

# Package: chatgpt (via r-universe)

July 4, 2024

**Type** Package

**Title** Interface to 'ChatGPT' from R

**Version** 0.2.3

**Maintainer** Juan Cruz Rodriguez <jcrodriguez@unc.edu.ar>

**Description** 'OpenAI's 'ChatGPT' <<https://chat.openai.com/>> coding assistant for 'RStudio'. A set of functions and 'RStudio' addins that aim to help the R developer in tedious coding tasks.

**License** GPL (>= 3)

**URL** <https://github.com/jcrodriguez1989/chatgpt>

**BugReports** <https://github.com/jcrodriguez1989/chatgpt/issues>

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 7.2.3

**Imports** clipr, httr, jsonlite, miniUI, rstudioapi, shiny, utils

**Repository** <https://jcrodriguez1989.r-universe.dev>

**RemoteUrl** <https://github.com/jcrodriguez1989/chatgpt>

**RemoteRef** HEAD

**RemoteSha** 65969e3e2fd476129bd0cbbe5abf0053ed2119e6

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### Description

'OpenAI's 'ChatGPT' <https://chat.openai.com/> coding assistant for 'RStudio'. A set of functions and 'RStudio' addins that aim to help the R developer in tedious coding tasks.

### Author(s)

**Maintainer:** Juan Cruz Rodriguez <[jcrodriguez@unc.edu.ar](mailto:jcrodriguez@unc.edu.ar)>

### See Also

Useful links:

- <https://github.com/jcrodriguez1989/chatgpt>
- Report bugs at <https://github.com/jcrodriguez1989/chatgpt/issues>

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ask_chatgpt	<i>Ask ChatGPT</i>
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### Description

Note: See also 'reset\_chat\_session'.

### Usage

```
ask_chatgpt(question)
```

### Arguments

question      The question to ask ChatGPT.

**Value**

A character value with the response generated by ChatGPT.

**Examples**

```
## Not run:  
cat(ask_chatgpt("What do you think about R language?"))  
  
## End(Not run)
```

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comment_code	<i>ChatGPT: Comment Code</i>
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**Description**

ChatGPT: Comment Code

**Usage**

```
comment_code(code = clipr::read_clip(allow_non_interactive = TRUE))
```

**Arguments**

code	The code to be commented by ChatGPT. If not provided, it will use what's copied on the clipboard.
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**Value**

A character value with the response generated by ChatGPT.

**Examples**

```
## Not run:  
cat(comment_code("for (i in 1:10) {\n  print(i ** 2)\n}"))  
  
## End(Not run)
```

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complete_code	<i>ChatGPT: Complete Code</i>
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**Description**

ChatGPT: Complete Code

**Usage**

```
complete_code(code = clipr::read_clip(allow_non_interactive = TRUE))
```

**Arguments**

code	The code to be completed by ChatGPT. If not provided, it will use what's copied on the clipboard.
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**Value**

A character value with the response generated by ChatGPT.

**Examples**

```
## Not run:  
cat(complete_code("# A function to square each element of a vector\nsquare_each <- function("))  
## End(Not run)
```

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create_unit_tests	<i>ChatGPT: Create Unit Tests</i>
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**Description**

Create 'testthat' test cases for the code.

**Usage**

```
create_unit_tests(code = clipr::read_clip(allow_non_interactive = TRUE))
```

**Arguments**

code	The code for which to create unit tests by ChatGPT. If not provided, it will use what's copied on the clipboard.
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**Value**

A character value with the response generated by ChatGPT.

**Examples**

```
## Not run:  
cat(create_unit_tests("squared_numbers <- function(numbers) {\n  numbers ^ 2\n}"))  
  
## End(Not run)
```

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create\_variable\_name    *ChatGPT: Create Variable Name*

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**Description**

ChatGPT: Create Variable Name

**Usage**

```
create_variable_name(code = clipr::read_clip(allow_non_interactive = TRUE))
```

**Arguments**

code                    The code for which to give a variable name to its result. If not provided, it will use what's copied on the clipboard.

**Value**

A character value with the response generated by ChatGPT.

**Examples**

```
## Not run:  
cat(create_variable_name("sapply(1:10, function(i) i ** 2)"))  
  
## End(Not run)
```

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document\_code            *ChatGPT: Document Code (in roxygen2 format)*

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**Description**

ChatGPT: Document Code (in roxygen2 format)

**Usage**

```
document_code(code = clipr::read_clip(allow_non_interactive = TRUE))
```

**Arguments**

code            The code to be documented by ChatGPT. If not provided, it will use what's copied on the clipboard.

