

運算邏輯思維 -

Line Bot + Python on Heroku

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建立頻道 - 新聞報馬仔

▶ STEP 1

The screenshot displays the LINE Developers console interface. The left sidebar contains a 'Providers' section with a search bar and a list of providers: Admin, Marketing assistant, Webduino, WebduinoBot, and 運算思維 (1). The 運算思維 provider is highlighted with a red box. The main area shows the '運算思維' (2) page with tabs for Channels, Roles, and Settings. The 'Channels' tab is selected and highlighted with a red box. Below the tabs is a large box with a plus sign and the text 'Create a new channel' (3). A green arrow points from this box to a modal window titled 'Create a channel'. The modal window prompts the user to 'Choose a channel type to continue' and shows four options: LINE Login, Messaging API (4), Clova Skill, and [BETA] Blockchain Service. The Messaging API option is highlighted with a red box. Below the modal, two cards for 'Messaging API' are visible.

LINE Developers

Products Documents API reference News FAQ Community Blog

Console home

Providers

Search...

Admin

Marketing assistant

Webduino

WebduinoBot

運算思維 (1)

TOP > 運算思維

運算思維

Channels (2) Roles Settings

+

Create a new channel (3)

Create a channel

Choose a channel type to continue

LINE Login

Messaging API (4)

Clova Skill

[BETA] Blockchain Service

Messaging API

Messaging API

<https://developers.line.biz/zh-hant/>

建立頻道 - 新聞報馬仔

▶ STEP 2

Create a channel

Channel type

Messaging API

✓ Don't leave this empty

Provider

運算思維

✓ Don't leave this empty

Channel icon

optional

1



✓ File type must be one of: PNG,JPG,JPEG,GIF,BMP

✓ File must be no larger than 3 MB

Channel name

新聞報馬仔

2

Note: The channel name can't be changed for seven days.

✓ Don't leave this empty

✓ Don't use special characters (4-byte Unicode)

✓ Enter no more than 20 characters

Channel description

圖片選單式新聞機器人

3

✓ Don't leave this empty

✓ Don't use special characters (4-byte Unicode)

✓ Enter no more than 500 characters

Category

雜誌、報紙

4

✓ Don't leave this empty

Subcategory

雜誌、報紙 (其他)

5

✓ Don't leave this empty

Email address ?

jungyuyu@gmail.com

6

✓ Don't leave this empty

✓ Enter a valid email address

✓ Enter no more than 100 characters

Privacy policy URL

optional

Enter privacy policy URL

✓ Enter a valid HTTPS URL

✓ Enter no more than 500 characters

Terms of use URL

optional

Enter terms of use URL

✓ Enter a valid HTTPS URL

設定頻道 Access token (long-lived)

▶ STEP 3

新聞報馬仔

Admin | Messaging API

1


Basic settings **Messaging API** Security Roles Statistics LIFF

Messaging API settings

Bot information

Bot basic ID @509mfcau

QR code



Available APIs ?

- REPLY_MESSAGE
- PUSH_MESSAGE

Webhook settings

Webhook URL ? -

Edit

LINE Official Account features

Edit the message text and other settings for these

Allow bot to join group chats ? Disabled

Auto-reply messages ? Enabled

Greeting messages ? Enabled

Channel access token

Channel access token (long-lived) ?

835UUQo64a371YSbGEBIlo4+MxbrGjr
G4og2OtzmlrIVreUjtvbclxT+N4TTW+0R

2

Reissue

直接捲到畫面最下方，點擊「issue」按鈕

設定自動回覆訊息 Auto-reply messages

▶ STEP 1

新聞報馬仔

Admin | Messaging API


Basic settings **Messaging API** Security Roles Statistics LIFF

Messaging API settings

Bot information

Bot basic ID @509mfcau

QR code



LINE Official Account features

Edit the message text and other settings for these features in the LINE Official Account Manager

Allow bot to join group chats ?	Disabled	Edit
Auto-reply messages ?	Enabled	2 Edit
Greeting messages ?	Enabled	Edit

設定自動回應訊息 Auto-reply messages

▶ STEP 2

LINE Official Account Manager

新聞報馬仔 @509mfcau 輕用量 0 回應模式：聊天機器人

主頁 提醒 分析 聊天 基本檔案 口袋商店

帳號設定
權限管理
回應設定
Messaging API
登錄資訊
帳務專區

回應設定

基本設定

回應模式

- ☒ 聊天機器人
可使用自動回應訊息及 Webhook
- ☐ 聊天
可使用聊天、自動回應訊息

加入好友的歡迎訊息

- ☒ 啟用
- ☐ 停用

加入好友的歡迎訊息設定

進階設定

自動回應訊息

- ☒ 啟用
- ☐ 停用

3 自動回應訊息設定

Webhook

- ☒ 啟用
- ☐ 停用

Messaging API設定

建立圖文選單

▶ STEP 1

LINE Official Account Manager



新聞報馬仔 ▾

@509mfcau

輕用量

0

回應模式：聊天機器人

帳號

Help

主頁

提醒

分析

聊天

基本檔案

口袋商店

設定

群發訊息

貼文串

加入好友的歡迎訊息

自動回應訊息

AI自動回應訊息

圖文訊息

進階影片訊息

多頁訊息

圖文選單

優惠券

集點卡

問卷調查

加入好友

圖文選單

您可建立具有視覺效果的互動型選單，於聊天室中提供優惠券、網址連結及相關行銷資訊以進行宣傳。
本頁面僅可顯示透過本頁面所建立的圖文選單。

狀態

全部 ▾



YYYY/MM/DD

~



YYYY/MM/DD



清除

標題	圖片	使用期間	狀態
<u>選擇新聞類型</u>		2020/06/02 00:00 - 2020/07/31 23:59	開啟 已就緒

建立圖文選單

▶ STEP 2 圖文選單

您可建立具有視覺效果的互動型選單，於聊天室中提供優惠券、網址連結及相關行銷資訊以進行宣傳。

刪除

儲存

顯示設定

標題

選擇新聞類型

1

6/30

狀態

☒ 開啟

☐ 關閉

使用期間

2020/06/02

2

00:00

2020/07/31

23:59

清除

選單列顯示文字 ①

☒ 選單

☐ 自訂文字

輸入自訂文字

0/14

預設顯示方式 ①

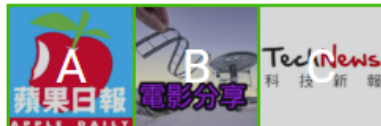
☒ 顯示

☐ 隱藏

建立圖文選單

STEP 3

內容設定



1

選擇版型

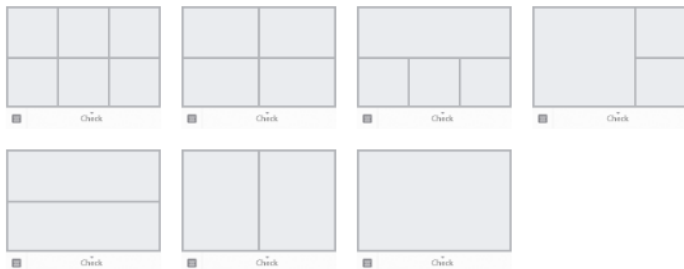
上傳背景圖片

3

建立圖片

選擇版型

大型



小型



取消

套用

動作

設計規範

類型

文字

4

可設定為「關鍵字回應」中的文字或其他任何文字（50個字以內）。

蘋果日報

5

4/50

類型

文字

可設定為「關鍵字回應」中的文字或其他任何文字（50個字以內）。

電影情報

4/50

類型

文字

可設定為「關鍵字回應」中的文字或其他任何文字（50個字以內）。

科技新報

註冊 Heroku



HEROKU

Products ▾

Marketplace ▾

Pricing

Documentation

Support

COVID-19 ▾

More ▾



Log in or

Sign up

We are blacking out our website to stand with the Black community against racial injustice and violence on **#BlackOutTuesday**.

As part of this, we are using our platform to host an urgent and important conversation about race and injustice.

OFFICIALLY SUPPORTED LANGUAGES



Node.js



Ruby



Java



PHP



Python



Go



Scala



Clojure

<https://www.heroku.com/>

註冊 Heroku

▶ STEP 1

Sign up for free and
experience Heroku today

Free account

Create apps, connect databases and add-on services, and collaborate on your apps, for free.

Your app platform

A platform for apps, with app management & instant scaling, for development and production.

Deploy now

Go from code to running app in minutes. Deploy, scale, and deliver your app to the world.

First name *

aaron

Last name *

yu

Email address *

jungyuyu@gmail.com

Company name

Company name

Role *

Student

Country *

Taiwan

Primary development language *

Python



I'm not a robot



reCAPTCHA
[Privacy](#) - [Terms](#)

