Package 'deepRstudio'

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Type Package

Title Seamless Language Translation in 'RStudio' using 'DeepL' API and
'Rstudioapi'

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Description Enhancing cross-language compatibility within the 'RStudio' environment and support-
ing seamless language understanding,
the 'deepRstudio' package leverages the power of the 'DeepL' API (see <https:
//www.deepl.com/docs-api>) to enable seamless, fast,
accurate, and affordable translation of code comments, documents, and text. This package of-
fers the ability to translate selected text
into English (EN), as well as from English into various languages, namely Japanese (JA), Chi-
nese (ZH), Spanish (ES),
French (FR), Russian (RU), Portuguese (PT), and Indonesian (ID). With much of the text be-
ing written in English, the emphasis
is on compatibility from English. It is also designed for developers working on multilin-
gual projects and data analysts collaborating
with international teams, simplifying the translation process and making code more accessi-
ble and comprehensible to people with
diverse language backgrounds. This package uses the 'rstudioapi' pack-
age and 'DeepL' API, and is simply implemented, executed
from addins or via shortcuts on 'RStudio'. With just a few steps, content can be translated be-
tween supported languages, promoting better
collaboration and expanding the global reach of work. The functionality of this pack-
age works only on 'RStudio' using 'rstudioapi'.

Depends R (>= 4.2.0)

Imports httr, jsonlite, assertthat, clipr, rstudioapi, crayon

Suggests testthat, knitr

License Artistic-2.0

URL https://kumes.github.io/deepRstudio/,
https://github.com/kumeS/deepRstudio

BugReports <https://github.com/kumeS/deepRstudio/issues>

RoxygenNote 7.2.3

Encoding UTF-8

NeedsCompilation no

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Repository CRAN

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R topics documented:

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deepel   *DeepL Translation Function*

Description

This function translates text using the DeepL API.

Usage

```
deepel(
  input,
  target_lang = "EN",
  Auth_Key = Sys.getenv("DeepL_API_KEY"),
  free_mode = TRUE
)
```

Arguments

`input`	The text to be translated.
`target_lang`	The target language code for translation. The language into which the text should be translated. Options are: BG - Bulgarian, CS - Czech, DA - Danish, DE - German, EL - Greek, EN - English (unspecified variant for backward compatibility; please select EN-GB or EN-US instead), EN-GB - English (British), EN-US - English (American), ES - Spanish, ET - Estonian, FI - Finnish, FR - French, HU - Hungarian, ID - Indonesian, IT - Italian, JA - Japanese, KO - Korean, LT - Lithuanian, LV - Latvian, NB - Norwegian (Bokmål), NL - Dutch, PL - Polish, PT - Portuguese (unspecified variant for backward compatibility; please select PT-BR or PT-PT instead), PT-BR - Portuguese (Brazilian), PT-PT - Portuguese (all Portuguese varieties excluding Brazilian Portuguese), RO - Romanian, RU - Russian, SK - Slovak, SL - Slovenian, SV - Swedish, TR - Turkish, UK - Ukrainian, ZH - Chinese (simplified).
`Auth_Key`	Your DeepL API authentication key. Defaults to the value of the environment variable "DeepL_API_KEY".
`free_mode`	A boolean value; set to TRUE if using the free DeepL API, FALSE if using the paid version. Default is TRUE.

Value

A data frame containing the detected source language, target language, and translated text.

Author(s)

Satoshi Kume

Examples

```
## Not run:
Auth_Key <- "your_deepl_api_key"
input <- "Hello, how are you?"
target_lang <- "JA"

translated_text <- deepel(input, target_lang, Auth_Key)
print(translated_text)

## End(Not run)
```

---

deepel_from_EN   *Translate English Text to Other Languages via DeepL API*

Description

Translate English text from the clipboard into the specified target language using the DeepL API.

