# Package 'gemini.R'

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Title Interface for 'Google Gemini' API
Version 0.5.2
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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 <a href="https://ai.google.dev/docs/gemini_api_overview">https://ai.google.dev/docs/gemini_api_overview</a> .
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<b>Depends</b> R (>= $4.0.0$ )
<pre>URL https://github.com/jhk0530/gemini.R</pre>
BugReports https://github.com/jhk0530/gemini.R/issues Encoding UTF-8 Imports base64enc, cli, httr2 RoxygenNote 7.3.2 Suggests testthat (>= 3.0.0) Config/testthat/edition 3 Config/Needs/website rmarkdown NeedsCompilation no
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addHistory Add history for chating context
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# **Description**

Add history for chating 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

#### **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.

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#### 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 bject 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.

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#### 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)</pre>
```

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

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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)
```

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