

Package ‘polyglotr’

February 12, 2024

Title Translate Text

Version 1.4.0

Description The goal of the this package is to provide easy methods to translate pieces of text. Functions send requests to translation services online.

License MIT + file LICENSE

URL <https://github.com/Tomeriko96/polyglotr/>,
<https://tomeriko96.github.io/polyglotr/>

BugReports <https://github.com/Tomeriko96/polyglotr/issues>

Encoding UTF-8

RoxygenNote 7.3.1

Imports dplyr, htr, jsonlite, magrittr, purrr, RCurl, rlang, rvest,
stringr, tibble, urltools

Suggests knitr, rmarkdown, testthat (>= 3.0.0), text2vec

Config/testthat/edition 3

VignetteBuilder knitr

Depends R (>= 2.10)

LazyData true

NeedsCompilation no

Author Tomer Iwan [aut, cre, cph]

Maintainer Tomer Iwan <t.iwan@vu.nl>

Repository CRAN

Date/Publication 2024-02-12 09:20:02 UTC

R topics documented:

batch_translate	2
create_translation_table	3
create_transliteration_table	3
google_get_supported_languages	4

google_is_valid_language_code	4
google_supported_languages	5
google_translate	5
google_transliterate	6
language_detect	7
linguee_external_sources	7
linguee_translation_examples	8
linguee_word_translation	9
mymemory_translate	10
pons_translate	11
qcri_api_key	11
qcri_get_domains	12
qcri_get_language_pairs	13
qcri_translate_text	13
translate_file	14
wikimedia_detect_language	15
wikipedia_get_language_names	16
wmcloud_translate	16

Index	18
--------------	-----------

batch_translate	<i>Batch Translation Function</i>
------------------------	-----------------------------------

Description

This function translates a file into each target language using the polyglotr package's translate_file function, and saves the translated files.

Usage

```
batch_translate(input_file, source_language, target_languages)
```

Arguments

input_file	A character string indicating the path to the input file.
source_language	A character string indicating the source language.
target_languages	A character vector indicating the target languages.

Value

Nothing is returned.

Examples

```
## Not run:  
batch_translate("README.md", "nl", c("fr", "es", "de"))  
  
## End(Not run)
```

```
create_translation_table  
Create a Translation Table
```

Description

This function generates a translation table by translating a list of words into multiple languages.

Usage

```
create_translation_table(words, languages)
```

Arguments

words	A character vector containing the words to be translated.
languages	A character vector specifying the target languages for translation.

Value

A data frame representing the translation table with original words and translations in each language.

Examples

```
words <- c("Hello", "Translate", "Table", "Script")  
languages <- c("es", "fr", "de", "nl")  
translations <- create_translation_table(words, languages)  
print(translations)
```

```
create_transliteration_table  
Create a Transliteration Table
```

Description

This function generates a transliteration table by transliterating a list of words into multiple languages.

Usage

```
create_transliteration_table(words, languages)
```

Arguments

<code>words</code>	A character vector containing the words to be transliterated.
<code>languages</code>	A character vector specifying the target languages for transliteration.

Value

A data frame representing the transliteration table with original words and transliterations in each language.

Examples

```
words <- c("Hello world", "Goodbye", "Thank you", "Please")
languages <- c("ar", "he", "el", "ru", "fa")
transliterations <- create_transliteration_table(words, languages)
print(transliterations)
```

`google_get_supported_languages`
Get Supported Languages

Description

This function fetches the supported languages from the Google Cloud Translate documentation page.

Usage

```
google_get_supported_languages()
```

Value

A data frame containing the supported languages and their corresponding ISO 639-1 codes.

`google_is_valid_language_code`
Check if a language code is valid

Description

This function checks if a given language code is in the `google_supported_languages` dataset.

Usage

```
google_is_valid_language_code(language_code)
```

Arguments

language_code The language code to check.

Value

A logical value indicating if the language code is valid.

