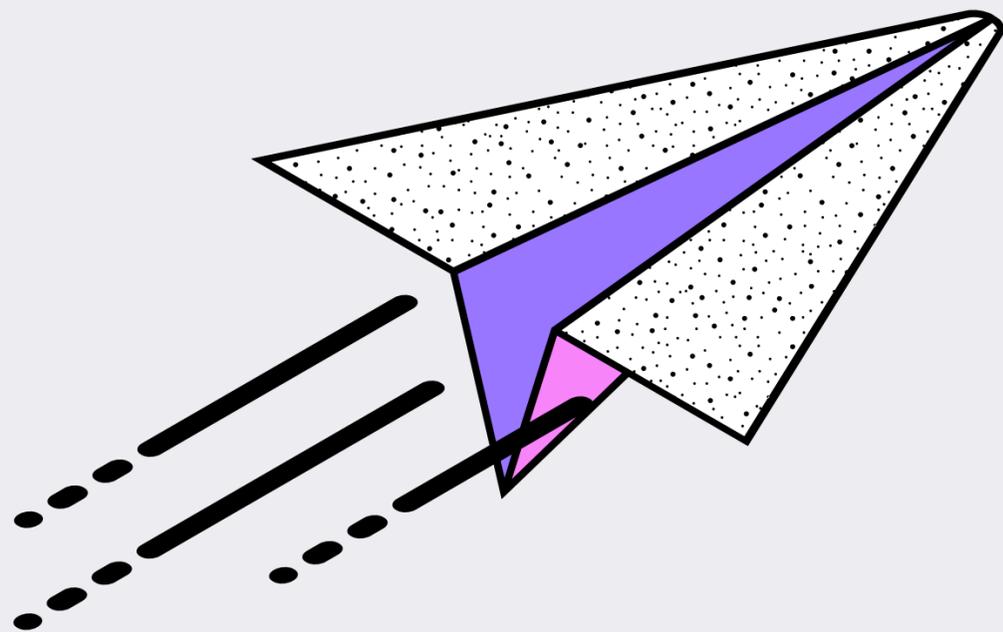


GitHub Copilot × VS Code 微教學

微教學導航



Step 1 : 註冊 GitHub 帳號

Step 2 : 安裝 Visual Studio Code (VS Code)

Step 3 : 安裝 Copilot 擴充套件

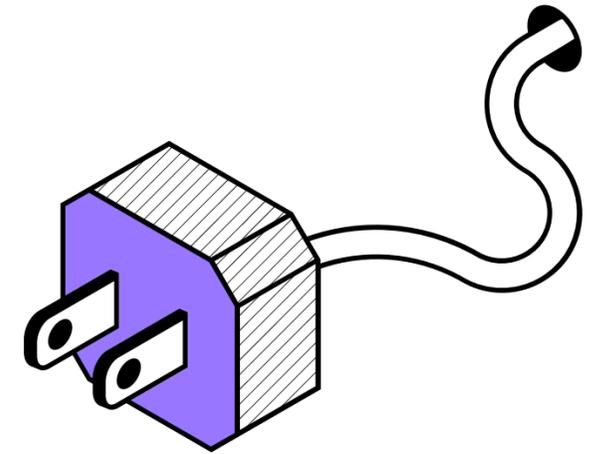
Step 4 : 登入 GitHub 並啟用 Copilot Free

Step 5 : 授權連結 VS Code 和 GitHub

Step 6 : 設定 GitHub Copilot

Step 7 : 開始寫程式

✅ Step 1 : 註冊 GitHub 帳號



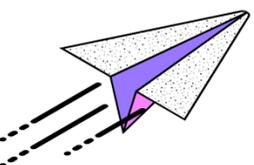
A screenshot of the GitHub homepage. The navigation bar includes links for Product, Solutions, Resources, Open Source, Enterprise, and Pricing, along with a search icon, 'Sign in', and 'Sign up' buttons. The main heading reads 'Build and ship software on a single, collaborative platform'. Below this is the tagline 'Join the world's most widely adopted AI-powered developer platform.' At the bottom, there is a registration form with an email input field containing '@mail.ntou.edu.tw|', a green 'Sign up for GitHub' button (highlighted with a red border), and a 'Try GitHub Copilot' button.

1. 前往 github.com

2. 輸入你的 E-mail 帳號

3. Sign up for GitHub

4. 依指示完成帳號註冊



✓ Step 2 : 安裝 Visual Studio Code (VS Code)

1. 前往 code.visualstudio.com
2. 下載並安裝適用於你作業系統的版本 (Windows/macOS/Linux)

Visual Studio Code Docs Updates Blog API Extensions FAQ GitHub Copilot Search Docs Download

Try [agent mode](#) in VS Code!

Your code editor. Redefined with AI.

[Download for Windows](#) Try agent mode

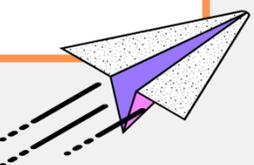
[Web](#), [Insiders edition](#), or [other platforms](#)

