ChatGPT 與 OpenAI API

生成式 AI 應用

生成式 AI 是什麼？

① **深度學習技術（Deep Learning）**

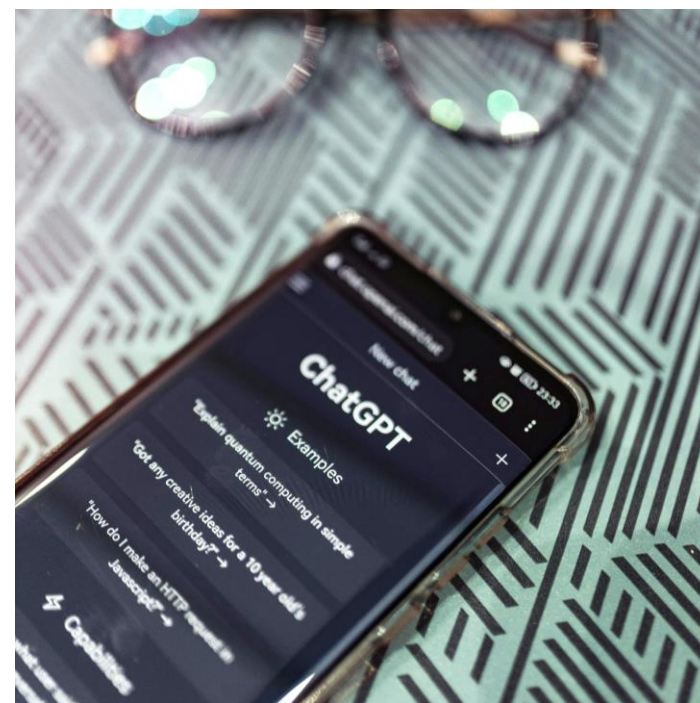使用深度學習技術來創建新的、未見過的內容的人工智能。

② **生成式 AI （Generative AI）**