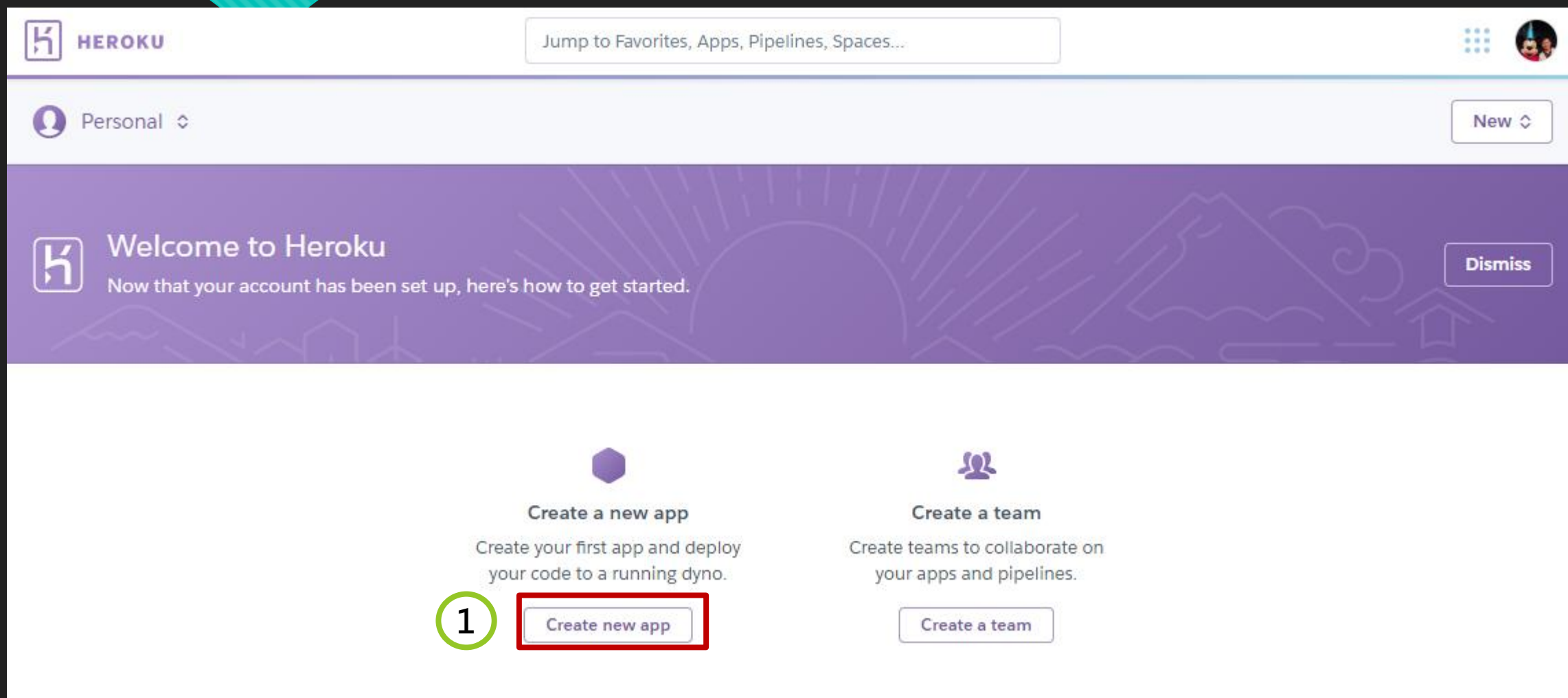
CREATE FREE ACCOUNT

Signing up signifies that you have read and agree to the [Terms of Service](#) and our [Privacy Policy](#).

註冊完，記得收信來啟動帳號

建立新的 APP

▶ STEP 1



The screenshot shows the Heroku dashboard interface. At the top, there is a navigation bar with the Heroku logo, a search bar, and a user profile icon. Below the navigation bar, there is a section for the user's account, labeled 'Personal', with a 'New' button. A large purple banner with a sun and mountains background contains the text 'Welcome to Heroku' and 'Now that your account has been set up, here's how to get started.', with a 'Dismiss' button. Below the banner, there are two main options: 'Create a new app' and 'Create a team'. The 'Create a new app' option is highlighted with a green circle containing the number '1' and a red box around the 'Create new app' button. The 'Create a team' option is also visible with its own 'Create a team' button.

HEROKU

Jump to Favorites, Apps, Pipelines, Spaces...

Personal

New

Welcome to Heroku

Now that your account has been set up, here's how to get started.

Dismiss

Create a new app

Create your first app and deploy your code to a running dyno.

1

Create new app

Create a team

Create teams to collaborate on your apps and pipelines.

Create a team

建立新的 APP

▶ STEP 2


Create New App


App name

1

news-robot is available

Choose a region




 United States

 Add to pipeline...

2

建立新的 APP

▶ STEP 3


 Personal >  news-robot  [Open app](#) [More](#)

[Overview](#) [Resources](#) [Deploy](#) [Metrics](#) [Activity](#) [Access](#) [Settings](#)


Add this app to a pipeline

Create a new pipeline or choose an existing one and add this app to a stage in it.


Add this app to a stage in a pipeline to enable additional features




Pipelines let you connect multiple apps together and **promote code** between them. [Learn more.](#)





Pipelines connected to GitHub can enable **review apps**, and create apps for new pull requests. [Learn more.](#)

 Choose a pipeline

Deployment method

 **Heroku Git**
Use Heroku CLI

 **GitHub**
Connect to GitHub

 **Container Registry**
Use Heroku CLI

安裝 Heroku CLI

Deploy using Heroku Git

Use git in the command line or a GUI tool to deploy this app.

1

Install the Heroku CLI

Download and install the [Heroku CLI](#).

下載 Heroku Git 應用程式，並執行安裝

If you haven't already, log in to your Heroku account and

```
$ heroku login
```

Create a new Git repository

Initialize a git repository in a new or existing directory

```
$ cd my-project/  
$ git init  
$ heroku git:remote -a news-robot
```

Deploy your application

Commit your code to the repository and deploy it to Heroku

```
$ git add .  
$ git commit -am "make it better"  
$ git push heroku master
```

Existing Git repository

For existing repositories, simply add the `heroku` remote

```
$ heroku git:remote -a news-robot
```

2

🍏 macOS

Download the installer

Also available via Homebrew:

```
$ brew tap heroku/brew && brew install heroku
```



Windows

Download the appropriate installer for your Windows installation:

64-bit installer

32-bit installer

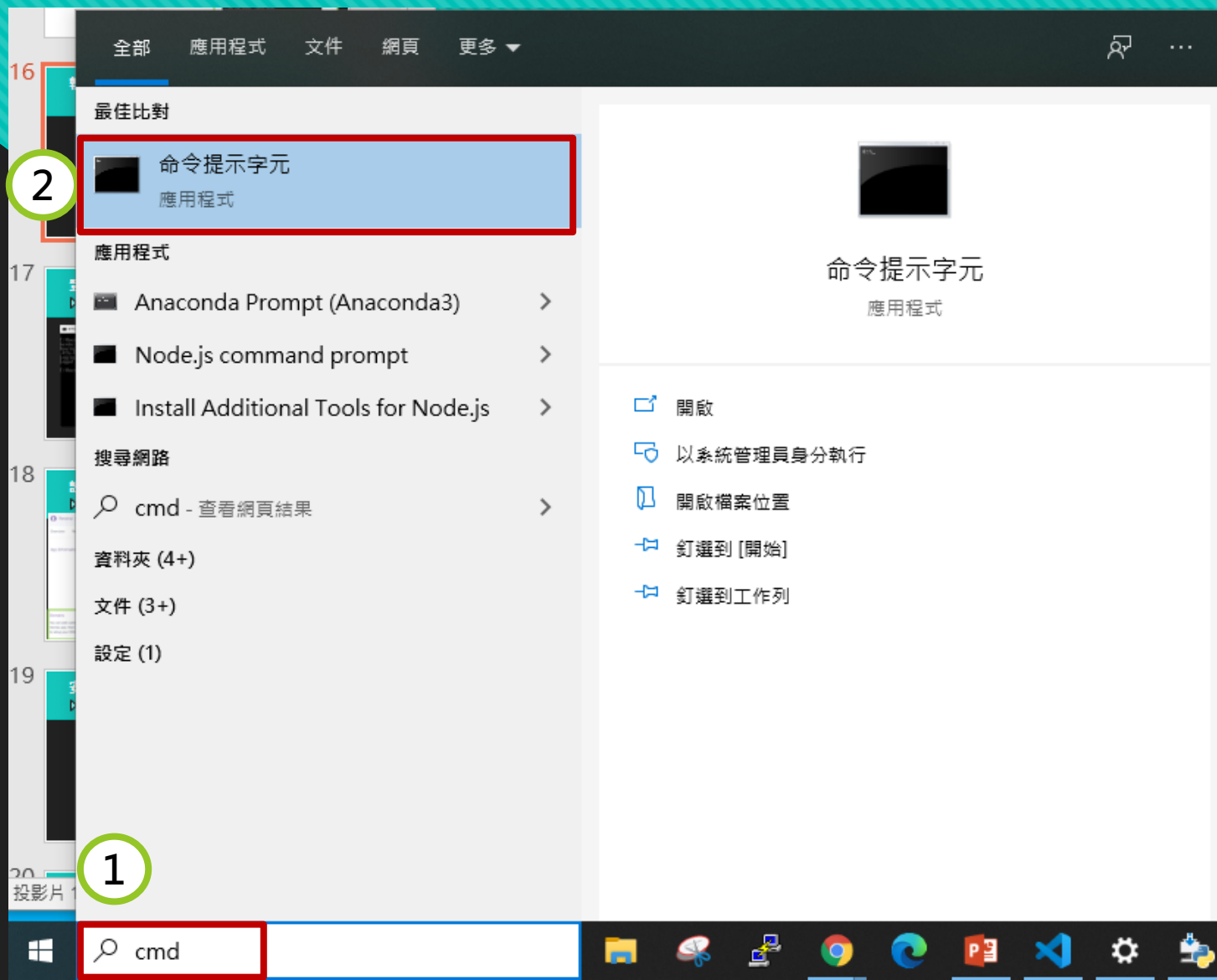
🐧 Ubuntu 16+

Run the following from your terminal:

```
$ sudo snap install --classic heroku
```

Snap is available on other Linux OS's as well.