Download Visual Studio Code

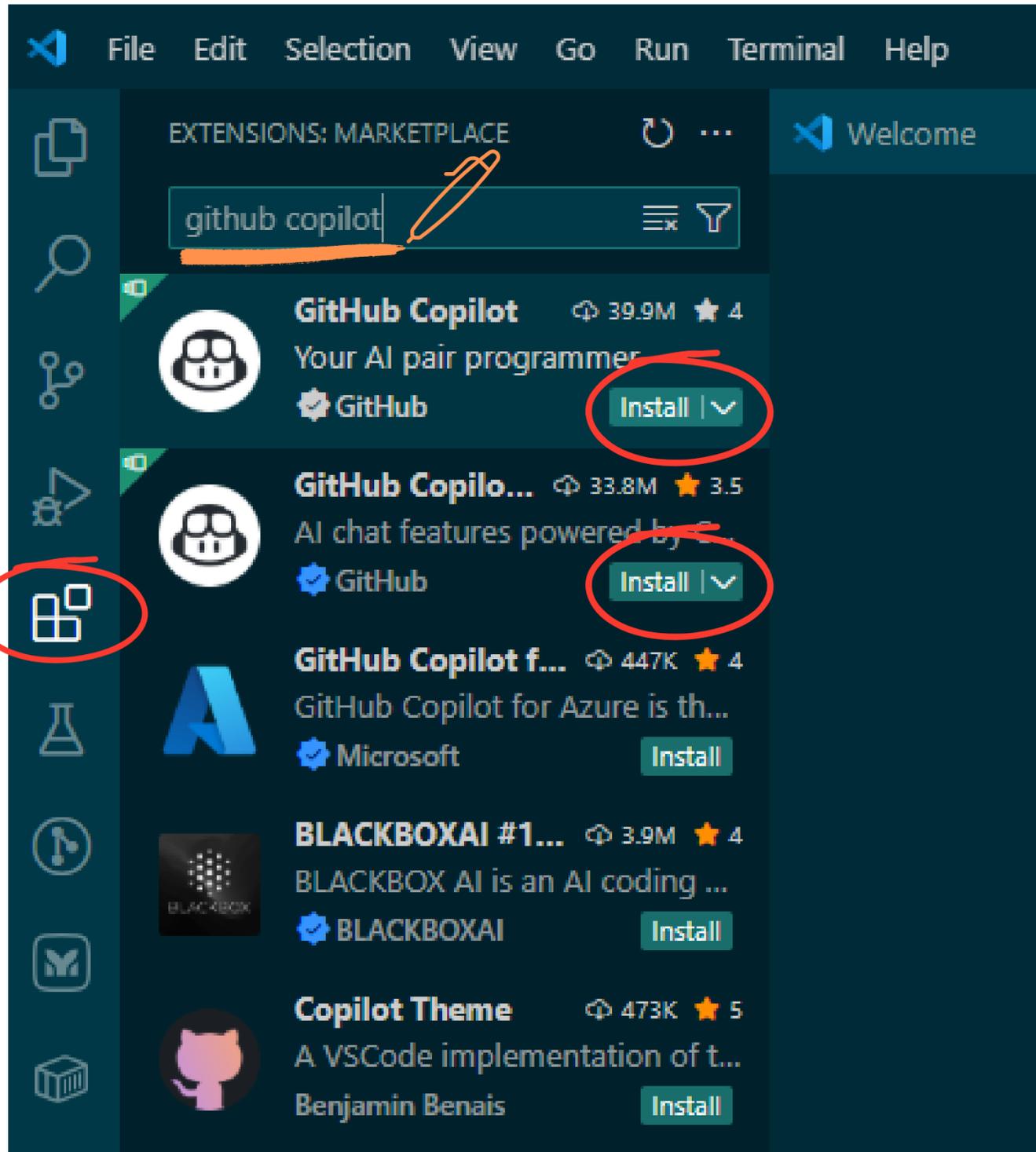
Free and built on open source. Integrated Git, debugging and extensions.

Platform	Download Link	Supported OS/Architectures
Windows	↓ Windows	Windows 10, 11
Linux	↓ .deb	Debian, Ubuntu
Linux	↓ .rpm	Red Hat, Fedora, SUSE
Mac	↓ Mac	macOS 10.15+

Platform	Download Link	Supported OS/Architectures
Windows	User Installer	x64 Arm64
Windows	System Installer	x64 Arm64
Windows	.zip	x64 Arm64
Windows	CLI	x64 Arm64
Linux	.deb	x64 Arm32 Arm64
Linux	.rpm	x64 Arm32 Arm64
Linux	.tar.gz	x64 Arm32 Arm64
Linux	Snap	Snap Store
Linux	CLI	x64 Arm32 Arm64
Mac	.zip	Intel chip Apple silicon Universal
Mac	CLI	Intel chip Apple silicon



