeoJSON using geojsonhint Javascript library

Description

Validate GeoJSON using geojsonhint Javascript library

Usage

```
geojson_hint(x, verbose = FALSE, error = FALSE)
```

Arguments

x	Input, a geojson character string, json object, or file or url pointing to one of the former
verbose	(logical) When geojson is invalid, return reason why (TRUE) or don't return reason (FALSE). Default: FALSE
error	(logical) Throw an error on parse failure? If TRUE, then function returns TRUE on success, and stop with the error message on error. Default: FALSE

Details

Uses the Javascript library <https://www.npmjs.com/package/geojsonhint> via the **V8** package

Value

TRUE or FALSE. If verbose=TRUE an attribute of name errors is added with error information

Examples

```

geojson_hint('{ "type": "FooBar" }')
geojson_hint('{ "type": "FeatureCollection" }')
geojson_hint(
  '{"type":"Point","geometry":{"type":"Point","coordinates":[-80,40]},"properties":{}}'
)

# A file
file <- system.file("examples", "zillow_or.geojson", package = "geojsonlint")
geojson_hint(as.location(file))

# A URL
url <- "https://raw.githubusercontent.com/glynnbird/usstatesgeojson/master/california.geojson"
geojson_hint(as.location(url))

# from json (jsonlite class)
x <- jsonlite::minify('{ "type": "FeatureCollection" }')
class(x)
geojson_hint(x)

# toggle whether reason for validation failure is given back
geojson_hint('{ "type": "FeatureCollection" }')
geojson_hint('{ "type": "FeatureCollection" }', verbose = TRUE)

# toggle whether to stop with error message
geojson_hint('{ "type": "FeatureCollection" }')
geojson_hint('{ "type": "FeatureCollection" }', verbose = TRUE)
if (interactive()) {
  geojson_hint('{ "type": "FeatureCollection" }', error = TRUE)
}

```

geojson_lint	<i>Validate GeoJSON using geojsonlint.com web service</i>
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Description

Validate GeoJSON using geojsonlint.com web service

Usage

```
geojson_lint(x, verbose = FALSE, error = FALSE, ...)
```

Arguments

x	Input, a geojson character string, json object, or file or url pointing to one of the former
verbose	(logical) When geojson is invalid, return reason why (TRUE) or don't return reason (FALSE). Default: FALSE
error	(logical) Throw an error on parse failure? If TRUE, then function returns TRUE on success, and stop with the error message on error. Default: FALSE
...	curl options passed on to GET or POST

Details

Uses the web service at <http://geojsonlint.com>

Value

TRUE or FALSE. If verbose=TRUE an attribute of name errors is added with error information

Examples

```
## Not run:
# From a json character string
geojson_lint(x = '{"type": "Point", "coordinates": [-100, 80]}') # good
geojson_lint(x = '{"type": "Rhombus", "coordinates": [[1, 2], [3, 4], [5, 6]]}') # bad

# A file
file <- system.file("examples", "zillow_or.geojson", package = "geojsonlint")
geojson_lint(x = as.location(file))

# A URL
url <- "https://raw.githubusercontent.com/glynnbird/usstatesgeojson/master/california.geojson"
geojson_lint(as.location(url))

# toggle whether reason for validation failure is given back
geojson_lint('{ "type": "FeatureCollection" }')
geojson_lint('{ "type": "FeatureCollection" }', verbose = TRUE)
```

```
# toggle whether to stop with error message
geojson_lint('{ "type": "FeatureCollection" }')
geojson_lint('{ "type": "FeatureCollection" }', verbose = TRUE)
if (interactive()) {
  geojson_lint('{ "type": "FeatureCollection" }', error = TRUE)
}

## End(Not run)
```

geojson_validate *Validate GeoJSON using is-my-json-valid Javascript library*

Description

Validate GeoJSON using is-my-json-valid Javascript library

Usage

```
geojson_validate(x, verbose = FALSE, error = FALSE, greedy = FALSE)
```

Arguments

x	Input, a geojson character string, json object, or file or url pointing to one of the former
verbose	(logical) When geojson is invalid, return reason why (TRUE) or don't return reason (FALSE). Default: FALSE
error	(logical) Throw an error on parse failure? If TRUE, then function returns NULL on success, and stop with the error message on error. Default: FALSE
greedy	(logical) Continue after the first error? TRUE or FALSE. Default: FALSE

Details

Sometimes you may get a response that your input GeoJSON is invalid, but get a somewhat unhelpful error message, e.g., no (or more than one) schemas match See <https://github.com/ropenscilabs/geojsonlint/issues/7#issuecomment-219881961>. We'll hopefully soon get this sorted out so you'll get a meaningful error message. However, this method is faster than the other two methods in this package, so there is that.

Value

TRUE or FALSE. If verbose=TRUE an attribute of name errors is added with error information

References

<https://www.npmjs.com/package/is-my-json-valid>

Examples

```

# From a json character string
geojson_validate(x = '{"type": "Point", "coordinates": [-100, 80]}') # good
geojson_validate(x = '{"type": "Rhombus", "coordinates": [[1, 2], [3, 4], [5, 6]]}') # bad

# A file
file <- system.file("examples", "zillow_or.geojson", package = "geojsonlint")
geojson_validate(x = as.location(file))

# A URL
url <- "https://raw.githubusercontent.com/glynnbird/usstatesgeojson/master/california.geojson"
geojson_validate(as.location(url))

# toggle whether reason for validation failure is given back
geojson_validate('{ "type": "FeatureCollection" }')
geojson_validate('{ "type": "FeatureCollection" }', verbose = TRUE)

# toggle whether to stop with error message
geojson_validate('{ "type": "FeatureCollection" }')
geojson_validate('{ "type": "FeatureCollection" }', verbose = TRUE)
if (interactive()) {
  geojson_validate('{ "type": "FeatureCollection" }', error = TRUE)
}

```

 gj_write

Write inputs to a geojson file

Description

Write inputs to a geojson file

Usage

```
gj_write(x, file, ...)
```

Arguments

x	input character, json, or geojson
file	file path to write to
...	Further args

Examples

```

gj_write(x = '{"type": "Point", "coordinates": [-100, 80]}', (file <- tempfile()))
library("jsonlite")
jsonlite::fromJSON(file)

```

states

This is the same data set from the ggplot2 library

Description

This is the same data set from the ggplot2 library

Format

A data.frame with 6 components, including "long", "lat", "group", "order", "region", and "subregion" columns specifying polygons for each US state.

us_cities

This is the same data set from the maps library, named differently

Description

This database is of us cities of population greater than about 40,000. Also included are state capitals of any population size.

Format

A list with 6 components, namely "name", "country.etc", "pop", "lat", "long", and "capital", containing the city name, the state abbreviation, approximate population (as at January 2006), latitude, longitude and capital status indication (0 for non-capital, 1 for capital, 2 for state capital).

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