從數據中學習，還能在學到的模式的基礎上生成新的輸出。

③ **電腦視覺領域**

可用來創建全新的圖像或者修改現有的圖像。

④ **自然語言處理領域**
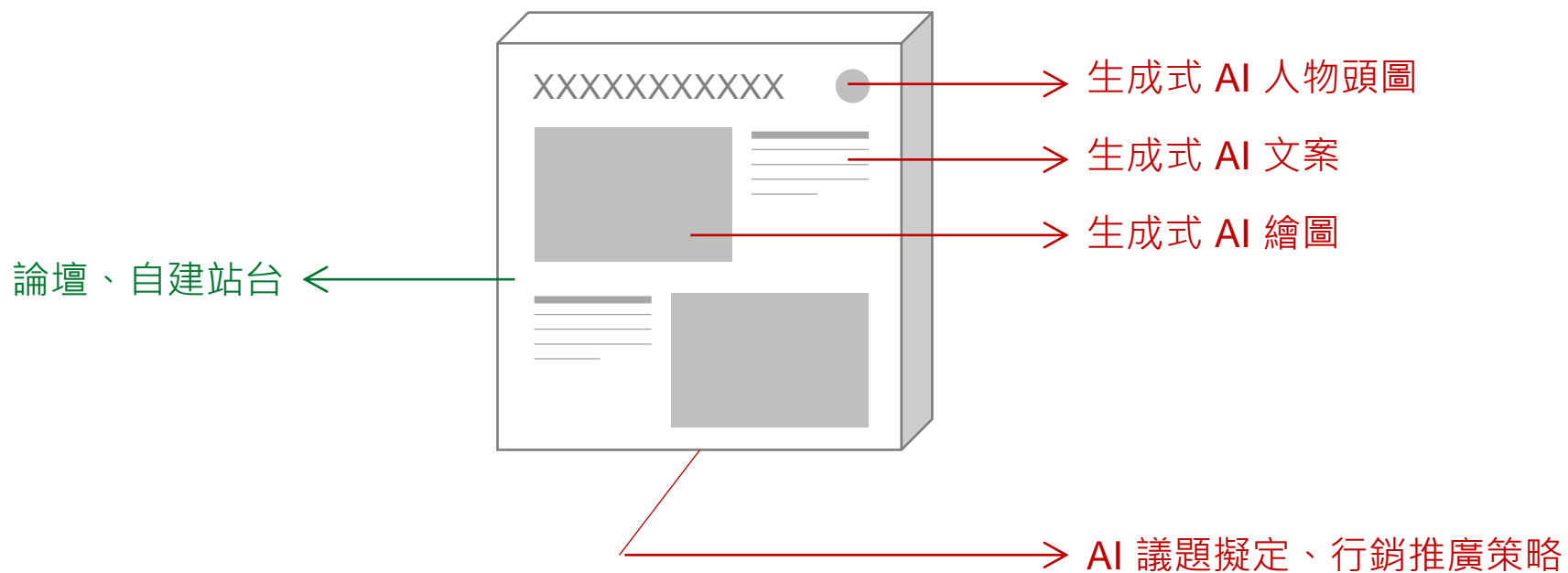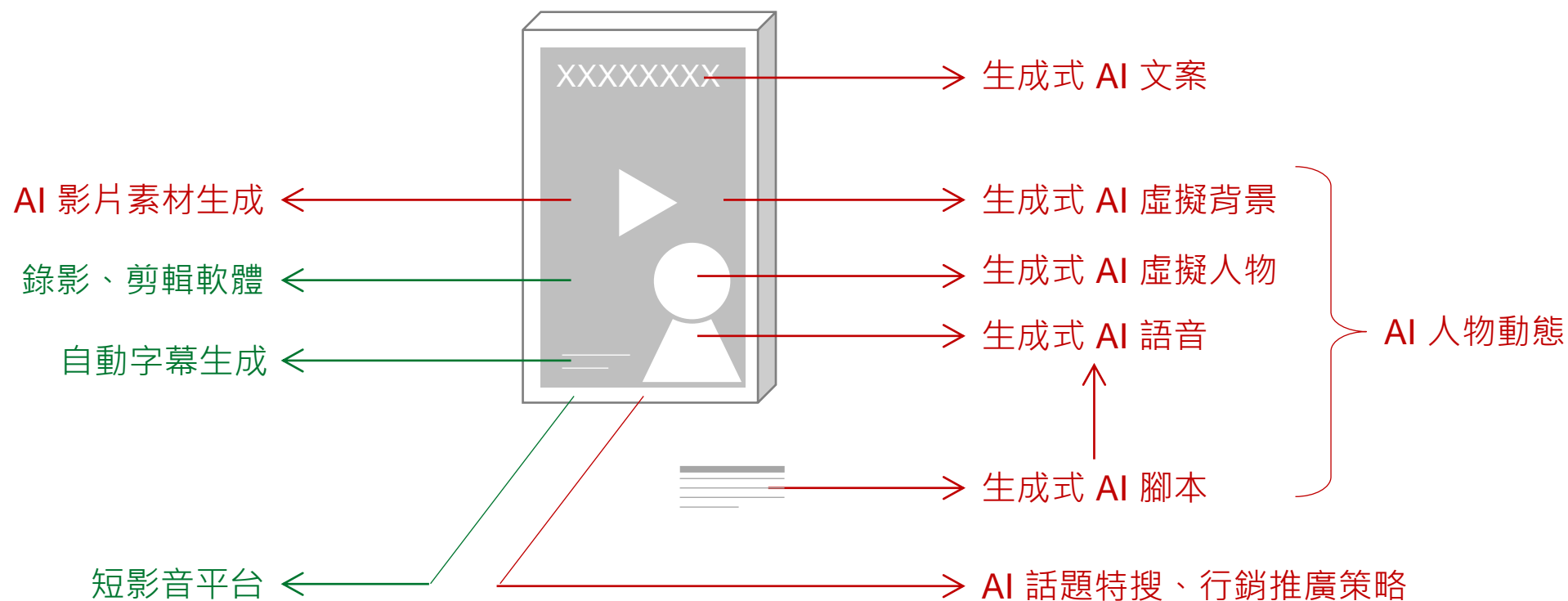
可用來生成全新的文本，比如寫文章、寫詩、寫故事等。