✅ Step 3 : 安裝 Copilot 擴充套件



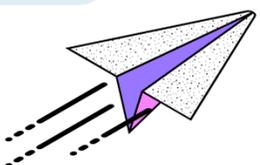
Extensions
擴充功能

1. 開啟 Visual Studio Code

2. 點擊左側工具列「擴充功能」圖示

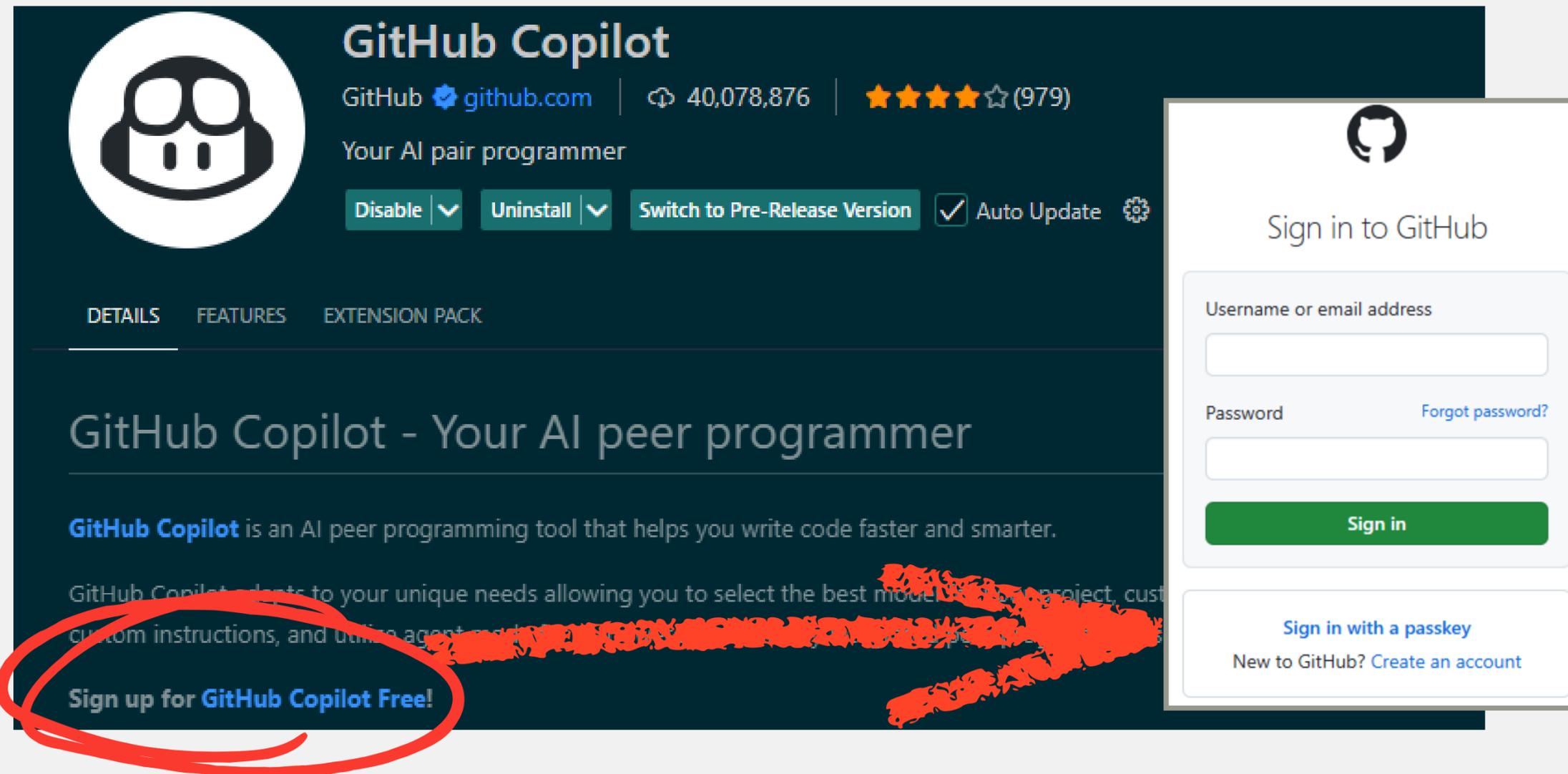
3. 在搜尋框輸入 " github copilot "

4. 安裝「GitHub Copilot」和
「GitHub Copilot Chat」

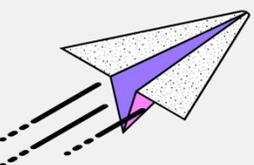


✓ Step 4 : 登入 GitHub 並啟用 Copilot Free - 1

方法一：安裝擴充功能後，從 DETAILS 頁面，點擊 Sign up for GitHub Copilot Free！前往登入。

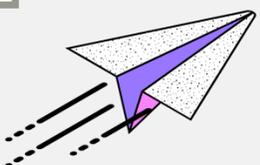
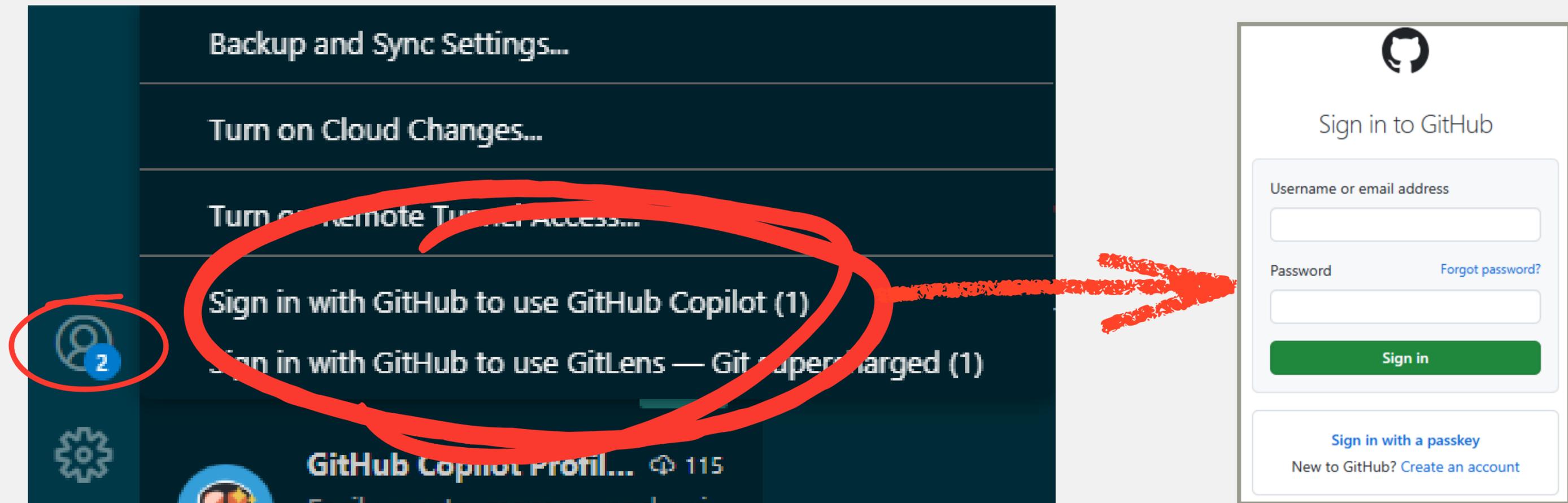