使用 cmd 命令提示字元-執行 Heroku CLI

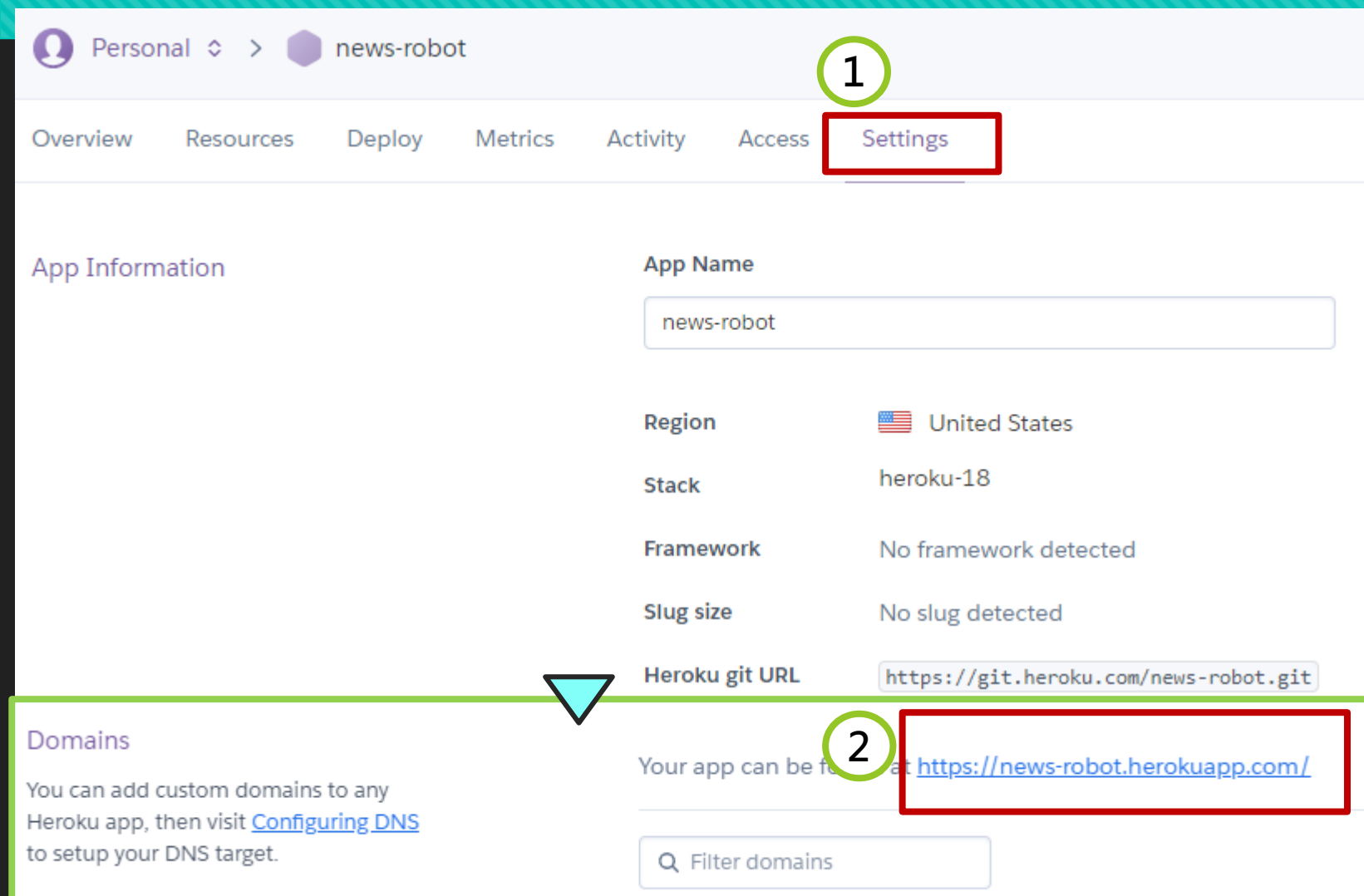


▶ 輸入 heroku login

The image shows the Heroku logo at the top, which consists of a stylized 'h' inside a square followed by the word 'HEROKU'. Below the logo is a white rectangular box containing a green circle with the number '2' and the text 'Log in to the Heroku CLI'. At the bottom of this box is a purple button with the text 'Log In', which is highlighted by a red rectangular border.

設定 Webhook :

▶ 取得Heroku的 APP Domain 來設定 Line bot 的 webhook



The image shows the Heroku dashboard for an application named 'news-robot'. The 'Settings' tab is selected and highlighted with a red box and a circled '1'. Below the tabs, the 'App Information' section displays various details: App Name (news-robot), Region (United States), Stack (heroku-18), Framework (No framework detected), Slug size (No slug detected), and Heroku git URL (https://git.heroku.com/news-robot.git). A red box and a circled '2' highlight the 'Domains' section, which contains the text 'Your app can be found at https://news-robot.herokuapp.com/'. Below this is a search bar labeled 'Filter domains'.

Personal > news-robot

Overview Resources Deploy Metrics Activity Access **Settings**

App Information

App Name
news-robot

Region United States

Stack heroku-18

Framework No framework detected

Slug size No slug detected

Heroku git URL https://git.heroku.com/news-robot.git

Domains

You can add custom domains to any Heroku app, then visit [Configuring DNS](#) to setup your DNS target.

Filter domains

Webhook settings

Webhook URL ?

3

Edit

▼ 加 callback

Webhook settings

4

Webhook URL ?

<https://news-robot.herokuapp.com/callback>

✓ Don't leave this empty

✓ Enter a valid HTTPS URL

✓ Enter no more than 500 characters

5

Update

Cancel

6

Use webhook ?



安裝 Python

▶ 取得Heroku的 APP Domain 來設定 Line bot 的 webhook



The screenshot shows the Python.org website with a dark blue header and a lighter blue main content area. The header includes navigation links for Python, PSF, Docs, PyPI, Jobs, and Community. Below the header is a search bar with a 'GO' button and a 'Socialize' link. The main content area features a large illustration of two parachutes carrying boxes, symbolizing the download of Python. A yellow button labeled 'Download Python 3.8.3' is highlighted with a red box and a green circle with the number '1'. Below this button, there are links for 'Windows', 'Linux/UNIX', 'Mac OS X', and 'Other'. At the bottom, there is a section for 'Active Python Releases' and a link to the Python Developer's Guide.

Python PSF Docs PyPI Jobs Community

python™

Donate Search GO Socialize

About Downloads Documentation Community Success Stories News Events

Download the latest version for Windows

1 Download Python 3.8.3

Looking for Python with a different OS? Python for [Windows](#), [Linux/UNIX](#), [Mac OS X](#), [Other](#)

Want to help test development versions of Python? [Prereleases](#), [Docker images](#)

Looking for Python 2.7? See below for specific releases

Active Python Releases

For more information visit the Python Developer's Guide.

<https://www.python.org/downloads/>

設定系統環境變數 - python

The image shows a Windows 10 desktop with the 'System' settings window open. The navigation pane on the left has '進階系統設定' (Advanced system settings) selected. The main window shows the 'System' page with tabs for '電腦名稱', '硬體', '進階', '系統保護', and '遠端'. The '進階' tab is active, showing '效能' (Performance), '使用者設定檔' (User profiles), and '啟動及修復' (Startup and recovery) sections. The '環境變數(N)...' button is highlighted. A second window, '環境變數' (Environment variables), is open, showing 'Aaron 的使用者變數(U)' (User variables for Aaron) and '系統變數(S)' (System variables). The '新增(N)...' button is highlighted. A third window, '編輯使用者變數' (Edit user variable), is open, showing the 'Python' variable being added with the value 'C:\Users\Aaron\AppData\Local\Programs\Python\Python38-32'. The '確定' (OK) button is highlighted.

1. 系統 > 控制台 > 系統及安全性 > 系統

2. 進階系統設定

3. 環境變數(N)...

4. 新增(N)...

5. 編輯使用者變數

變數名稱(N): Python

變數值(V): C:\Users\Aaron\AppData\Local\Programs\Python\Python38-32

確定

設定系統環境變數 - Path

▶ 設定 Path：加入 %PYTHON% 及 %PYTHON%\Scripts\

The image shows two windows from the Windows 'Environment Variables' control panel. The left window, titled '環境變數', shows the 'Aaron 的使用者變數(U)' and '系統變數(S)' sections. In the 'Aaron 的使用者變數(U)' section, the 'Path' variable is selected and highlighted with a red box and a green circle labeled '1'. Below it, the '新增' button is highlighted with a green circle labeled '2', and the '編輯(E)...' button is highlighted with a red box. The right window, titled '編輯環境變數', shows a list of paths. The '%PYTHON%' and '%PYTHON%\Scripts\' entries are highlighted with a blue selection bar and a red box, with a green circle labeled '4' next to them. To the right of this list, the '新增(N)' button is highlighted with a red box and a green circle labeled '3'. At the bottom of the right window, the '確定' button is highlighted with a red box and a green circle labeled '5'. At the bottom of the left window, the '確定' button is highlighted with a red box and a green circle labeled '6'. A blue arrow points from the '編輯(E)...' button in the left window to the '編輯環境變數' window.

環境變數

Aaron 的使用者變數(U)

變數	值
OneDrive	C:\Users\Aaron\OneDrive
OneDriveConsum...	C:\Users\Aaron\OneDrive
Path	C:\Users\Aaron\AppData\Local\Mu\bin;C...
Python	C:\Users\Aaron\AppData\Local\Program...

新增 2 編輯(E)... 刪除(D)

系統變數(S)

變數	值
ComSpec	C:\WINDOWS\system32\cmd.exe
DriverData	C:\Windows\System32\Drivers\DriverData
NUMBER_OF_PR...	4
OS	Windows_NT

新增(W)... 編輯(I)... 刪除(L)

編輯環境變數

3

4

5

6

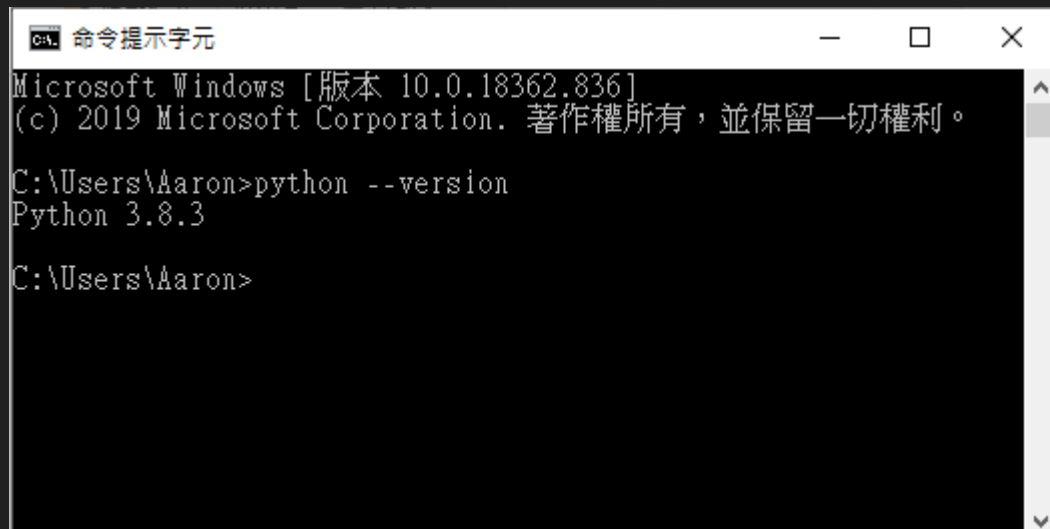
新增(N) 編輯(E) 瀏覽(B)... 刪除(D) 上移(U) 下移(O) 編輯文字(T)...

