

Package ‘polyglotr’

July 27, 2024

Title Translate Text

Version 1.5.1

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

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

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

Encoding UTF-8

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Contents

batch_translate	2
create_translation_table	3
create_transliteration_table	4
google_get_supported_languages	4

google_is_valid_language_code	5
google_supported_languages	5
google_translate	6
google_translate_long_text	6
google_transliterate	7
language_detect	8
linguee_external_sources	8
linguee_translation_examples	9
linguee_word_translation	10
microsoft_supported_languages	11
mymemory_translate	12
pons_dictionaries	12
pons_translate	13
qcri_api_key	14
qcri_get_domains	14
qcri_get_language_pairs	15
qcri_translate_text	15
translate_file	16
translate_to_morse	17
translate_to_morse_audio	18
wikimedia_detect_language	18
wikipedia_get_language_names	19
wmcloud_translate	19

Index	21
--------------	-----------

batch_translate	<i>Batch Translation Function</i>
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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

<code>input_file</code>	A character string indicating the path to the input file.
<code>source_language</code>	A character string indicating the source language.
<code>target_languages</code>	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

words A character vector containing the words to be transliterated.
languages 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_translate_long_text *Translate long text using Google Translate*

Description

This function translates long text from one language to another using Google Translate. It splits the text into smaller chunks if necessary to handle large inputs.

Usage

```
google_translate_long_text(
  text,
  target_language = "en",
  source_language = "auto",
  chunk_size = 1000
)
```

Arguments

text	The long text to translate. Should be a single string.
target_language	The language to translate the text into. Default is "en" for English.
source_language	The language of the input text. Default is "auto" for automatic detection.
chunk_size	The maximum number of characters to send in a single translation request. Default is 1000.

Value

A single string containing the translated text.

Examples

```
long_text <- paste(rep("This is a long text to translate.", 100), collapse = " ")
google_translate_long_text(
  long_text, target_language = "de",
  source_language = "en",
  chunk_size = 500)
```

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

query	The word or phrase for which you want translation examples.
src	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.

guess_direction

Specifies whether the API should guess the translation direction when the source language is set to "auto". The default value is FALSE.

follow_corrections

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")
```

microsoft_supported_languages

Get the set of languages currently supported by the Microsoft Translator API

Description

Get the set of languages currently supported by the Microsoft Translator API

Usage

```
microsoft_supported_languages(scope = NULL)
```

Arguments

scope (optional) A comma-separated list of names defining the group of languages to return. Allowed group names are: translation, transliteration, and dictionary. If no scope is given, then all groups are returned.

Value

A list of supported languages for the specified groups.

Examples

```
## Not run:  
microsoft_supported_languages(scope = "translation,transliteration,dictionary")  
  
## End(Not run)
```

mymemory_translate *Translate text using mymemory translate*

Description

Translate text using mymemory translate

Usage

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

Arguments

text	Text to translate.
target_language	Language to translate text to.
source_language	Language to translate text from

Value

Translated text.

Examples

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

pons_dictionaries *Get the list of available dictionaries from PONS API*

Description

Get the list of available dictionaries from PONS API

Usage

```
pons_dictionaries(language = "en")
```

Arguments

language	The language of the output (ISO 639-1 - two-letter codes). Supported languages are de, el, en, es, fr, it, pl, pt, ru, sl, tr, zh.
----------	--

Value

A list of available dictionaries in the specified language.

Examples

```
## Not run:
pons_dictionaries(language = "es")

## End(Not run)
```

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	<i>QCRI Get Domains</i>
------------------	-------------------------

Description

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

Usage

```
qcri_get_domains(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.
---------	--

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

<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 <code>QCRI_API_KEY</code> 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

text	The text to be translated. This must be URL encoded.
langpair	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.
domain	The domain over which the translation is tuned.
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.

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)
```

translate_file

Translate File

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)
```

translate_to_morse *Translate Text to Morse Code using the FunTranslations API*

Description

This function takes a string of text as input and translates it to Morse code using the FunTranslations API.

Usage

```
translate_to_morse(text, api_key = NULL)
```

Arguments

text	A character string containing the text to be translated to Morse code.
api_key	(optional) Your FunTranslations API key, if you have a paid subscription.

Value

A list containing the translated Morse code text and other metadata.

translate_to_morse_audio

Translate English Text to Morse Code with Audio

Description

This function takes an English text string as input and translates it to Morse code with an audio output using the FunTranslations API.

Usage

```
translate_to_morse_audio(text, api_key = NULL)
```

Arguments

`text` A character string containing the English text to be translated.
`api_key` (optional) Your FunTranslations API key, if you have a paid subscription.

Value

A list containing the translated Morse code text, the Morse code audio as a base64-encoded string, and other metadata.

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, 4
- google_get_supported_languages, 4
- google_is_valid_language_code, 5
- google_supported_languages, 5
- google_translate, 6
- google_translate_long_text, 6
- google_transliterate, 7
- language_detect, 8
- linguee_external_sources, 8
- linguee_translation_examples, 9
- linguee_word_translation, 10
- microsoft_supported_languages, 11
- mymemory_translate, 12
- pons_dictionaries, 12
- pons_translate, 13
- qcri_api_key, 14
- qcri_get_domains, 14
- qcri_get_language_pairs, 15
- qcri_translate_text, 15
- translate_file, 16
- translate_to_morse, 17
- translate_to_morse_audio, 18
- wikimedia_detect_language, 18
- wikipedia_get_language_names, 19
- wmcloud_translate, 19