

Package: gemini.R (via r-universe)

December 2, 2024

Title Interface for 'Google Gemini' API

Version 0.5.2.9000

Maintainer Jinhwan Kim <hwanistic@gmail.com>

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.

License MIT + file LICENSE

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

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.2

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

Config/Needs/website rmarkdown

Config/pak/sysreqs libssl-dev

Repository <https://jhk0530.r-universe.dev>

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

RemoteRef HEAD

RemoteSha 5f03658584c291f9bdda1f9d14a7261319880813

Contents

addHistory	2
gemini	2
gemini_chat	3
gemini_image	4
Index	6

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

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>
--------	--

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)
```

Index

`addHistory`, 2

`gemini`, 2

`gemini_chat`, 3

`gemini_image`, 4