Usage

```
deepel_from_EN(
  target_lang = "JA",
  Auth_Key = Sys.getenv("DeepL_API_KEY"),
  free_mode = TRUE
)
```

Arguments

target_lang   The language into which the text should be translated. Options are: BG - Bul-
               garian, CS - Czech, DA - Danish, DE - German, EL - Greek, EN - English (un-
               specified variant for backward compatibility; please select EN-GB or EN-US
               instead), EN-GB - English (British), EN-US - English (American), ES - Span-
               ish, ET - Estonian, FI - Finnish, FR - French, HU - Hungarian, ID - Indonesian,
               IT - Italian, JA - Japanese, KO - Korean, LT - Lithuanian, LV - Latvian, NB
               - Norwegian (Bokmål), NL - Dutch, PL - Polish, PT - Portuguese (unspeci-
               fied variant for backward compatibility; please select PT-BR or PT-PT instead),
               PT-BR - Portuguese (Brazilian), PT-PT - Portuguese (all Portuguese varieties
               excluding Brazilian Portuguese), RO - Romanian, RU - Russian, SK - Slovak,
               SL - Slovenian, SV - Swedish, TR - Turkish, UK - Ukrainian, ZH - Chinese
               (simplified). assertthat::is.string(target_lang)

Auth_Key   The authentication key for the DeepL API.

free_mode   A logical value indicating whether to use the free or paid DeepL API. Default is
               TRUE.

Details

Translate English Text to Other Languages via DeepL API

This function takes English text from the clipboard and translates it into the specified target language
using the DeepL API. The translated text is then placed back into the clipboard, ready to be pasted
wherever needed.

Value

The translated text is placed into the clipboard and the function returns the result of `clipr::write_clip`.

Author(s)

Satoshi Kume

Examples

```
## Not run:

#Copy English text into your clipboard to excute the function. Then paste your clipboard.
deepel_from_EN(target_lang = 'JA')


## End(Not run)
```

---

deepel_rstudioapi_2EN   *Translate Selected Text to English via DeepL API*

Description

Translate the selected text in RStudio into English using the DeepL API with auto-detection of the source language. This function uses free-version DeepL API (https://api-free.deepl.com/v2/translate).

Usage

```
deepel_rstudioapi_2EN()
```

Details

Translate Selected Text to English via DeepL API

This function uses the rstudioapi to execute English translation of the selected text using the DeepL API. It will attempt to auto-detect the language of the text and translate it into English. First, select the text and execute "DeepL Translation into English" from addins. As a result, the selected part will be translated into English.

Value

No value is returned.

Author(s)

Satoshi Kume

Examples

```
## Not run:

#Select the following text: "La selección está traducida al inglés."
#Then, execute "DeepL Translation into English" from RStudio addins.


## End(Not run)
```

---

deepel_rstudioapi_2ES   *Translate Selected Text to Spanish via DeepL API*

Description

Translate the selected text in RStudio into Spanish using the DeepL API with auto-detection of the source language. This function uses free-version DeepL API (https://api-free.deepl.com/v2/translate).

Usage

```
deepel_rstudioapi_2ES()
```

Details

Translate Selected Text to Spanish via DeepL API

This function uses the rstudioapi to execute Spanish translation of the selected text using the DeepL API. It will attempt to auto-detect the language of the text and translate it into Spanish. First, select the text and execute "DeepL Translation into Spanish" from addins. As a result, the selected part will be translated into Spanish.

Value

A message indicating the completion of the translation. No value is returned.

Author(s)

Satoshi Kume

Examples

```
## Not run:

#Select the following text: "La selección está traducida al inglés."
#Then, execute "DeepL Translation into Spanish" from RStudio addins.


## End(Not run)
```

---

deepel_rstudioapi_2FR   *Translate Selected Text to French via DeepL API*

Description

Translate the selected text in RStudio into French using the DeepL API with auto-detection of the source language. This function uses free-version DeepL API (https://api-free.deepl.com/v2/translate).

Usage

```
deepel_rstudioapi_2FR()
```

Details

Translate Selected Text to French via DeepL API

This function uses the rstudioapi to execute French translation of the selected text using the DeepL API. It will attempt to auto-detect the language of the text and translate it into French. First, select the text and execute "DeepL Translation into French" from addins. As a result, the selected part will be translated into French.

Value

A message indicating the completion of the translation. No value is returned.

Author(s)

Satoshi Kume

Examples

```
## Not run:

#Select the following text: "La selección está traducida al inglés."
#Then, execute "DeepL Translation into French" from RStudio addins.


## End(Not run)
```

---

deepel_rstudioapi_2ID   *Translate Selected Text to Indonesian via DeepL API*

Description

Translate the selected text in RStudio into Indonesian using the DeepL API with auto-detection of the source language. This function uses free-version DeepL API (https://api-free.deepl.com/v2/translate).