The image shows the GitHub Copilot extension interface. The main header includes the Copilot logo, the name "GitHub Copilot", the GitHub logo, the website "github.com", a star count of 40,078,876, and a rating of 4.5 stars (979 reviews). Below this, it says "Your AI pair programmer" and provides controls: "Disable", "Uninstall", "Switch to Pre-Release Version", and "Auto Update" (checked). Navigation tabs for "DETAILS", "FEATURES", and "EXTENSION PACK" are visible. The main content area features the heading "GitHub Copilot - Your AI peer programmer" and a description: "GitHub Copilot is an AI peer programming tool that helps you write code faster and smarter." A red circle highlights the "Sign up for GitHub Copilot Free!" link at the bottom. A sign-in modal is overlaid on the right, titled "Sign in to GitHub", with fields for "Username or email address" and "Password", a "Forgot password?" link, and a "Sign in" button. Below the modal, there is a "Sign in with a passkey" option and a link for "New to GitHub? Create an account".

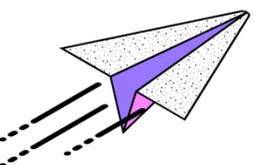
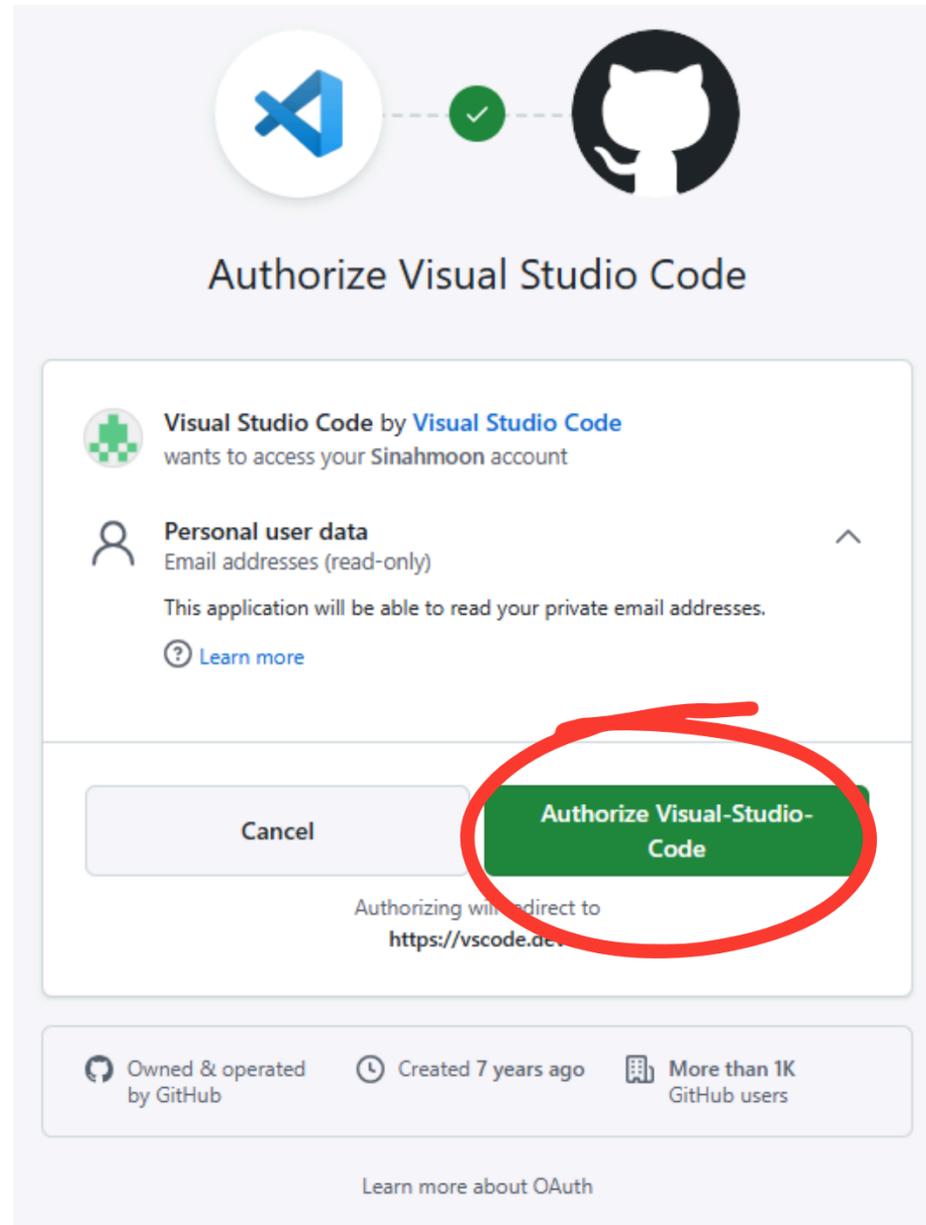


✔ Step 4 : 登入 GitHub 並啟用 Copilot Free - 2

方法二：點開 VS Code 左下角 Accounts，點擊 Sign in with GitHub to use GitHub Copilot (1) 前往登入