Examples

```
google_is_valid_language_code("en") # TRUE  
google_is_valid_language_code("fr") # TRUE  
google_is_valid_language_code("xx") # FALSE
```

google_supported_languages

Google Supported Languages

Description

This dataset contains the language names and iso codes of languages supported by Google Translate API.

Usage

```
google_supported_languages
```

Format

A data frame with two variables: language_name and iso_code

Source

Google Translate API

google_translate

Translate text using google translate

Description

Translate text using google translate

Usage

```
google_translate(text, target_language = "en", source_language = "auto")
```

Arguments

- `text` This is the text that you want to translate.
- `target_language` This is the language that you want to translate the text into. The default value for this argument is "en" for English.
- `source_language` This is the language of the text that you want to translate. The default value for this argument is "auto", which means that the function will try to automatically detect the language of the text.

Value

Translated text.

Examples

```
google_translate("I love languages", target_language = "es")
text_to_translate <- c("the", "quick", "brown")
google_translate(text_to_translate, "fr", "en")
```

`google_transliterate` *Transliterate a single word or a sentence to the required language.*

Description

Transliterate a single word or a sentence to the required language.

Usage

```
google_transliterate(text, language_tag = "el", num = 5)
```

Arguments

- `text` The word or sentence to transliterate from Latin/Roman (English) script.
- `language_tag` The target language's ISO639 code. The default value for this argument is "el" for Greek.
- `num` The maximum number of suggestions to fetch. The default value for this argument is 5.

Value

Character vector of transliterated sentences or larger pieces of text.

Examples

```
## Not run:  
google_transliterate("Hello world", "fr", 10)  
google_transliterate("hello", "el", 10)  
  
## End(Not run)
```

language_detect *Detect Language using Google Translate API*

Description

This function detects the language of a given text using the Google Translate API.

Usage

```
language_detect(text)
```

Arguments

text The text for which the language needs to be detected.

Value

A character string representing the detected language.

linguee_external_sources *Retrieve external sources using Linguee Translation API*

Description

Retrieve external sources using Linguee Translation API

Usage

```
linguee_external_sources(query, src, dst, limit = 5)
```

Arguments

query The word or phrase for which you want to retrieve external sources.
src The source language of the word or phrase. Accepts language codes such as "en", "es", "fr", etc.
dst The target language for the external source retrieval. Accepts language codes such as "en", "es", "fr", etc.
limit The maximum number of external sources to retrieve. Defaults to 5.

Value

A dataframe of external sources with columns: src, dst, src_url, dst_url.

See Also

[linguee_word_translation](#), [linguee_translation_examples](#)

Examples

```
linguee_external_sources(query = "hello", src = "en", dst = "es")
```

linguee_translation_examples

Provide translation examples using Linguee Translation API

Description

Provide translation examples using Linguee Translation API

Usage

```
linguee_translation_examples(
  query,
  src,
  dst,
  guess_direction = FALSE,
  follow_corrections = "always"
)
```

Arguments

<code>query</code>	The word or phrase for which you want translation examples.
<code>src</code>	The source language of the word or phrase. Accepts language codes such as "en", "es", "fr", etc.
<code>dst</code>	The target language for the translation examples. Accepts language codes such as "en", "es", "fr", etc.
<code>guess_direction</code>	A boolean flag that determines whether the API should guess the translation direction. The default value is FALSE.
<code>follow_corrections</code>	Specifies how to treat responses with a "did you mean" link. Possible values are "always", "never", or "on_empty_translations". The default value is "always".

Value

A dataframe of translation examples with columns: source, target, pos.