確定 取消

使用 cmd 命令提示字元-執行 python

▶ 安裝 pip

檢視 python 版本：
python --version



```
命令提示字元
Microsoft Windows [版本 10.0.18362.836]
(c) 2019 Microsoft Corporation. 著作權所有，並保留一切權利。

C:\Users\Aaron>python --version
Python 3.8.3

C:\Users\Aaron>
```

下載 pip:

<https://bootstrap.pypa.io/get-pip.py>

安裝 pip :

python get-pip.py



```
命令提示字元
C:\Users\Aaron>python get-pip.py
Collecting pip
  Downloading pip-20.1.1-py2.py3-none-any.whl (1.5 MB)
    |██████████████████████████████████████████████████████████████████████████████| 1.5 MB 819 kB/s
Collecting wheel
  Downloading wheel-0.34.2-py2.py3-none-any.whl (26 kB)
Installing collected packages: pip, wheel
  Attempting uninstall: pip
    Found existing installation: pip 19.2.3
    Uninstalling pip-19.2.3:
      Successfully uninstalled pip-19.2.3
  WARNING: The scripts pip.exe, pip3.8.exe and pip3.exe are installed in 'C:\Users\Aaron\AppData\Local\Programs\Python\Python38-32\Scripts' which is not on PATH.
  Consider adding this directory to PATH or, if you prefer to suppress this warning, use -no-warn-script-location.
  WARNING: The script wheel.exe is installed in 'C:\Users\Aaron\AppData\Local\Programs\Python\Python38-32\Scripts' which is not on PATH.
  Consider adding this directory to PATH or, if you prefer to suppress this warning, use -no-warn-script-location.
Successfully installed pip-20.1.1 wheel-0.34.2

C:\Users\Aaron>
```

使用 pip 安裝需要的套件

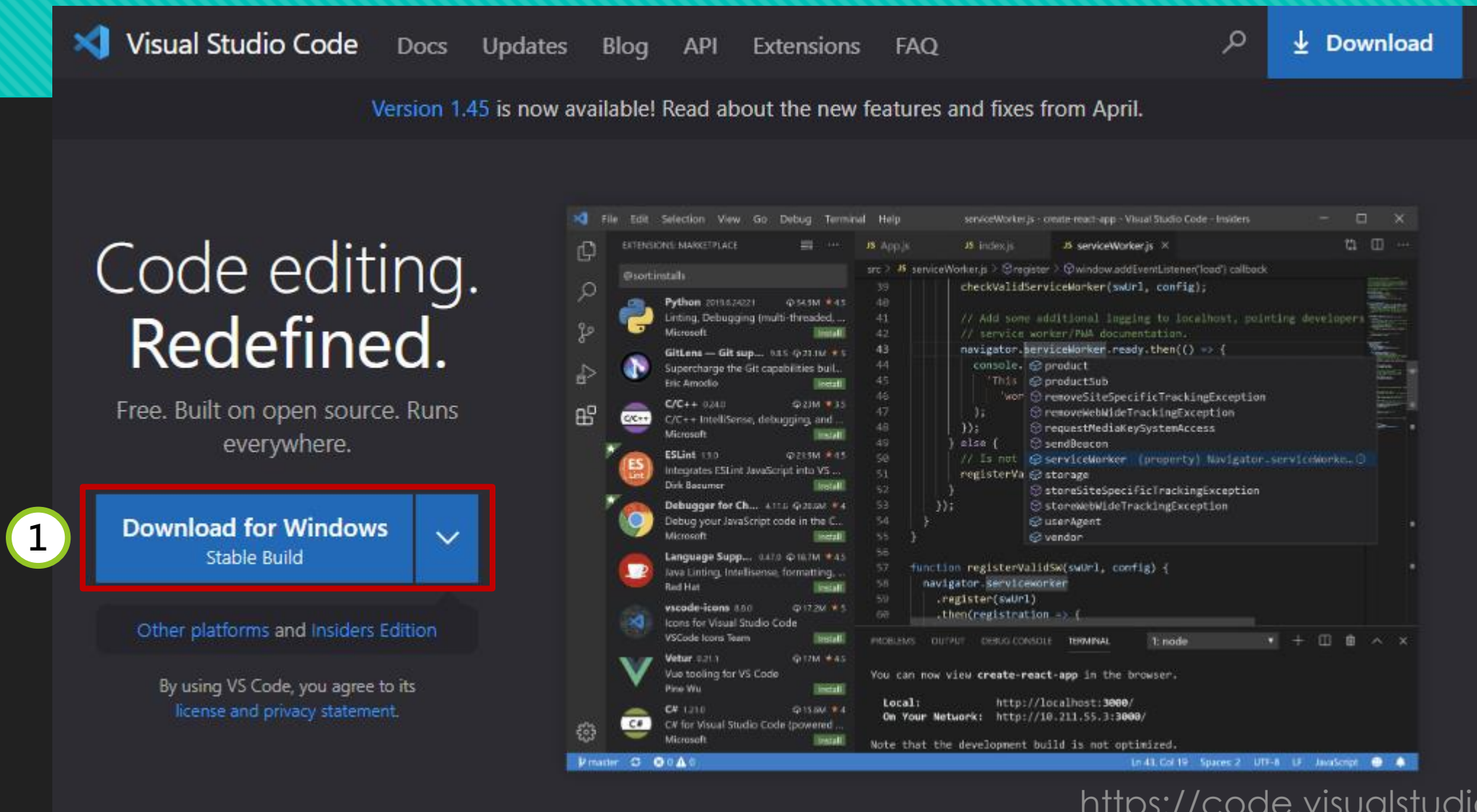
▶ requests, configparser, bs4, flask, imgurpython, line-bot-sdk

```
命令提示字元
D:\temp\line-bot-tutorial-master>pip freeze
D:\temp\line-bot-tutorial-master>pip install requests
Collecting requests
  Downloading requests-2.23.0-py2.py3-none-any.whl (58 kB)
    | 51 kB 648 kB/s eta 0:00:
    | 58 kB 612 kB/s
Collecting certifi<=2017.4.17
  Downloading certifi-2020.4.5.1-py2.py3-none-any.whl (157 kB)
    | 122 kB 2.2 MB/s eta 0:00:01
    | 133 kB 2.2 MB/s eta 0:00:
    | 143 kB 2.2 MB/s eta 0:0
    | 153 kB 2.2 MB/s eta 0
    | 157 kB 2.2 MB/s
Collecting chardet<4,>=3.0.2
  Downloading chardet-3.0.4-py2.py3-none-any.whl (133 kB)
    | 102 kB 6.8 MB/s eta 0:00:01
    | 112 kB 6.8 MB/s eta 0:00:
    | 122 kB 6.8 MB/s eta 0:
    | 133 kB 6.8 MB/s eta
    | 133 kB 6.8 MB/s
Collecting urllib3!=1.25.0,!1.25.1,<1.26,>=1.21.1
  Downloading urllib3-1.25.9-py2.py3-none-any.whl (126 kB)
    | 126 kB ...
Collecting idna<3,>=2.5
  Downloading idna-2.9-py2.py3-none-any.whl (58 kB)
    | 58 kB 2.9 MB/s
Installing collected packages: certifi, chardet, urllib3, idna, requests
Successfully installed certifi-2020.4.5.1 chardet-3.0.4 idna-2.9 requests-2.23.0 urllib3-1.2
```

安裝指令如下：

```
pip install requests
pip install configparser
pip install bs4
pip install flask
pip install imgurpython
pip install line-bot-sdk
pip install gunicorn
```

安裝 Visual Studio Code



Visual Studio Code Docs Updates Blog API Extensions FAQ

Version 1.45 is now available! Read about the new features and fixes from April.

Code editing. Redefined.

Free. Built on open source. Runs everywhere.

1 Download for Windows Stable Build

Other platforms and Insiders Edition

By using VS Code, you agree to its [license and privacy statement](#).

The screenshot shows the Visual Studio Code website interface. The 'Download for Windows' button is highlighted with a red box and a green circle with the number '1'. The background of the website features a dark-themed image of the Visual Studio Code editor interface, showing the Extensions Marketplace on the left, a code editor in the center with a JavaScript file, and a terminal at the bottom displaying the output of a command.

<https://code.visualstudio.com/>

Visual Studio Code: 設定中文環境

Visual Studio Code 介面顯示安裝中文環境的步驟：

1. 點擊左側工具欄的「擴展」圖示。
2. 在搜尋欄輸入「chinese」。
3. 選擇搜尋結果中的「Chinese (Traditional) Language Pack for Visual Studio Code」。
4. 點擊「安裝」按鈕。

安裝後，Visual Studio Code 的介面將顯示中文（繁體）語言套件。

Visual Studio Code: 安裝 python 外掛

The screenshot shows the Visual Studio Code interface with the 'Extensions: Marketplace' view. The search bar contains 'python'. The search results list several extensions, with 'Python' by Microsoft and 'Python for VSCode' by Thomas Haakon Townsend highlighted with red boxes. The 'Python' extension page is also shown, with the '安裝' (Install) button highlighted with a red box. The interface is in Chinese.