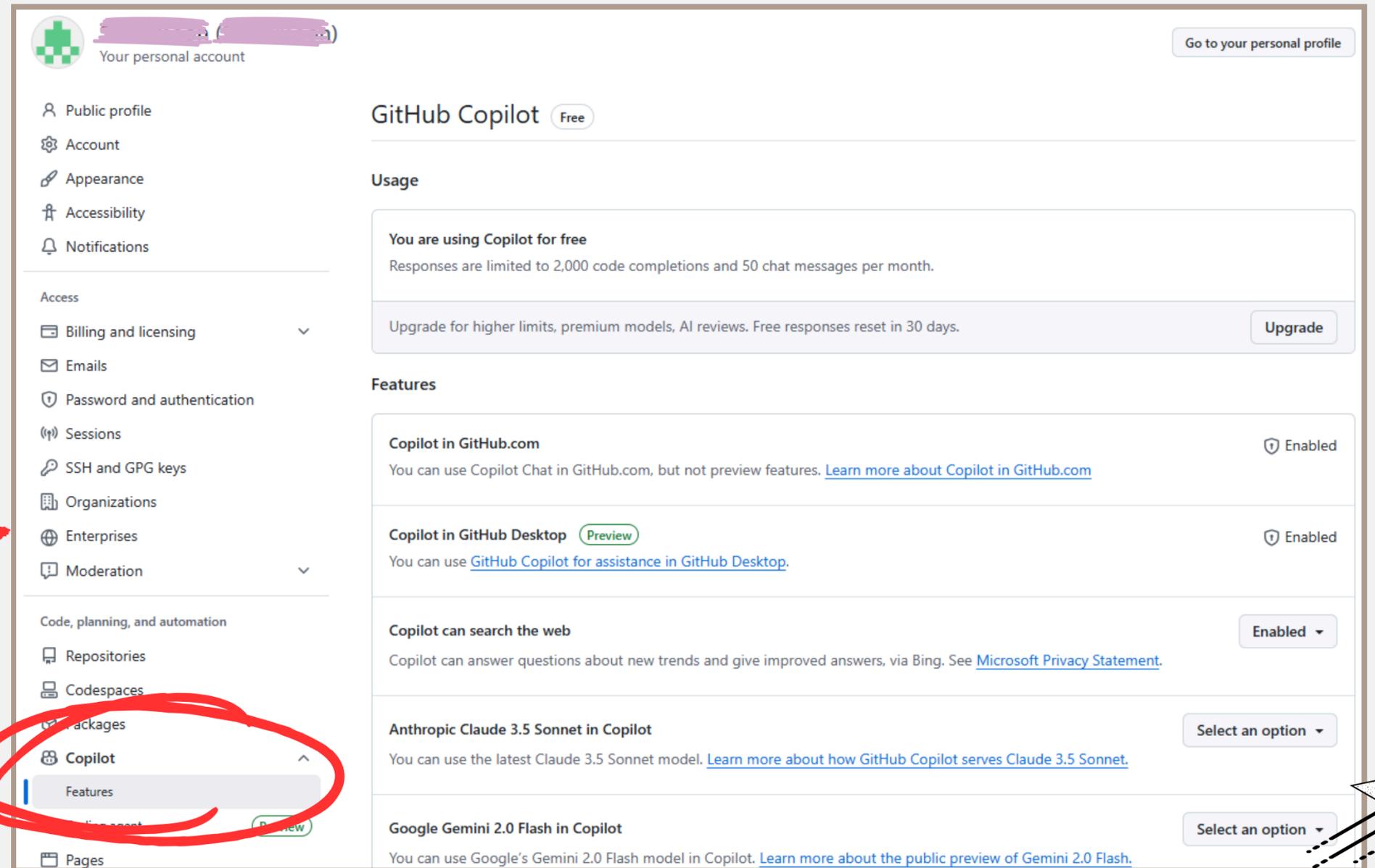
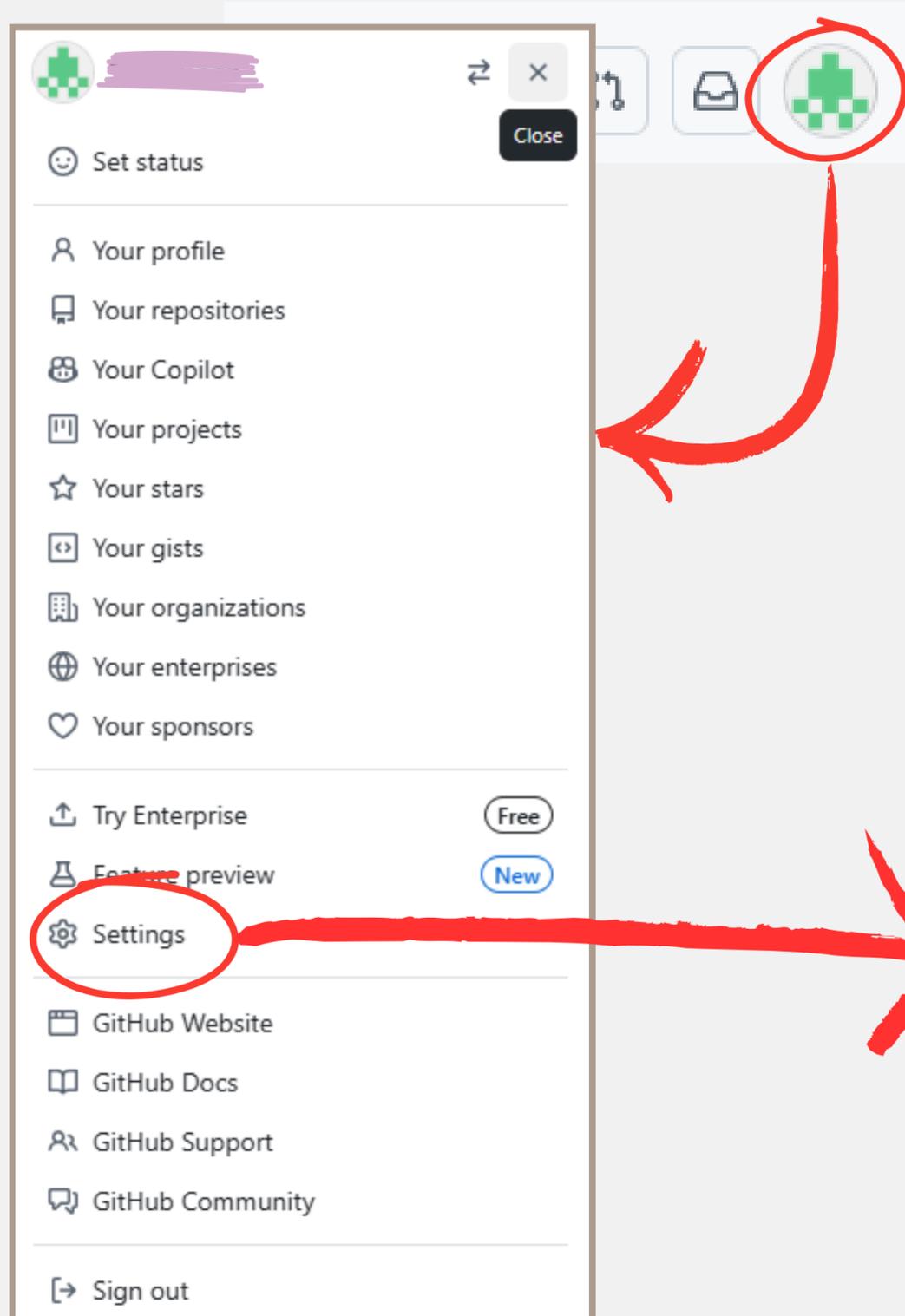