Usage

```
deepel_rstudioapi_2ID()
```

Details

Translate Selected Text to Indonesian via DeepL API

This function uses the rstudioapi to execute Indonesian translation of the selected text using the DeepL API. It will attempt to auto-detect the language of the text and translate it into Indonesian. First, select the text and execute "DeepL Translation into Indonesian" from addins. As a result, the selected part will be translated into Indonesian.

Value

A message indicating the completion of the translation. No value is returned.

Author(s)

Satoshi Kume

Examples

```
## Not run:

#Select the following text: "La selección está traducida al inglés."
#Then, execute "DeepL Translation into Indonesian" from RStudio addins.


## End(Not run)
```

---

deepel_rstudioapi_2JA   *Translate Selected Text to Japanese via DeepL API*

Description

Translate the selected text in RStudio into Japanese using the DeepL API with auto-detection of the source language. This function uses free-version DeepL API (https://api-free.deepl.com/v2/translate).

Usage

```
deepel_rstudioapi_2JA()
```

Details

Translate Selected Text to Japanese via DeepL API

This function uses the rstudioapi to execute Japanese translation of the selected text using the DeepL API. It will attempt to auto-detect the language of the text and translate it into Japanese. First, select the text and execute "DeepL Translation into Japanese" from addins. As a result, the selected part will be translated into Japanese.

Value

A message indicating the completion of the translation. No value is returned.

Author(s)

Satoshi Kume

Examples

```
## Not run:

#Select the following text: "La selección está traducida al inglés."
#Then, execute "DeepL Translation into Japanese" from RStudio addins.


## End(Not run)
```

---

deepel_rstudioapi_2PT *Translate Selected Text to Portuguese via DeepL API*

Description

Translate the selected text in RStudio into Portuguese using the DeepL API with auto-detection of the source language. This function uses free-version DeepL API (https://api-free.deepl.com/v2/translate).

Usage

```
deepel_rstudioapi_2PT()
```

Details

Translate Selected Text to Portuguese via DeepL API

This function uses the rstudioapi to execute Portuguese translation of the selected text using the DeepL API. It will attempt to auto-detect the language of the text and translate it into Portuguese. First, select the text and execute "DeepL Translation into Portuguese" from addins. As a result, the selected part will be translated into Portuguese.

Value

A message indicating the completion of the translation.

Author(s)

Satoshi Kume

Examples

```
## Not run:

#Select the following text: "La selección está traducida al inglés."
#Then, execute "DeepL Translation into Portuguese" from RStudio addins.


## End(Not run)
```

---

deepel_rstudioapi_2RU *Translate Selected Text to Russian via DeepL API*

Description

Translate the selected text in RStudio into Russian using the DeepL API with auto-detection of the source language. This function uses free-version DeepL API (https://api-free.deepl.com/v2/translate).

Usage

```
deepel_rstudioapi_2RU()
```

Details

Translate Selected Text to Russian via DeepL API

This function uses the rstudioapi to execute Russian translation of the selected text using the DeepL API. It will attempt to auto-detect the language of the text and translate it into Russian. First, select the text and execute "DeepL Translation into Russian" from addins. As a result, the selected part will be translated into Russian.

Value

A message indicating the completion of the translation.

Author(s)

Satoshi Kume

Examples

```
## Not run:

#Select the following text: "La selección está traducida al inglés."
#Then, execute "DeepL Translation into Russian" from RStudio addins.


## End(Not run)
```

---

deepel_rstudioapi_2ZH   *Translate Selected Text to Chinese via DeepL API*

Description

Translate the selected text in RStudio into Chinese using the DeepL API with auto-detection of the source language. This function uses free-version DeepL API (https://api-free.deepl.com/v2/translate).

Usage

```
deepel_rstudioapi_2ZH()
```

Details

Translate Selected Text to Chinese via DeepL API

This function uses the rstudioapi to execute Chinese translation of the selected text using the DeepL API. It will attempt to auto-detect the language of the text and translate it into Chinese. First, select the text and execute "DeepL Translation into Chinese" from addins. As a result, the selected part will be translated into Chinese.

Value

A message indicating the completion of the translation.

Author(s)

Satoshi Kume

Examples

```
## Not run:

#Select the following text: "La selección está traducida al inglés."
#Then, execute "DeepL Translation into Chinese" from RStudio addins.


## End(Not run)
```

---

deepel_rstudioapi_speakInJA

Translate and Speak in Japanese

Description

This function takes the selected text in RStudio, translates it into Japanese using the DeepL API, and then speaks the translated text using MacOS's speech system.