See Also

[linguee_word_translation](#)

Examples

```
linguee_translation_examples(query = "hello", src = "en", dst = "es")
```

linguee_word_translation

Translate word using Linguee Translation API

Description

Translate word using Linguee Translation API

Usage

```
linguee_word_translation(  
  word,  
  target_language,  
  source_language,  
  guess_direction = FALSE,  
  follow_corrections = "always"  
)
```

Arguments

<code>word</code>	This is the word that you want to translate.
<code>target_language</code>	This is the language that you want to translate the word into.
<code>source_language</code>	This is the language of the word that you want to translate.
<code>guess_direction</code>	Specifies whether the API should guess the translation direction when the source language is set to "auto". The default value is FALSE.
<code>follow_corrections</code>	Specifies whether the API should include translations that have been marked as corrections. The default value is "always" to include corrections.

Value

Translated word options.

Examples

```
linguee_word_translation("hello", target_language = "es", source_language = "en")
```

mymemory_translate *Translate text using mymemory translate*

Description

Translate text using mymemory translate

Usage

```
mymemory_translate(text, target_language = "en", source_language = "auto")
```

Arguments

<code>text</code>	Text to translate.
<code>target_language</code>	Language to translate text to.
<code>source_language</code>	Language to translate text from

Value

Translated text.

Examples

```
mymemory_translate("Hello World", target_language = "es", source_language = "en")
```

pons_translate	<i>Translate text using PONS</i>
----------------	----------------------------------

Description

Translate text using PONS

Usage

```
pons_translate(text, target_language = "pt", source_language = "en")
```

Arguments

text	This is the text that you want to translate. Can be a single string or a vector of strings.
target_language	This is the language that you want to translate the text into. The default value for this argument is "pt" for Portuguese.
source_language	This is the language of the text that you want to translate. The default value for this argument is "en" for English.

Value

Translated text. If the input is a vector, it returns a character vector of translated strings.

Examples

```
## Not run:  
pons_translate("I love languages!", target_language = "pt", source_language = "en")  
text_to_translate <- c("The", "Greatest", "Language")  
pons_translate(text_to_translate, "pt", "en")  
  
## End(Not run)
```

qcri_api_key	<i>Get the QCRI API key from the environment variable</i>
--------------	---

Description

Get the QCRI API key from the environment variable

Usage

```
qcri_api_key()
```

Value

The QCRI API key stored in the QCRI_API_KEY environment variable.

`qcri_get_domains`

QCRI Get Domains

Description

This function retrieves the supported domains from the QCRI Multiterm API.

Usage

```
qcri_get_domains(api_key = qcri_api_key())
```

Arguments

<code>api_key</code>	The API key associated with the user account being used. If not provided, the function will attempt to retrieve it from the QCRI_API_KEY environment variable.
----------------------	--

Value

A list with keys:

- `success`: Boolean indicating whether the request succeeded.
- `domains`: Array of supported domains, such as news, tedtalks etc. Only present if success is true.
- `error`: Error message in case success is false.

Examples

```
## Not run:  
qcri_get_domains(api_key = "YourApiKey")  
qcri_get_domains()  
  
## End(Not run)
```

```
qcri_get_language_pairs
```

QCRI Get Language Pairs

Description

This function retrieves the supported language pairs from the QCRI Multiterm API.

Usage

```
qcri_get_language_pairs(api_key = qcri_api_key())
```

Arguments

api_key	The API key associated with the user account being used. If not provided, the function will attempt to retrieve it from the QCRI_API_KEY environment variable. You can register for an API key at https://mt.qcri.org/api/register
---------	---

Value

Language pairs.

Examples

```
## Not run:  
qcri_get_language_pairs(api_key = "YourApiKey")  
qcri_get_language_pairs()  
  
## End(Not run)
```

```
qcri_translate_text    QCRI Translate Text
```

Description

This function translates a text from the source language to the target language using the QCRI Multiterm API.

Usage

```
qcri_translate_text(text, langpair, domain, api_key = qcri_api_key())
```

Arguments

<code>text</code>	The text to be translated. This must be URL encoded.
<code>langpair</code>	The source-target language pair, where source is language of the provided text and target is the language into which the text has to be translated.
<code>domain</code>	The domain over which the translation is tuned.
<code>api_key</code>	The API key associated with the user account being used. If not provided, the function will attempt to retrieve it from the QCRI_API_KEY environment variable.