✅ Step 5 : 授權連結 VS Code 和 GitHub



✔ Step 6 : 設定 GitHub Copilot - 1

1. 前往 github.com 並登入你的帳號
2. 點選右上角大頭貼 → Settings (設定) → Copilot 或直接進入 <https://github.com/settings/copilot>





Step 6 : 設定 GitHub Copilot - 2

GitHub Copilot Free

Usage

You are using Copilot for free
Responses are limited to 2,000 code completions and 50 chat messages per month.

Upgrade for higher limits, premium models, AI reviews. Free responses reset in 30 days. Upgrade

Features

Copilot in GitHub.com You can use Copilot Chat in GitHub.com, but not preview features. Learn more about Copilot in GitHub.com	Enabled
Copilot in GitHub Desktop Preview You can use GitHub Copilot for assistance in GitHub Desktop .	Enabled
Copilot can search the web Copilot can answer questions about new trends and give improved answers, via Bing. See Microsoft Privacy Statement .	Enabled
Anthropic Claude 3.5 Sonnet in Copilot You can use the latest Claude 3.5 Sonnet model. Learn more about how GitHub Copilot serves Claude 3.5 Sonnet .	Enabled
Google Gemini 2.0 Flash in Copilot You can use Google's Gemini 2.0 Flash model in Copilot. Learn more about the public preview of Gemini 2.0 Flash .	Select an option
Dashboard entry point Allows instant chatting when landing on GitHub.com	

Enabled
You will have access to the feature

Disabled
You won't have access to the feature

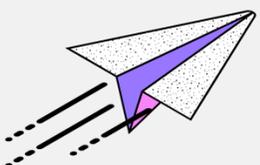
目前使用的 Copilot 版本

升級使用方案

是否允許 Copilot 搜尋網路

是否使用 Claude 模型

是否使用 Gemini 模型



✔ Step 6 : 設定 GitHub Copilot - 3

Privacy

Suggestions matching public code (duplication detection filter)

Allowed ▾

Copilot can allow or block suggestions matching public code. Learn more about [code suggestions](#).

Allow GitHub to use my data for product improvements

Allow GitHub, its affiliates and third parties to use my data, including Prompts, Suggestions, and Code Snippets, for product improvements. More information in the [Privacy Statement](#).

Allow GitHub to use my data for AI model training

Disabled

Allow GitHub, its affiliates and third parties to use my data, including Prompts, Suggestions, and Code Snippets, for AI model training. More information in the [Privacy Statement](#).

For more information about the data your organization receives regarding your use of GitHub Copilot, please review [GitHub's Privacy Statement](#).

i It can take up to 30 minutes for the changes to take effect. Restart your code editor for the changes to take effect immediately.