1. Click the Extensions icon in the left sidebar.

2. Search for 'python' in the search bar.

3. Click on the 'Python for VSCode' extension by Thomas Haakon Townsend.

4. Click the '安裝' (Install) button for the 'Python' extension by Microsoft.

使用 Visual Studio Code 編輯第一支程式

▶ Hello World

檔案名稱：hello.py

```
from flask import Flask
app = Flask(__name__)
@app.route('/')
def hello_world():
    return 'Hello World!'
if __name__ == '__main__':
    app.run()
```

使用 CMD 執行 python hello.py

```
* Serving Flask app "hello" (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```

打開瀏覽器，在網址列輸入：127.0.0.1:5000



Hello World!

免註冊 DNS 讓外界可以連入本機程式

▶ 使用 ngrok

① Download ngrok

First, download the ngrok client, a single binary with zero run-time dependencies.

↓ Download for Windows

[Mac OS X](#) [Linux](#) [Mac \(32-bit\)](#) [Windows \(32-bit\)](#)

[Linux \(ARM\)](#) [Linux \(ARM64\)](#) [Linux \(32-bit\)](#)

[FreeBSD \(64-Bit\)](#) [FreeBSD \(32-bit\)](#)

② Unzip to install

On Linux or OSX you can unzip ngrok from a terminal with the following command. On Windows, just double click *ngrok.zip*.

```
$ unzip /path/to/ngrok.zip
```

Most people like to keep ngrok in their primary user folder or set an alias for easy command-line access.

③ Connect your account

Running this command will add your authtoken to your *ngrok.yml* file. Connecting an account will list your open tunnels in the dashboard, give you longer tunnel timeouts, and more. Visit the dashboard to [get your authtoken](#).

```
$ ./ngrok authtoken <YOUR_AUTH_TOKEN>
```

Don't have an account?

[Sign up for free](#) to get your authtoken.

④ Fire it up

Try it out by running it from the command line:

```
$ ./ngrok help
```

To start a HTTP tunnel on port 80, run this next:

```
$ ./ngrok http 80
```

Read [the documentation](#) to get more ideas on how to use ngrok.

<https://ngrok.com/download>

免註冊 DNS 讓外界可以連入本機程式

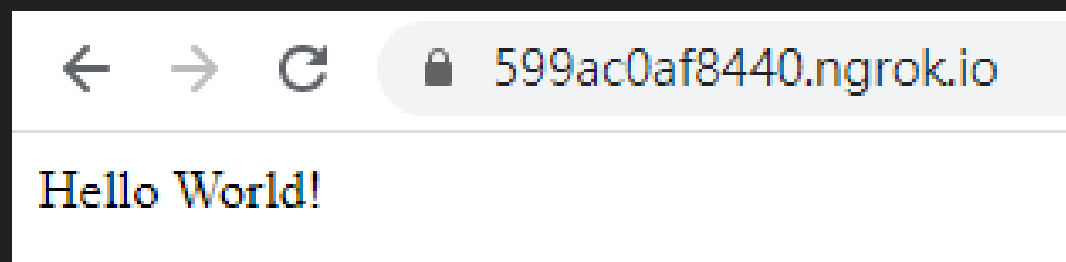
▶ 指令：ngrok http 5000

```
C:\Users\Aaron\Downloads\ngrok-stable-windows-amd64\ngrok.exe - ngrok http 5000
ngrok by @inconshreveable

Session Status      online
Session Expires    7 hours, 59 minutes
Version            2.3.35
Region             United States (us)
Web Interface       http://127.0.0.1:4040
Forwarding          http://599ac0af8440.ngrok.io -> http://localhost:5000
Forwarding          https://599ac0af8440.ngrok.io -> http://localhost:5000