Usage

```
deepel_rstudioapi_speakInJA()
```

Details

Translate Selected Text and Speak in Japanese via DeepL API and MacOS system

Value

A message indicating that the translation and speech process has finished.

Author(s)

Satoshi Kume

Examples

```
## Not run:
#Select the following text: "La selección está traducida al inglés."
#Then, execute "Translation and Speak in Japanese : deepRstudio" from RStudio addins.

## End(Not run)
```

---

deepel_X2X *Translate X Language to Other X Language via DeepL API*

Description

Translate English text from the clipboard into the specified target language using the DeepL API.

Usage

```
deepel_X2X(
  target_lang = "JA",
  Auth_Key = Sys.getenv("DeepL_API_KEY"),
  free_mode = TRUE
)
```

Arguments

target_lang   The language into which the text should be translated. Options are: BG - Bul-
                 garian, CS - Czech, DA - Danish, DE - German, EL - Greek, EN - English (un-
                 specified variant for backward compatibility; please select EN-GB or EN-US
                 instead), EN-GB - English (British), EN-US - English (American), ES - Span-
                 ish, ET - Estonian, FI - Finnish, FR - French, HU - Hungarian, ID - Indonesian,
                 IT - Italian, JA - Japanese, KO - Korean, LT - Lithuanian, LV - Latvian, NB
                 - Norwegian (Bokmål), NL - Dutch, PL - Polish, PT - Portuguese (unspeci-
                 fied variant for backward compatibility; please select PT-BR or PT-PT instead),
                 PT-BR - Portuguese (Brazilian), PT-PT - Portuguese (all Portuguese varieties
                 excluding Brazilian Portuguese), RO - Romanian, RU - Russian, SK - Slovak,
                 SL - Slovenian, SV - Swedish, TR - Turkish, UK - Ukrainian, ZH - Chinese
                 (simplified). `assertthat::is.string(target_lang)`

Auth_Key   The authentication key for the DeepL API.

free_mode   A logical value indicating whether to use the free or paid DeepL API. Default is
                 TRUE.

Details

Translate X to X via DeepL API

This function takes text from the clipboard and translates it into the specified target language us-
ing the DeepL API. The translated text is then placed back into the clipboard, ready to be pasted
wherever needed.

Value

The translated text is placed into the clipboard and the function returns the result of `clipr::write_clip`.

Author(s)

Satoshi Kume

Examples

```
## Not run:

#Copy text into your clipboard to excute the function. Then paste your clipboard.
deepel_X2X(target_lang = 'JA')


## End(Not run)
```

is_mac   *Check Mac OS (Darwin)*

Description

Determines if the current system is running on Mac OS (Darwin).

Usage

```
is_mac()
```

Details

Check if the System is Running on Mac OS

This function determines whether the current system is running on Mac OS. It utilizes the system information provided by R to check the operating system name, and returns TRUE if it is Mac OS (Darwin), and FALSE otherwise.

Value

Logical value indicating whether the system is Mac OS. Returns TRUE if Mac OS, FALSE otherwise.

Author(s)

Satoshi Kume

Examples

```
## Not run:
if (is_mac()) {
  print("This is a Mac OS system.")
} else {
  print("This is not a Mac OS system.")
}

## End(Not run)
```

slow_print   *Slowly Print Text*

Description

Prints the characters of the input text string one by one, with a specified delay between each charac-
ter. If the random parameter is set to TRUE, the delay will be a random value between 0.0001 and
0.3 seconds. Otherwise, the delay will be the value specified by the delay parameter.

Usage

```
slow_print(text, random = FALSE, delay = 0.125)
```

Arguments

text   A string representing the text to be printed. Must be a non-NA string.

random   A logical value indicating whether the delay between characters should be ran-
                  dom. Default is FALSE.

delay   A numeric value representing the fixed delay between characters in seconds.
                  Default is 0.125. Must be a non-negative number.

Details

Slowly Print Text

This function prints the characters of a given text string one by one, with a specified delay between
each character. The delay can be either fixed or random.

Value

Invisible NULL. The function prints the text to the console.

Author(s)

Satoshi Kume

Examples

```
## Not run:
slow_print("Hello, World!")
slow_print("Hello, World!", random = TRUE)
slow_print("Hello, World!", delay = 0.1)

## End(Not run)
```

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