應用場景 1 : **Blog**

XXXXXXXXXXXX

生成式 AI 人物頭圖

生成式 AI 文案

生成式 AI 繪圖

論壇、自建站台

AI 議題擬定、行銷推廣策略

應用場景 2：Podcast

生成式 AI 人物頭圖

生成式 AI 文案

生成式 AI 繪圖

Podcast 錄音軟體

Podcast 平台

生成式 AI 語音

生成式 AI 腳本

AI 話題發想、行銷推廣策略

應用場景 3：短影音

生成式 AI 文案

AI 影片素材生成

錄影、剪輯軟體

自動字幕生成

生成式 AI 虛擬背景

生成式 AI 虛擬人物

生成式 AI 語音

AI 人物動態

生成式 AI 腳本

短影音平台

AI 話題特搜、行銷推廣策略

應用場景 4：直播

生成式 AI 文案

AI 影片素材生成

錄影、剪輯軟體

自動字幕生成

生成式 AI 虛擬背景

生成式 AI 虛擬人物

生成式 AI 語音

跨平台串流媒體

AI 人物動態

生成式 AI 腳本

直播平台

AI 話題特搜、行銷推廣策略
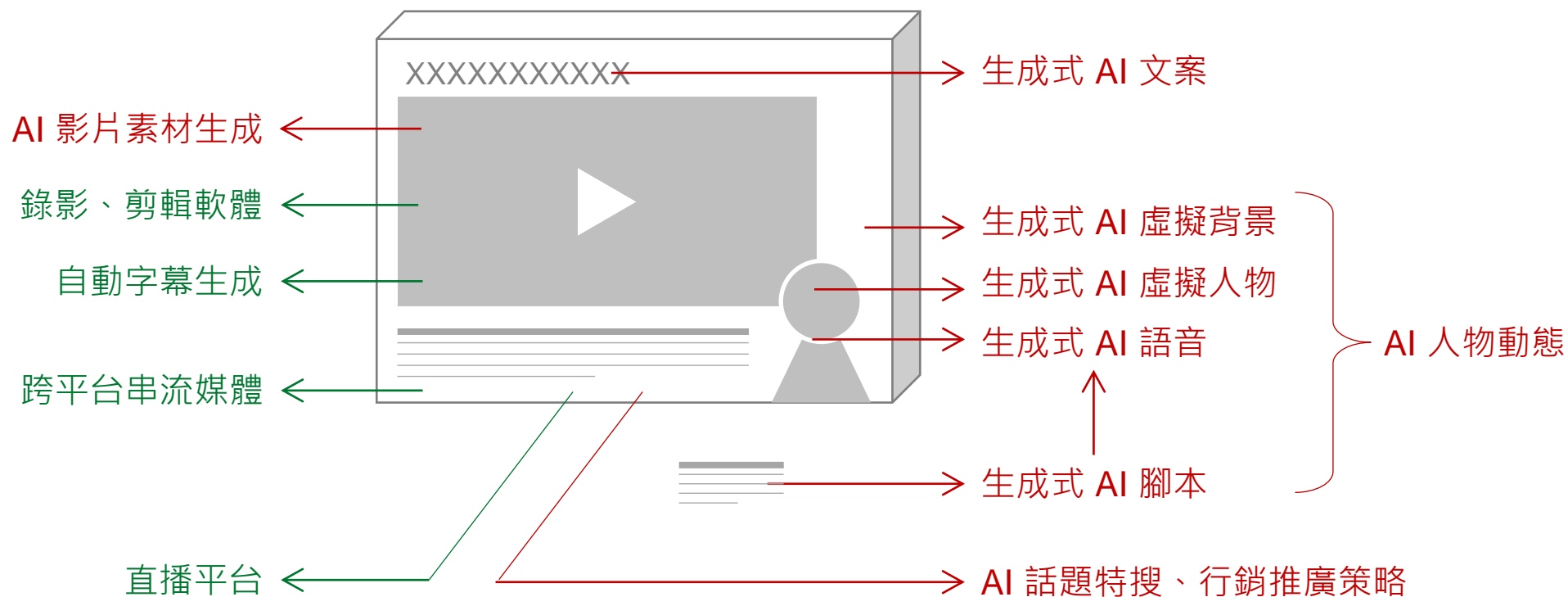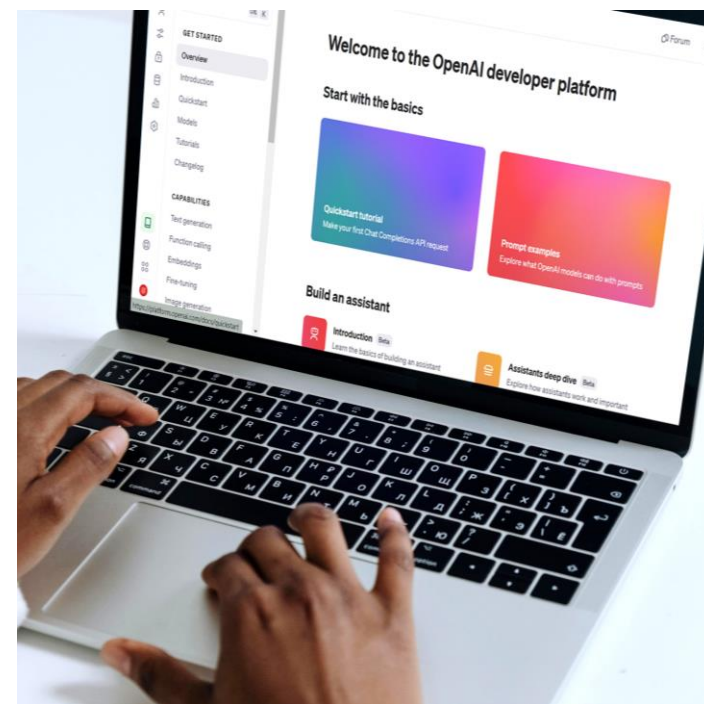
ChatGPT 與 OpenAI API

