

Package ‘gemini.R’

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Title Interface for 'Google Gemini' API

Version 0.6.1

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Description Provides a comprehensive interface for Google Gemini API, enabling users to access and utilize Gemini Large Language Model (LLM) functionalities directly from R. This package facilitates seamless integration with Google Gemini, allowing for advanced language processing, text generation, and other AI-driven capabilities within the R environment. For more information, please visit <https://ai.google.dev/docs/gemini_api_overview>.

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Depends R (>= 4.0.0)

URL <https://github.com/jhk0530/gemini.R>

BugReports <https://github.com/jhk0530/gemini.R/issues>

Encoding UTF-8

Imports base64enc, cli, httr2, rstudioapi

RoxygenNote 7.3.2

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

Config/Needs/website rmarkdown

NeedsCompilation no

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Contents

addHistory	2
gemini	2
gemini_chat	3
gemini_image	4
gen_docs	6
Index	7

addHistory	<i>Add history for chatting context</i>
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Description

Add history for chatting context

Usage

```
addHistory(history, role = NULL, item = NULL)
```

Arguments

history	The history of chat
role	The role of chat: "user" or "model"
item	The item of chat: "prompt" or "output"

Value

The history of chat

gemini	<i>Generate text from text with Gemini</i>
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Description

Generate text from text with Gemini

Usage

```
gemini(prompt, model = "1.5-flash", temperature = 0.5, maxOutputTokens = 1024)
```

Arguments

prompt	The prompt to generate text from
model	The model to use. Options are '1.5-flash', '1.5-pro', '1.0-pro'. Default is '1.5-flash' see https://ai.google.dev/gemini-api/docs/models/gemini
temperature	The temperature to use. Default is 0.5 value should be between 0 and 2 see https://ai.google.dev/gemini-api/docs/models/generative-models#model-parameters
maxOutputTokens	The maximum number of tokens to generate. Default is 1024 and 100 tokens correspond to roughly 60-80 words.

Value

Generated text

See Also

https://ai.google.dev/docs/gemini_api_overview#text_input

Examples

```
## Not run:
library(gemini.R)
setAPI("YOUR_API_KEY")
gemini("Explain dplyr's mutate function")

## End(Not run)
```

gemini_chat

Multi-turn conversations (chat)

Description

Generate text from text with Gemini

Usage

```
gemini_chat(
  prompt,
  history = list(),
  model = "1.5-flash",
  temperature = 0.5,
  maxOutputTokens = 1024
)
```

Arguments

prompt	The prompt to generate text from
history	history object to keep track of the conversation
model	The model to use. Options are '1.5-flash', '1.5-pro', '1.0-pro'. Default is '1.5-flash' see https://ai.google.dev/gemini-api/docs/models/gemini
temperature	The temperature to use. Default is 0.5 value should be between 0 and 2 see https://ai.google.dev/gemini-api/docs/models/generative-models#model-parameters
maxOutputTokens	The maximum number of tokens to generate. Default is 1024 and 100 tokens correspond to roughly 60-80 words.

Value

Generated text

See Also

https://ai.google.dev/docs/gemini_api_overview#chat

Examples

```
## Not run:
library(gemini.R)
setAPI("YOUR_API_KEY")

chats <- gemini_chat("Pretend you're a snowman and stay in character for each")
print(chats$outputs)

chats <- gemini_chat("What's your favorite season of the year?", chats$history)
print(chats$outputs)

chats <- gemini_chat("How do you think about summer?", chats$history)
print(chats$outputs)

## End(Not run)
```

gemini_image

Generate text from text and image with Gemini

Description

Generate text from text and image with Gemini

Usage

```
gemini_image(  
  image = NULL,  
  prompt = "Explain this image",  
  model = "1.5-flash",  
  temperature = 0.5,  
  maxOutputTokens = 1024,  
  type = "png"  
)
```

Arguments

image	The image to generate text
prompt	The prompt to generate text, Default is "Explain this image"
model	The model to use. Options are '1.5-flash', '1.5-pro'. Default is '1.5-flash' see https://ai.google.dev/gemini-api/docs/models/gemini
temperature	The temperature to use. Default is 0.5 value should be between 0 and 2 see https://ai.google.dev/gemini-api/docs/models/generative-models#model-parameters
maxOutputTokens	The maximum number of tokens to generate. Default is 1024 and 100 tokens correspond to roughly 60-80 words.
type	The type of image. Options are 'png', 'jpeg', 'webp', 'heic', 'heif'. Default is 'png'

Value

Generated text

See Also

https://ai.google.dev/docs/gemini_api_overview#text_image_input

Examples

```
## Not run:  
library(gemini.R)  
setAPI("YOUR_API_KEY")  
gemini_image(image = system.file("docs/reference/figures/image.png", package = "gemini.R"))  
  
## End(Not run)
```

`gen_docs`*Generate Roxygen Documentation*

Description

Generates Roxygen2 documentation for an R function based on the currently selected code.

Usage

```
gen_docs(prompt = NULL)
```

Arguments

`prompt` A character string specifying additional instructions for the LLM. Defaults to a prompt requesting Roxygen2 documentation without the original code.

Value

A character string containing the generated Roxygen2 documentation.

Index

`addHistory`, 2

`gemini`, 2

`gemini_chat`, 3

`gemini_image`, 4

`gen_docs`, 6