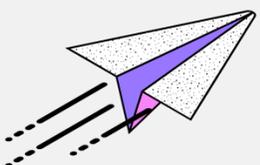
Visibility

Show Copilot

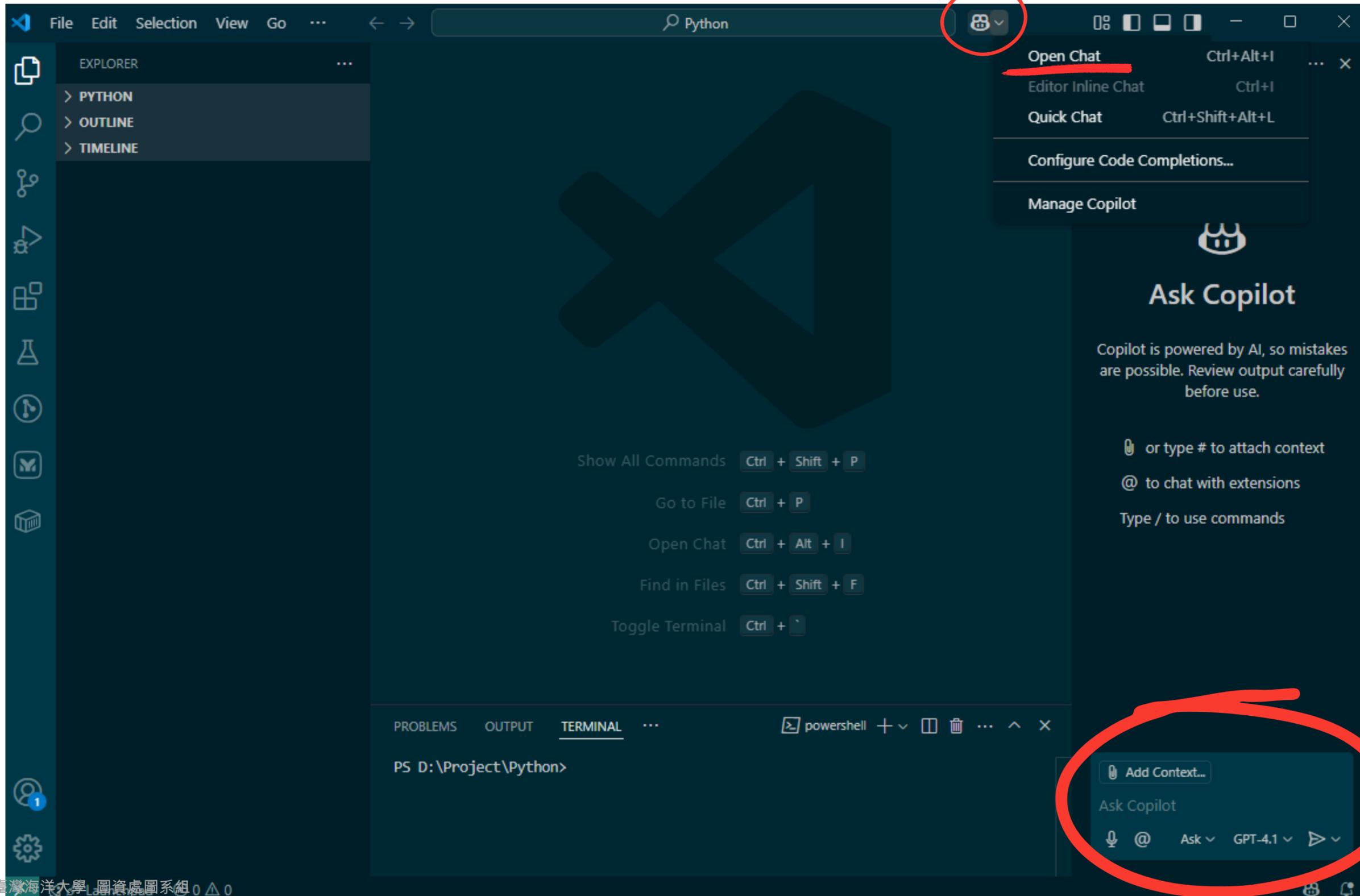
Enabled ▾

Enable Copilot for all GitHub features, including navigation bar, search, and dashboard. When disabled, Copilot will be hidden and unavailable.

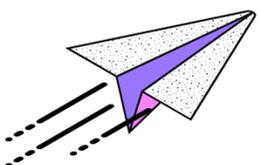
若不希望自己的資料被使用，取消勾選這個項目



✅ Step 7 : 開始寫程式 - 1



1. 依步驟設定完成後，VS Code 右側會出現 Ask Copilot 對話框
2. 若對話框未出現，可從上方 GitHub 圖示 Open chat

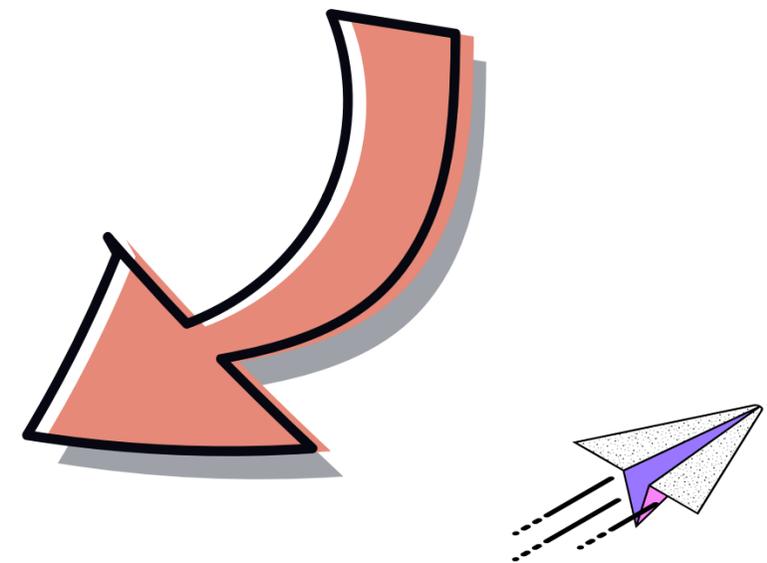


✔ Step 7 : 開始寫程式 - 2



The screenshot displays the Visual Studio Code interface. The main editor area shows a large 'X' watermark. The left sidebar contains the Explorer, Search, and Run and Debug views. The bottom status bar shows the current file path: PS D:\Project\Python>. The right sidebar is split into two panes. The top pane is the 'Ask Copilot' chat window, which includes the GitHub logo and the text 'Ask Copilot'. Below this, it states 'Copilot is powered by AI, so mistakes are possible. Review output carefully before use.' There are instructions for using context (e.g., '# to attach context') and commands (e.g., '/ to use commands'). The bottom pane is the Copilot settings panel, which shows 'Copilot Usage' with 'Code completions' at 0% and 'Chat messages' at 0.6%. It also shows 'Workspace Index' as 'Locally indexed'. Under 'Settings', 'Code Completions (all files)' and 'Next Edit Suggestions' are both checked. A red circle highlights the GitHub icon in the bottom right corner of the settings panel.