OpenAI API 初探

OpenAI API 介紹

① 透過 OpenAI API，我們能夠大幅縮減繁瑣的程式碼撰寫時間，並透過更高效率的方法完成任務。

② ChatGPT 是一個單純使用的介面，若要將 ChatGPT 的功能放到 Line Bot 中，要進到 OpenAI Platform，找到 API 跟 相關程式碼，可以在 Python 程式中，進行開發。

找到 OpenAI API

如果有 ChatGPT 的帳號，就可以直接登入

OpenAI

Research ⌄   API ⌄   ChatGPT ⌄   Safety   Company ⌄
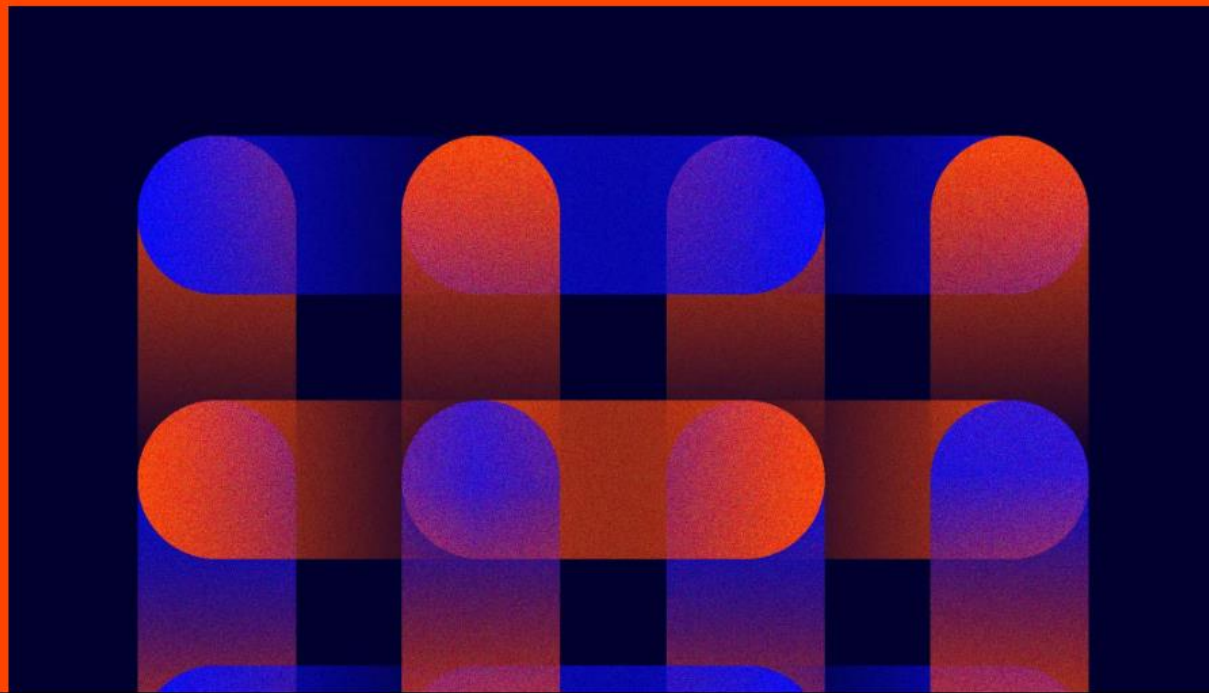
Search   Log in ↗   Try ChatGPT ↗