Connections        ttl    opn    rt1    rt5    p50    p90
                   0      0      0.00   0.00   0.00   0.00
```

打開瀏覽器，在網址列輸入上述網址



使用 POSTMAN 模擬瀏覽器 HTTP 請求方法

▶ HTTP 請求方法: GET, POST, PUT, DELETE...



The screenshot shows the Postman website's download page for Windows. The header is dark with the Postman logo and navigation links. The main content area has a dark background with white text. A large orange button is centered on the page. Below it, there are links for release notes and product roadmap. At the bottom, there is a section for other operating systems.

POSTMAN Product Use Cases Pricing Enterprise Explore APIs Learning Center Dashboard Download

Download Postman for Windows

Join 10 million developers and download the **ONLY** complete API Development Environment.

Download

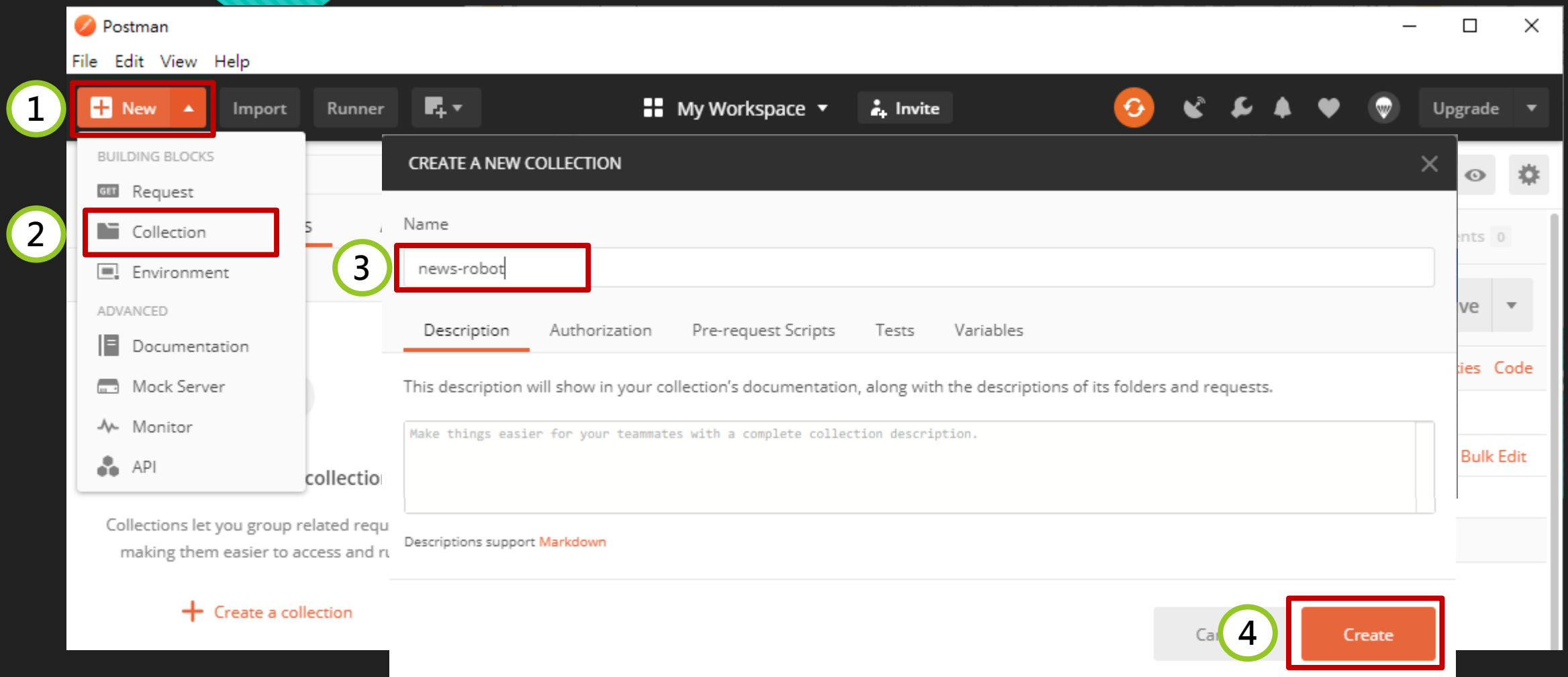
Version 7.26.0 | [RELEASE NOTES](#) | [PRODUCT ROADMAP](#)

Not your OS? Download for [macOS](#) or Linux ([x64](#))

<https://www.postman.com/downloads/>

POSTMAN

▶ 新建 Collection: news-robot



POSTMAN

▶ 使用 GET 方法，請求網址執行查詢

The screenshot displays the Postman application interface. At the top, the 'Launchpad' tab is active, showing a list of requests. A red box labeled '1' highlights the first request: 'GET https://599ac0af8440.ngrok.io'. Below this, the 'Untitled Request' tab is selected. A red box labeled '2' highlights the 'GET' method, a red box labeled '3' highlights the URL 'https://599ac0af8440.ngrok.io', and a red box labeled '4' highlights the 'Send' button. The 'Params' tab is selected, showing a table for 'Query Params' with columns 'KEY', 'VALUE', and 'DESCRIPTION'. The 'Body' tab is also visible. At the bottom, the 'Pretty' tab is selected, showing the response '1 Hello World!' in a red box labeled '5'. The status bar at the bottom right indicates 'Status: 200 OK', 'Time: 1516 ms', and 'Size: 189 B'.

Launchpad 1 GET https://599ac0af8440.ngrok.io + ... No Environment

Untitled Request Comments 0

2 GET 3 https://599ac0af8440.ngrok.io 4 Send Save

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies Code

Query Params

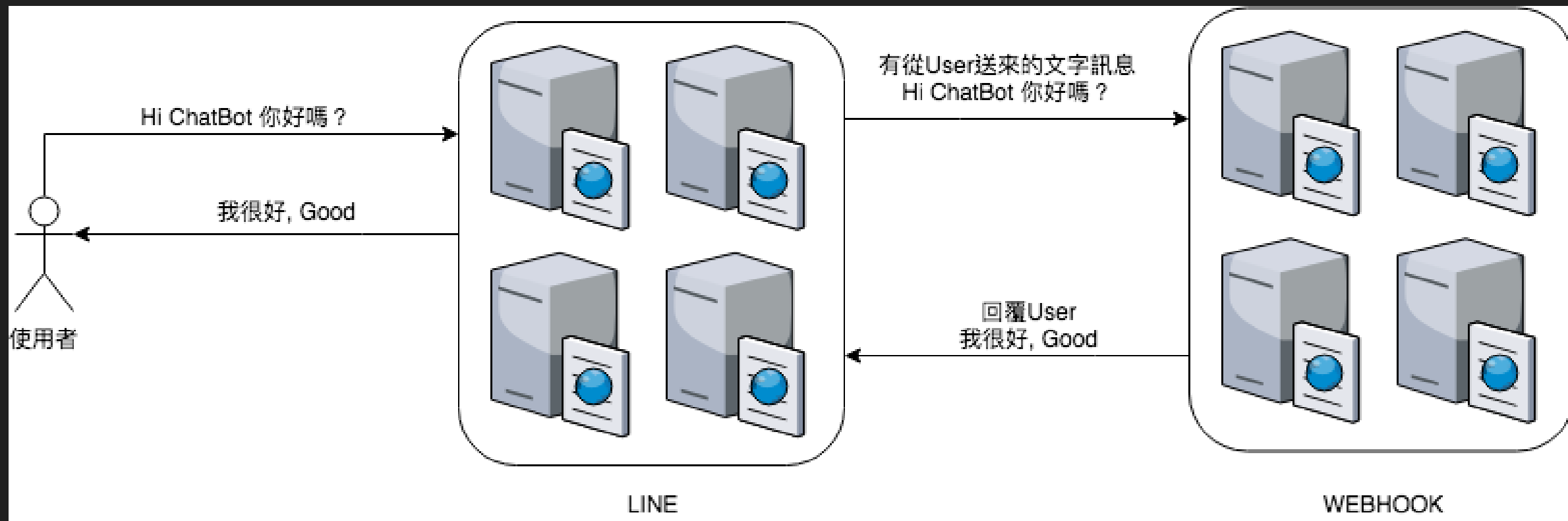
KEY	VALUE	DESCRIPTION
Key	Value	Description

Body Cookies Headers (5) Test Results Status: 200 OK Time: 1516 ms Size: 189 B Save Response

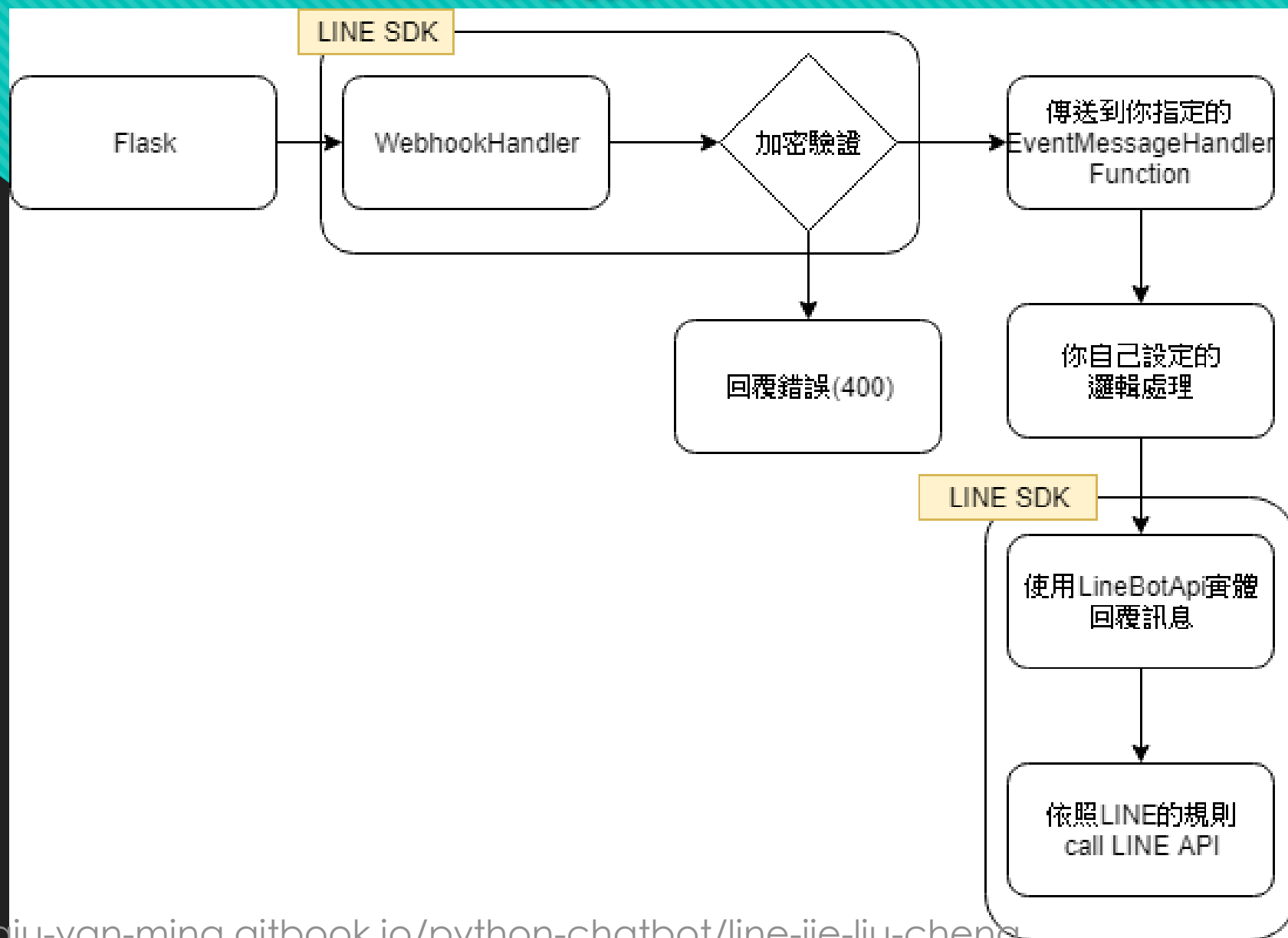
Pretty Raw Preview Visualize HTML

5 1 Hello World!

LINE 使用 Webhook 對接流程



使用 line-bot-sdk 對接 Webhook 流程



使用 line-bot-sdk 建立第一支 webhook 程式

▶ Channel Access Token 參考第4頁

檔案名稱：bot.py

```
from flask import Flask, request, abort

from linebot import (
    LineBotApi, WebhookHandler
)
from linebot.exceptions import (
    InvalidSignatureError
)
from linebot.models import (
    MessageEvent, TextMessage, TextSendMessage,
)

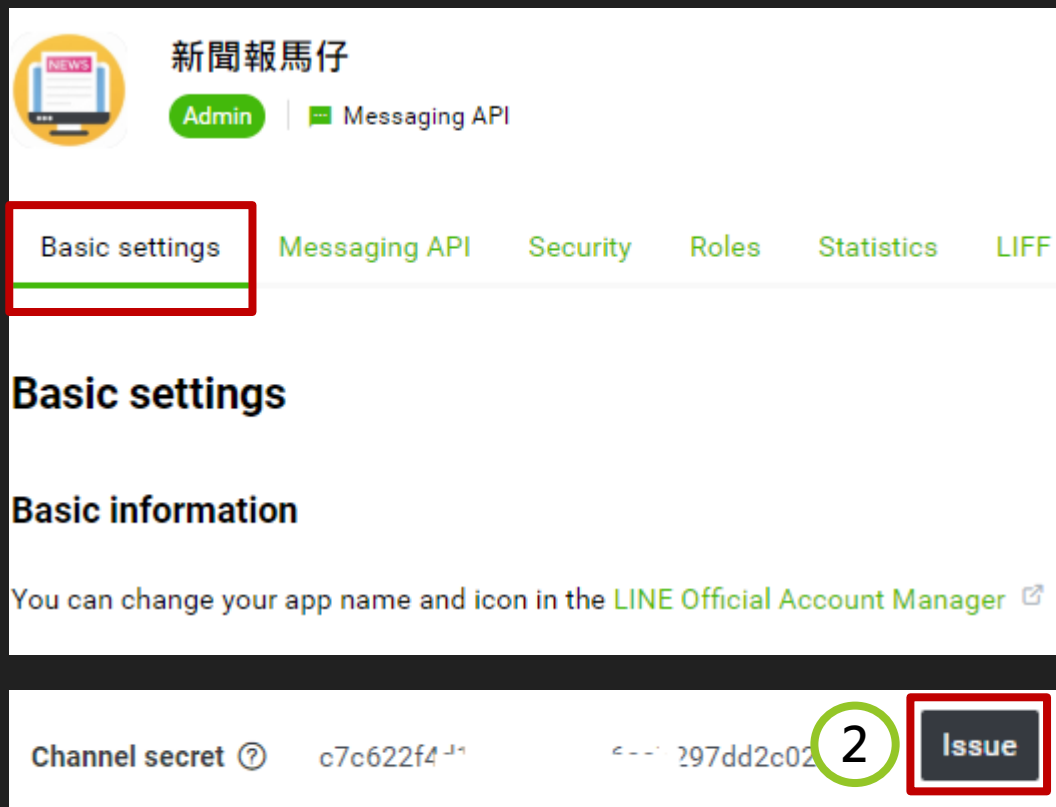
app = Flask(__name__)

line_bot_api = LineBotApi('YOUR_CHANNEL_ACCESS_TOKEN')
handler = WebhookHandler('YOUR_CHANNEL_SECRET')
```

3 要換成自己的

<https://github.com/line/line-bot-sdk-python>

在 Basic settings 取得 Channel Secret



新聞報馬仔

Admin | Messaging API

Basic settings | Messaging API | Security | Roles | Statistics | LIFF

Basic settings

Basic information

You can change your app name and icon in the [LINE Official Account Manager](#)

Channel secret ⓘ c7c622f4-11 297dd2c02 **2** **Issue**

<https://developers.line.biz/>

POSTMAN

▶ 使用 POST 方法請求 Webhook 查詢

網址後面再加：**callback**

1. Method: POST

2. URL: https://599ac0af8440.ngrok.io/callback

3. Headers (9)

4. X-Line-Signature: AAAAAAAAAAAAAAAAAA

5. Content-Type: application/json

6. Send

Response

Pretty Raw Preview Visualize HTML

(※出現 400 訊息代表有執行，只是 X-Line-Signature 等是錯的...)