Value

Translated text.

Examples

```
## Not run:
qcri_translate_text(text = "Hello, world!",
langpair = "en-ar",
domain = "general",
api_key = "YourApiKey")
qcri_translate_text(text = "Hello, world!",
langpair = "en-ar",
domain = "general")

## End(Not run)
```

<code>translate_file</code>	<i>Translate File</i>
-----------------------------	-----------------------

Description

Translates the content of a file using Google Translate API.

Usage

```
translate_file(
  file_path,
  target_language = "en",
  source_language = "auto",
  overwrite = FALSE
)
```

Arguments

file_path	The path to the file to be translated.
target_language	The target language to translate the file content to. Default is "en".
source_language	The source language of the file content. Default is "auto".
overwrite	Logical indicating whether to overwrite the original file with the translated content. Default is FALSE.

Examples

```
## Not run:
translate_file("path/to/file.txt", target_language = "fr", source_language = "en", overwrite = TRUE)

## End(Not run)
```

wikimedia_detect_language

Detect the language of a text

Description

This function sends a POST request to the Wikimedia Language ID API with the specified text, parses the JSON response, and returns the detected language.

Usage

```
wikimedia_detect_language(text)
```

Arguments

text	The text whose language is to be detected.
------	--

Value

The detected language.

Examples

```
# Detect the language of a text
wikimedia_detect_language("Hallo, wereld")
```

wikipedia_get_language_names
Get language names

Description

This function sends a GET request to the Wikipedia API and returns the language names as a dataframe.

Usage

```
wikipedia_get_language_names()
```

Value

A dataframe of language names.

Examples

```
# Get language names
wikipedia_get_language_names()
```

wmcloud_translate *Translate content using WMCloud*

Description

This function sends a POST request to the WMCloud translation API with the specified parameters, parses the JSON response, and returns the translated content.

Usage

```
wmcloud_translate(
  content,
  target_language = "en",
  source_language = "en",
  format = "text",
  model = "nllb200-600M"
)
```

Arguments

content	The content to translate. Can be plain text, a URL (for a webpage), a JSON string, or a Markdown string.
target_language	The target language for the translation (default is "en").
source_language	The source language of the content (default is "en").
format	The format of the content ("json", "markdown", "text", "webpage").
model	The model to use for the translation (only "nllb200-600M" is currently known to work).

Value

The translated content.

Examples

```
## Not run:
# Translate plain text
wmcloud_translate("rijst",
  target_language = "es",
  source_language = "nl", format = "text")

# Translate a webpage
wmcloud_translate("https://en.m.wikivoyage.org/wiki/Goes",
  target_language = "es",
  source_language = "en", format = "webpage")

# Translate JSON content
wmcloud_translate('{
  "id": 1,
  "title": "Chicken Biryani",
  "description": "Chicken Biryani is a savory chicken and rice dish",
  "ingredients": [ "Vegetable oil", "Garlic", "Ginger" , "Rice"]
}
  ', target_language = "es", source_language = "en", format = "json")

# Translate Markdown content
wmcloud_translate('# Heading

This is a [link to Wikipedia](https://wikipedia.org)
  ', target_language = "es", source_language = "en", format = "markdown")

## End(Not run)
```

Index

* **data**
 google_supported_languages, 5

batch_translate, 2

create_translation_table, 3
create_transliteration_table, 3

google_get_supported_languages, 4
google_is_valid_language_code, 4
google_supported_languages, 5
google_translate, 5
google_transliterate, 6

language_detect, 7
linguee_external_sources, 7
linguee_translation_examples, 8
linguee_word_translation, 9

mymemory_translate, 10

pons_translate, 11

qcri_api_key, 11
qcri_get_domains, 12
qcri_get_language_pairs, 13
qcri_translate_text, 13

translate_file, 14

wikimedia_detect_language, 15
wikipedia_get_language_names, 16
wmcloud_translate, 16