Blog

OpenAI API

We're releasing an API for accessing new AI models developed by OpenAI.

Sign up ↗   Explore the API

可直接使用 Google 登入

Welcome back

電子郵件地址

school.ccwork@gmail.com

繼續

沒有帳戶？ 註冊

或

G　繼續 Google

⊞　繼續 Microsoft Account

🍎　繼續 Apple

進入 OpenAI 介面

簡述 OpenAI Platform 常見功能

① Examples

② API Reference

③ Playground

④ User Account

🦄 Examples

| 🔍 Search | CTRL K |

GET STARTED

Overview

Introduction

Quickstart

Models

Tutorials

Changelog

CAPABILITIES

Text generation

Function calling

Embeddings

Fine-tuning

Image generation

Welcome to the OpenAI developer platform

Start with the basics

Quickstart tutorial
Make your first Chat Completions API request

Prompt examples
Explore what OpenAI models can do with prompts

Build an assistant

Introduction Beta
Learn the basics of building an assistant

Assistants deep dive Beta
Explore how assistants work and important

https://platform.openai.com/docs/quickstart

Examples

Prompt examples

提供 AI 使用情境，透過
prompt (提示語)，及數
值的設定，能夠幫助開發
者清楚認識 AI 如何應用

Explore what's possible with some example prompts

🔍 Search...   All categories ⇕

Grammar correction
Convert ungrammatical statements into standard English.

Summarize for a 2nd grader
Simplify text to a level appropriate for a second-grade student.

Parse unstructured data
Create tables from unstructured text.

Emoji Translation
Translate regular text into emoji text.

Calculate time complexity
Find the time complexity of a function.

Explain code
Explain a complicated piece of code.

Keywords

Product name generator

API reference 提供 OpenAI API 功能與程式寫法

Search ᴄᵀᴿᴸ K

GETTING STARTED

Introduction

Authentication

Making requests

Streaming

ENDPOINTS

Audio

Chat

Embeddings

Fine-tuning

Files

Images

Models

Introduction

You can interact with the API through HTTP requests from any language, via our official Python bindings, our official Node.js library, or a **community-maintained library**.

To install the official Python bindings, run the following command:

```
pip install openai
```

To install the official Node.js library, run the following command in your Node.js project directory:

```
npm install openai@^4.0.0
```

Authentication

The OpenAI API uses API keys for authentication. Visit your **API Keys** page to retrieve the API key you'll use in your requests.

API playground

CTRL K

- Playground
- Assistants
- Fine-tuning
- API keys
- Storage
- Usage
- Settings

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- Documentation
- Help
- All products
- Personal

https://platform.openai.com/playground

API playground

THREAD   ⟨Logs ⬚⟩

① API playground 是一個協助開發人員和網站建立者測試和驗證應用程式介面的工具
② Playground 可以做到很多聊天機器人的進階功能
③ 跟寫入 Line Bot 的 ChatGPT 有很多的相關性

Create an assistant

to get started with the **Assistants API** ↗

+ Create

Enter your message...