```
1 <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2 Final//EN">
2 <title>400 Bad Request</title>
3 <h1>Bad Request</h1>
4 <p>The browser (or proxy) sent a request that this server could not understand.</p>
```

Line Developers

▶ 修改成 ngrok 生成的 Webhook URL

Messaging API

Webhook settings

Webhook URL

1

網址後面再加：**callback**

<https://599ac0af8440.ngrok.io/callback>

- ✓ Don't leave this empty
- ✓ Enter a valid HTTPS URL
- ✓ Enter no more than 500 characters

2

Update

Cancel

Use webhook

3



Available APIs ?

Error

狀態碼 **200** 代表程式有正確執行

The webhook returned an HTTP status code other than 200

OK

Webhook settings

Webhook URL ?

<https://599ac0af8440.ngrok.io/callback>

4

Verify

Edit

Use webhook ?



在手機上測試程式

▶ 目前的程式像隻應聲蟲，只是重覆回應使用者的訊息

停用自動回應訊息

回應設定

進階設定

自動回應訊息

☐ 啟用

1

☒ 停用

自動回應訊息設定

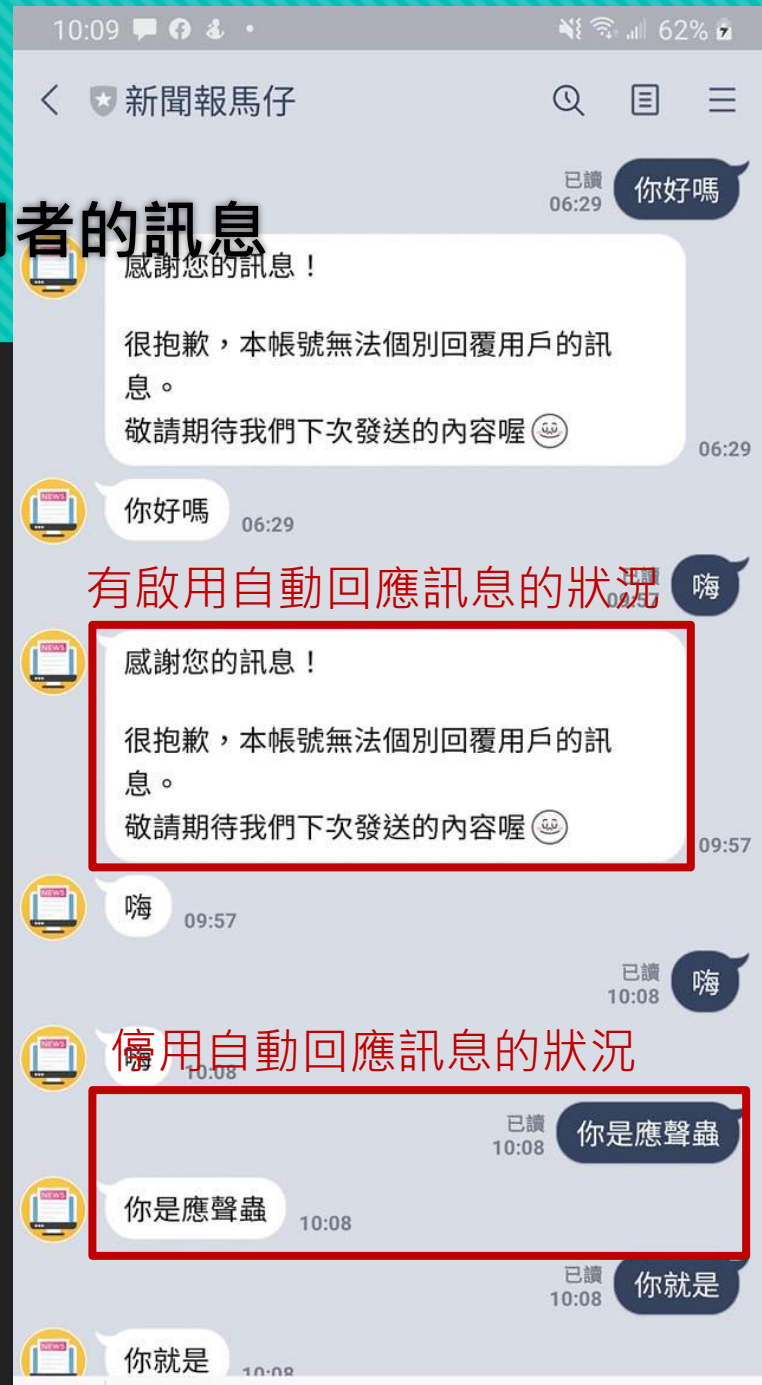
Webhook

☒ 啟用

☐ 停用

Messaging API設定

2



主程式參考(1)

▶ 檔名 : app.py

<https://github.com/jungyu/news-robot>

```
import requests
import re
import time
import random
import configparser
import urllib3
from bs4 import BeautifulSoup
from flask import Flask, request, abort

from linebot import (
    LineBotApi, WebhookHandler
)
from linebot.exceptions import (
    InvalidSignatureError
)
from linebot.models import (
    MessageEvent, TextMessage, TextSendMessage,
)
```

主程式參考(2)

▶ 檔名 : app.py

<https://github.com/jungyu/news-robot>

```
app = Flask(__name__)
config = configparser.ConfigParser()
config.read("config.ini")
line_bot_api = LineBotApi(config['line_bot']['Channel_Access-Token'])
handler = WebhookHandler(config['line_bot']['Channel_Secret'])
@app.route("/callback", methods=['POST'])
def callback():
    # get X-Line-Signature header value
    signature = request.headers['X-Line-Signature']

    # get request body as text
    body = request.get_data(as_text=True)
    app.logger.info("Request body: " + body)

    # handle webhook body
    try:
        handler.handle(body, signature)
    except InvalidSignatureError:
        print("Invalid signature. Please check your channel access token/channel secret.")
        abort(400)

    return 'OK'
```


主程式參考(3)

▶ 檔名 : app.py

<https://github.com/jungyu/news-robot>

```
@handler.add(MessageEvent, message=TextMessage)
def handle_message(event):
    print("event.reply_token:", event.reply_token)
    print("event.message.text:", event.message.text)

    if event.message.text == "Google新聞":
        content = google()
        line_bot_api.reply_message(
            event.reply_token,
            TextSendMessage(text=content))
        return 0

if __name__ == "__main__":
    app.run()
```

網頁爬蟲(1)

▶ 油價查詢

將以下函式加在 callback() 函式之後：

```
def oil_price():  
    target_url = 'https://gas.goodlife.tw/'  
    rs = requests.session()  
    res = rs.get(target_url, verify=False)  
    res.encoding = res.apparent_encoding  
    soup = BeautifulSoup(res.text, 'html.parser')  
  
    title = soup.select('#main')[0].text.replace('\n', '').split('(')[0]  
    gas_price = soup.select('#gas-price')[0].text.replace('\n\n\n', '').replace(' ', '')  
    cpc = soup.select('#cpc')[0].text.replace(' ', '')  
    content = '{}\n{}'.format(title, gas_price, cpc)  
    return content
```

撰寫網頁爬蟲，將查詢的內容回傳給使用者

網頁爬蟲(1)

▶ 油價查詢

將以下判斷式加到 handle_message() 內：

```
if event.message.text == "油價查詢":  
    content = oil_price()  
    line_bot_api.reply_message(  
        event.reply_token,  
        TextSendMessage(text=content))  
    return 0
```

網頁爬蟲(2)

▶ Google新聞

將以下函式加在 callback() 函式之後：

```
def google():
    target_url = 'https://news.google.com/topstories?hl=zh-TW&gl=TW&ceid=TW%3Azh-Hant'
    print('Start parsing google news....')
    rs = requests.session()
    res = rs.get(target_url, verify=False)
    soup = BeautifulSoup(res.text, 'html.parser')

    content = ''
    for index, news in enumerate(soup.find_all(class_='NiLAwe')):
        try:
            if index == 10:
                return content
            title = news.find(class_='DY5T1d').text
            link = 'https://news.google.com/' + news.find(class_='DY5T1d')['href']
            image = news.find(class_='tvs3Id')['src']
            content += '\n{}\n{}\n{}\n\n\n'.format(image, title, link)
        except:
            print('')

    return content
```

網頁爬蟲(2)

▶ Google新聞

將以下判斷式加到 handle_message() 內：

```
if event.message.text == "Google新聞":  
    content = google()  
    line_bot_api.reply_message(  
        event.reply_token,  
        TextSendMessage(text=content))  
    return 0
```

網頁爬蟲(3)

▶ 科技新報

將以下函式加在 callback() 函式之後：

```
def technews():
    target_url = 'https://technews.tw/'
    print('Start parsing movie ...')
    rs = requests.session()
    res = rs.get(target_url, verify=False)
    res.encoding = 'utf-8'
    soup = BeautifulSoup(res.text, 'html.parser')
    content = ""

    for index, data in enumerate(soup.select('article div h1.entry-title a')):
        if index == 12:
            return content
        title = data.text
        link = data['href']
        content += '{}\n{}\n\n'.format(title, link)
    return content
```

網頁爬蟲(3)

▶ 科技新報

將以下判斷式加到 handle_message() 內：

```
if event.message.text == "科技新報":  
    content = technews()  
    line_bot_api.reply_message(  
        event.reply_token,  
        TextSendMessage(text=content))  
    return 0
```


網頁爬蟲(4)

▶ 泛新聞

將以下函式加在 callback() 函式之後：