點擊下方工具列的
GitHub 圖示，可查
看 Copilot 使用狀況
與功能設定

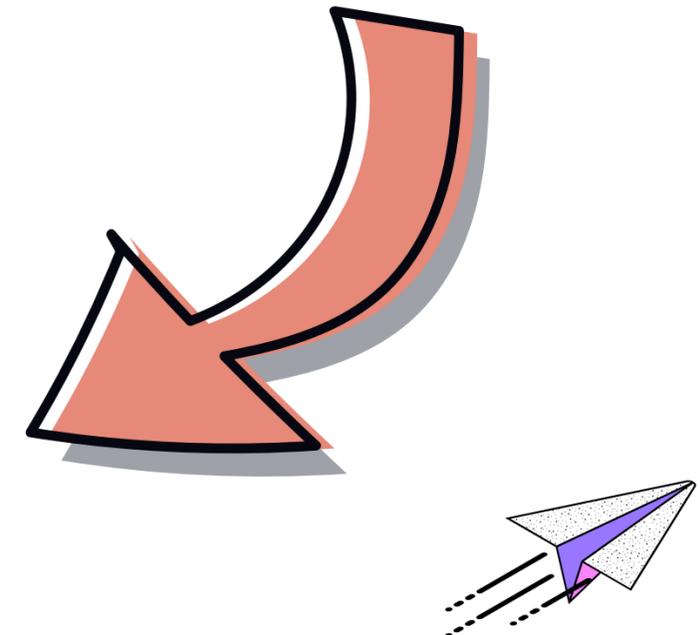


✔ Step 7 : 開始寫程式 - 3

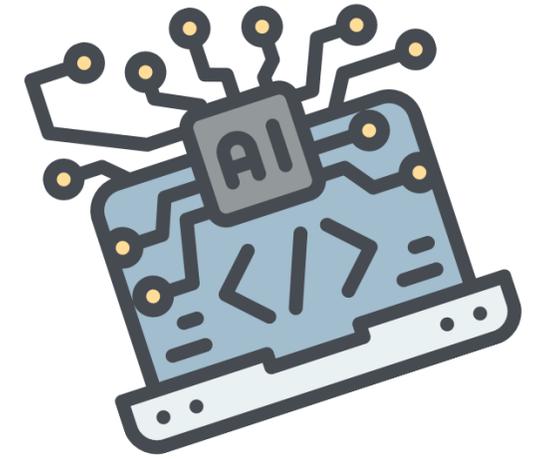


A screenshot of the Visual Studio Code editor interface. The main workspace is dark and contains a large, faint 'X' watermark. On the right side, the 'CHAT' panel is open, displaying the 'Ask Copilot' interface. Below the main text, a dropdown menu titled 'Copilot Models' is visible, listing several models: Claude 3.5 Sonnet, Gemini 2.0 Flash, GPT-4.1 (which is selected and circled in red), GPT-4o, and o3-mini. The bottom status bar shows the current model as 'GPT-4.1'. The terminal at the bottom displays the command prompt 'PS D:\Project\Python>'. The Explorer sidebar on the left shows a project structure with folders for 'PYTHON', 'OUTLINE', and 'TIMELINE'. The top menu bar includes 'File', 'Edit', 'Selection', 'View', and 'Go'. The search bar at the top contains the text 'Python'.

可選擇要交談的 AI 模型

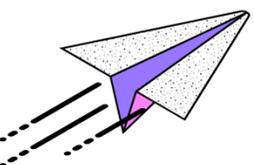


✅ Step 7 : 開始寫程式 - 4



A screenshot of the Visual Studio Code editor. The main window shows a Python script for converting a CSV file to a JSON file. The code includes imports for 'csv' and 'json', file path definitions, and logic to read the CSV file, process its rows, and write the resulting data to a JSON file. On the right side, the GitHub Copilot chat interface is open, displaying a prompt in Chinese: '讀取一個 CSV 檔案並將其轉換為 JSON 格式'. Below the prompt, Copilot provides a Python code snippet that matches the code in the editor. A red arrow points from the 'Apply in Editor' icon (a document with a checkmark) in the Copilot chat to the code in the editor. The bottom of the screenshot shows the terminal with a PowerShell prompt and the file status bar at the bottom indicating 'Ln 1, Col 1 Spaces: 4 UTF-8 LF Python 3.12.3 64-bit'.

1. Prompt : 讀取一個 CSV 檔案並將其轉換為 JSON 格式
2. 點擊「Apply in Editor」圖示，可將程式碼代入編輯區



✅ Step 7 : 開始寫程式 - 5



```
File Edit Selection View Go ... Python
test_copilot.py CSV to JSON conversion in Python
test_copilot.py
1 # 讀取一個 CSV 檔案並將其轉換為 JSON 格式
2 import pandas as pd
   def csv_to_json(csv_file, json_file):
3     
```

1. 建立一個新檔案，以 Python 為例。
2. 在編輯區（Editor）輸入註解。
3. Copilot 會依照註解內容，逐行生成、提示程式碼。