⬚   +   ▶ Run ⌄

Playground messages can be viewed by anyone at your organization using the API.

開啟 ChatGPT API playground

Playground | Assistants ⇕ | 🧪 Preview Learn about the Assistants API ↗

Chat

Assistants Beta

Complete Legacy

THREAD 🪄 Logs ⬚

Create an assistant

to get started with the Assistants API ↗

+ Create

Enter your message...

📎 + ▶ Run ⌄

Playground messages can be viewed by anyone at your organization using the API.

ChatGPT API playground

Get started ✕

Enter an instruction or select a preset, and watch the API respond with a message that attempts to match or answer the query.

You can control which model completes your request by changing the model.

KEEP IN MIND

↗ Use good judgment when sharing outputs, and attribute them to your name or company. Learn more.

∿ Requests submitted to our API and Playground will not be used to train or improve future models. Learn more.

📅 Each models' training data cuts off at a different time. Our newest models have knowledge of many current events up to April 2023. Learn more.

Playground [Chat ⇅]   Your presets ⇅   Save   View code   Share   ⋯

SYSTEM

You are a helpful assistant.

USER   Enter a user message here.

⊕ **Add message**

Submit ↺

Model

gpt-3.5-turbo ⇅

Temperature   1

Maximum length   256

Stop sequences
Enter sequence and press Tab

Top P   1

Frequency penalty   0

Presence penalty   0

Model 選擇與 ChatGPT 一樣的版本

User Account 可檢視帳戶狀態以及可使用功能

檢視 All products

會顯示已經串起 OpenAI API 的資源

Playground ⟨ Chat ⟩   Your presets ⟨ ⟩   Save   View code   Share   ...

Playground
Assistants
Fine-tuning
API keys
Storage
Usage
Settings

| Documentation |
| Help |
| All products |
| Personal |

✕

or select a preset, and
ond with a message that
or answer the query.

ch model completes
nging the model.

dgment when
uts, and attribute
name or company.

bmitted to our API
und will not be used
prove future
rn more.

;' training data cuts
ent time. Our

More from OpenAI

⬤ ChatGPT

▬ DALL·E 2

SYSTEM

You are a helpful
assistant.

USER   Enter a user message here.

⊕ **Add message**

Submit ↺

Model

gpt-3.5-turbo ⟨ ⟩

Temperature   1

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Stop sequences
Enter sequence and press Tab