**Value**

A character value with the response generated by ChatGPT.

**Examples**

```
## Not run:
cat(document_code("square_numbers <- function(numbers) numbers ** 2"))

## End(Not run)
```

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explain_code	<i>ChatGPT: Explain Code</i>
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**Description**

ChatGPT: Explain Code

**Usage**

```
explain_code(code = clipr::read_clip(allow_non_interactive = TRUE))
```

**Arguments**

code            The code to be explained by ChatGPT. If not provided, it will use what's copied on the clipboard.

**Value**

A character value with the response generated by ChatGPT.

**Examples**

```
## Not run:
cat(explain_code("for (i in 1:10) {\n  print(i ** 2)\n}"))

## End(Not run)
```

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find\_issues\_in\_code    *ChatGPT: Find Issues in Code*

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**Description**

ChatGPT: Find Issues in Code

**Usage**

```
find_issues_in_code(code = clipr::read_clip(allow_non_interactive = TRUE))
```

**Arguments**

code                    The code to be analyzed by ChatGPT. If not provided, it will use what's copied on the clipboard.

**Value**

A character value with the response generated by ChatGPT.

**Examples**

```
## Not run:  
cat(find_issues_in_code("i <- 0\nwhile (i < 0) {\n  i <- i - 1\n}"))  
  
## End(Not run)
```

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gpt\_get\_completions    *Get GPT Completions Endpoint*

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**Description**

Get GPT Completions Endpoint

**Usage**

```
gpt_get_completions(  
  prompt,  
  openai_api_key = Sys.getenv("OPENAI_API_KEY"),  
  messages = NULL  
)
```

**Arguments**

prompt                    The prompt to generate completions for.  
openai\_api\_key    OpenAI's API key.  
messages                Available variable, to send the needed messages list to ChatGPT.

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optimize_code	<i>ChatGPT: Optimize Code</i>
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**Description**

ChatGPT: Optimize Code

**Usage**

```
optimize_code(code = clipr::read_clip(allow_non_interactive = TRUE))
```

**Arguments**

code	The code to be optimized by ChatGPT. If not provided, it will use what's copied on the clipboard.
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**Value**

A character value with the response generated by ChatGPT.

**Examples**

```
## Not run:  
cat(optimize_code("i <- 10\nwhile (i > 0) {\n  i <- i - 1\n  print(i)\n}")  
  
## End(Not run)
```

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parse_response	<i>Parse OpenAI API Response</i>
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**Description**

Takes the raw response from the OpenAI API and extracts the text content from it.

**Usage**

```
parse_response(raw_responses)
```

**Arguments**

raw_responses	The raw response object returned by the OpenAI API.
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**Value**

Returns a character vector containing the text content of the response.



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refactor_code	<i>ChatGPT: Refactor Code</i>
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**Description**

ChatGPT: Refactor Code

**Usage**

```
refactor_code(code = clipr::read_clip(allow_non_interactive = TRUE))
```

**Arguments**

code	The code to be refactored by ChatGPT. If not provided, it will use what's copied on the clipboard.
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**Value**

A character value with the response generated by ChatGPT.

**Examples**

```
## Not run:  
cat(refactor_code("i <- 10\nwhile (i > 0) {\n  i <- i - 1\n  print(i)\n}"))  
  
## End(Not run)
```

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reset_chat_session	<i>Reset Chat Session</i>
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**Description**

This function is intended to be used with 'ask\_chatgpt'. If we are using 'ask\_chatgpt' to chat with ChatGPT, and we want to start a new conversation, we must call 'reset\_chat\_session'.

**Usage**

```
reset_chat_session(system_role = "You are a helpful assistant.")
```

**Arguments**

system_role	ChatGPT's role as an AI assistant.
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run_addin	<i>Run a ChatGPT RStudio Addin</i>
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**Description**

Run a ChatGPT RStudio Addin

**Usage**

```
run_addin(addin_name)
```

**Arguments**

addin\_name      The name of the adding to execute.

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run_addin_ask_chatgpt	<i>Ask ChatGPT</i>
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**Description**

Opens an interactive chat session with ChatGPT

**Usage**

```
run_addin_ask_chatgpt()
```

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