Top P   1

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API and Playground

ChatGPT 與 OpenAI API

User Account 說明

User Account 說明

① ChatGPT 並非完全免費的資源，如果要持續使用，要注意使用的方案及費用計算方式。

② 新註冊的帳號，有提供 US$5 的免費額度。

③ 免費額度最長可以使用到註冊的 3個月 內。

可以在 Usage 查詢付費的狀況
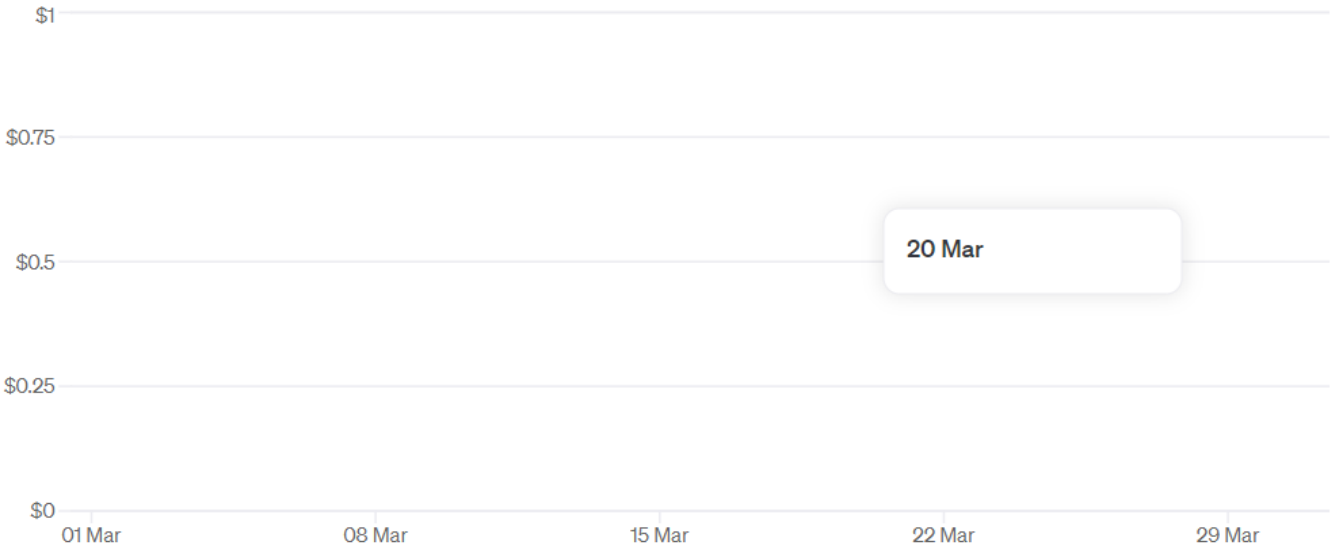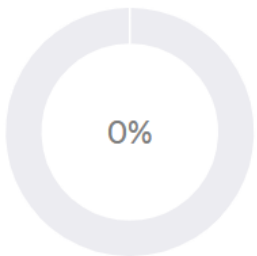
功能分項說明（Settings）→ Organization

Organization

Details

Organization name

Human-friendly label for your organization, shown in user interfaces

Personal

Organization ID

Identifier for this organization sometimes used in API requests

org-CCT9VWJsIL8nIO9FMp1ZqzQt

OpenAI 名稱與 ID

Features and capabilities

Threads

Threads page shows messages created with the Assistants API and Playground.

- ⦿ Hidden
- ◯ Visible to organization owners
- ◯ Visible to everyone

Usage dashboard visibility

Usage dashboard shows activity and costs for your organization.

- ◯ Visible to organization owners
- ⦿ Visible to everyone

Sidebar navigation

- Playground
- Assistants
- Fine-tuning
- API keys
- Storage
- Usage
- Settings
- Organization
- Team
- Limits
- Billing
- Profile
- Documentation
- Help
- All products
- Personal

Team

Team

Playground

Assistants

Fine-tuning

API keys

Storage

Usage

Settings

Organization

Creator Training School 創創 AI 數位學院 You
school.ccwork@gmail.com

Owner

Leave

Team

管理使用帳號的成員

Limits

Billing

Profile

Documentation

Help

All products

Personal

Limits – API 的計算方式，是以 tokens 來計算

Limits

Rate limits

API usage is subject to rate limits applied on tokens per minute (TPM), requests per minute or day (RPM/RPD), and other model-specific limits. Your organization's rate limits are listed below.

Visit our rate limits guide to learn more about how rate limits work.

ⓘ **Note:** Limits for specific model versions may vary, expand the table to see all models.

MODEL	TOKEN LIMITS	REQUEST AND OTHER LIMITS
gpt-3.5-turbo	40,000 TPM	3 RPM / 200 RPD
gpt-4	10,000 TPM	3 RPM / 200 RPD
gpt-4-turbo-preview	10,000 TPM	3 RPM / 200 RPD
text-embedding-3-small	150,000 TPM	3 RPM / 200 RPD
dall-e-3		3 RPM / 200 RPD

Playground
Assistants
Fine-tuning
API keys
Storage
Usage
Settings
Organization
Team
Limits
Billing
Profile
Documentation
Help
All products
Personal

API Request 的使用限制

Limits – API 的計算方式，是以 tokens 來計算

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gpt-4-turbo-preview	10,000 TPM	3 RPM / 200 RPD
text-embedding-3-small	150,000 TPM	3 RPM / 200 RPD
dall-e-3		3 RPM / 200 RPD

Sidebar
- Playground
- Assistants
- Fine-tuning
- API keys
- Storage
- Usage
- Settings
  - Organization
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  - **Limits**
  - Billing
  - Profile
- Documentation
- Help
- All products
- Personal

Token 是什麼

① 傳統機器翻譯以字元（chars）計費，OpenAI 則以 token 計算用戶使用 ChatGPT 的費用。

② token 對比字數約略計算如下：

- 1 token ≈ 4 chars（字元）in English。
- 1 token ≈ ¾ words。
- 100 tokens ≈ 75 words
- 每寫 1 個英文字；中文則只能寫 0.5 個字。
- 每個字耗費的平均 token 數：
  繁體中文 2.03 tokens，英文 1.25 tokens。

OpenAI 官網 不同模式收費說明

Limits

Rate limits

API usage is subject to rate limits applie
(RPM/RPD), and other model-specific lin

Visit our rate limits guide to learn more a

Model	Input	Output
gpt-4-0125-preview	$10.00 / 1M tokens	$30.00 / 1M tokens
gpt-4-1106-preview	$10.00 / 1M tokens	$30.00 / 1M tokens
gpt-4-1106-vision-preview	$10.00 / 1M tokens	$30.00 / 1M tokens

ℹ **Note:** Limits for specific model versions may vary, expand the table to see all models.

MODEL	TOKEN LIMITS	REQUEST AND OTHER LIMITS
gpt-3.5-turbo	40,000 TPM	3 RPM 200 RPD
gpt-4	10,000 TPM	3 RPM 200 RPD
gpt-4-turbo-preview	10,000 TPM	3 RPM 200 RPD
text-embedding-3-small	150,000 TPM	3 RPM 200 RPD
dall-e-3		3 RPM

Sidebar

- Playground
- Assistants
- Fine-tuning
- API keys
- Storage
- Usage
- Settings
  - Organization
  - Team
  - **Limits**
  - Billing
  - Profile
- Documentation
- Help
- All products
- Personal

Billing Settings

Billing settings

Overview Payment methods Billing history Preferences

Pay as you go

Credit balance ⓘ

$0.00

查詢帳單與付費狀況

◉ **Auto recharge is off**

When your credit balance reaches $0, your API requests will stop working. Enable automatic recharge to automatically keep your credit balance topped up.

Enable auto recharge

Add to credit balance   Cancel plan

🟩 **Payment methods** Add or change payment method	🟪 **Billing history** View past and current invoices
🟪 **Preferences** Manage billing information	🟥 **Usage limits** Set monthly spend limits

Sidebar

- ▸ Playground
- 🤖 Assistants
- Fine-tuning
- 🔒 API keys
- 🗄 Storage
- Usage
- ⚙ Settings
- Organization
- Team
- Limits
- **Billing**
- Profile
- 📖 Documentation
- ⊚ Help
- 88 All products
- 🦄 Personal

新註冊的帳號，有提供 US$5 的免費額度。

- Playground
- Assistants
- Fine-tuning
- API keys
- Storage
- Usage
- Settings
- Organization
- Team
- **Limits**
- Billing
- Profile
- Documentation
- Help
- All products
- Personal

$120.00

Set a monthly budget

If your organization exceeds this budget in a given calendar month (UTC), subsequent API requests will be rejected.

$120.00

Set an email notification threshold

If your organization exceeds this threshold in a given calendar month (UTC), an email notification will be sent.

$96.00

Save

Increasing your limits

Your organization is currently in **Free**. Your limits will automatically be increased once you move to the next usage tier based on the criteria outlined below. Visit our usage tiers documentation to learn more about the limits associated with each tier.

Current tier
Free

Once the following criteria are met, you'll automatically move to the next tier:
- At least **$5** spent on the API since account creation.

View payment history   Buy credits

Next tier
Usage tier 1

ChatGPT 與 OpenAI API

課後練習

課後練習

① 除了教材上的範例，請再試想 2 種生成式 AI 的應用。

② 請拿一篇約一兩百字的文章，透過上面的字數，去計算該文章所需要的 token 數。