```
def panx():
    target_url = 'https://panx.asia/'
    print('Start parsing ptt hot....')
    rs = requests.session()
    res = rs.get(target_url, verify=False)
    soup = BeautifulSoup(res.text, 'html.parser')
    content = ""
    for data in soup.select('div.container div.row div.desc_wrap h2 a'):
        title = data.text
        link = data['href']
        content += '{}\n{}\n\n'.format(title, link)
    return content
```

網頁爬蟲(4)

▶ 泛新聞

將以下判斷式加到 handle_message() 內：

```
if event.message.text == "泛新聞":  
    content = panx()  
    line_bot_api.reply_message(  
        event.reply_token,  
        TextSendMessage(text=content))  
    return 0
```

網頁爬蟲(5)



將以下函式加在 callback() 函式之後：

```
def movie():
    target_url = 'http://www.atmovies.com.tw/movie/next/0/'
    print('Start parsing movie ...')
    rs = requests.session()
    res = rs.get(target_url, verify=False)
    res.encoding = 'utf-8'
    soup = BeautifulSoup(res.text, 'html.parser')
    content = ""
    for index, data in enumerate(soup.find_all(class_='filmtitle')):
        if index == 20:
            return content
        title = data.text.replace('\t', '').replace('\r', '')
        link = "http://www.atmovies.com.tw" + data.find('a', href=True)['href']
        #image = data.find_previous_sibling('a').find('img')['src']
        content += '{}\n{}\n'.format(title, link)
    return content
```

網頁爬蟲(5)



將以下判斷式加到 handle_message() 內：

```
if event.message.text == "電影":  
    content = movie()  
    line_bot_api.reply_message(  
        event.reply_token,  
        TextSendMessage(text=content))  
return 0
```

網頁爬蟲(6)



將以下函式加在 callback() 函式之後：

```
def weather():
    target_url = 'https://weather.yam.com/%E5%85%A7%E5%9F%94%E9%84%89/%E5%B1%8F%E6%9D%B1%E7%B8%A3'
    print('Start parsing weather ...')
    rs = requests.session()
    res = rs.get(target_url, verify=False)
    res.encoding = 'utf-8'
    soup = BeautifulSoup(res.text, 'html.parser')

    content = ''
    desc = soup.find(class_='info').find(class_='container').find_all('p')
    for desc in desc:
        content += '\n{}'.format(desc.text)

    today = soup.find(class_='today')
    temperature = today.find(class_='tempB').text
    content += '\n氣溫：{}\n'.format(temperature)

    others = today.select('.right .wrap .detail')[0].find_all('p')
    for other in others:
        content += '\n{}'.format(other.text)

    return content
```

網頁爬蟲(6)

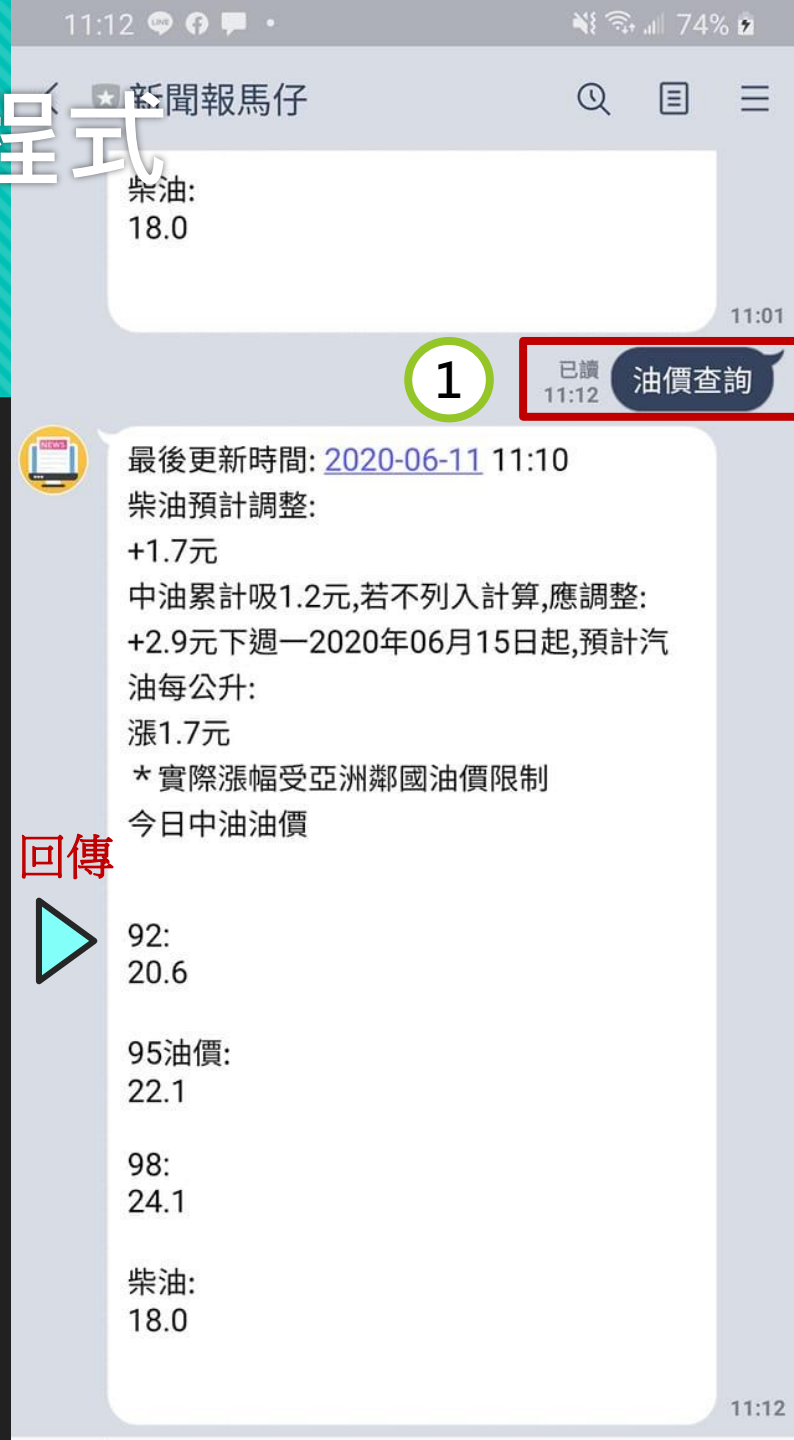
▶ 氣象

將以下判斷式加到 handle_message() 內：

```
if event.message.text == "氣象":  
    content = weather()  
    line_bot_api.reply_message(  
        event.reply_token,  
        TextSendMessage(text=content))  
return 0
```

在手機上測試程式

▶ 輸入：油價查詢



安裝 git



Search entire site...

Git is a **free and open source** distributed version control system designed to handle everything from small to very large projects with speed and efficiency.

Git is **easy to learn** and has a **tiny footprint** with **lightning fast performance**. It outclasses SCM tools like Subversion, CVS, Perforce, and ClearCase with features like **cheap local branching**, convenient **staging areas**, and **multiple workflows**.



About

The advantages of Git compared to other source control systems.



Documentation

Command reference pages, Pro Git book content, videos and other material.



Downloads

GUI clients and binary releases for all major platforms.



Community

Get involved! Bug reporting, mailing list, chat, development and more.

1



<https://git-scm.com/>



Pro Git by Scott Chacon and Ben Straub is available to **read online for free**. Dead tree versions are available on [Amazon.com](#).



Windows GUIs



Tarballs



Mac Build



Source Code

使用 Git 佈署 Heroku 專案

▶ 登入->初始化->遠端佈署專案->新增檔案->推送專案

```
命令提示字元
D:\temp\line-bot-tutorial-master>pip freeze
D:\temp\line-bot-tutorial-master>pip install requests
Collecting requests
  Downloading requests-2.23.0-py2.py3-none-any.whl (58 kB)
    | 51 kB 648 kB/s eta 0:00:
    | 58 kB 612 kB/s
Collecting certifi<=2017.4.17
  Downloading certifi-2020.4.5.1-py2.py3-none-any.whl (157 kB)
    | 122 kB 2.2 MB/s eta 0:00:01
    | 133 kB 2.2 MB/s eta 0:00:
    | 143 kB 2.2 MB/s eta 0:0
    | 153 kB 2.2 MB/s eta 0
    | 157 kB 2.2 MB/s
Collecting chardet<4,>=3.0.2
  Downloading chardet-3.0.4-py2.py3-none-any.whl (133 kB)
    | 102 kB 6.8 MB/s eta 0:00:01
    | 112 kB 6.8 MB/s eta 0:00:
    | 122 kB 6.8 MB/s eta 0:
    | 133 kB 6.8 MB/s eta
    | 133 kB 6.8 MB/s
Collecting urllib3!=1.25.0,!1.25.1,<1.26,>=1.21.1
  Downloading urllib3-1.25.9-py2.py3-none-any.whl (126 kB)
    | 126 kB ...
Collecting idna<3,>=2.5
  Downloading idna-2.9-py2.py3-none-any.whl (58 kB)
    | 58 kB 2.9 MB/s
Installing collected packages: certifi, chardet, urllib3, idna, requests
Successfully installed certifi-2020.4.5.1 chardet-3.0.4 idna-2.9 requests-2.23.0 urllib3-1.2
```

安裝指令如下：

heroku login

git init

heroku git:remote -a app名稱

git add .

git commit -am "news-robot"

git push heroku master

Heroku 專案佈署(1)

▶ 檔名：Procfile

```
web gunicorn app:app --preload
```

Heroku 使用 gunicorn 托管專案

Heroku 專案佈署(2)

▶ 檔名：requirements.txt

```
Flask==1.0.2  
gunicorn==19.9.0  
beautifulsoup4==4.6.3  
line-bot-sdk==1.8.0  
urllib3==1.25.9
```

本專案需要安裝的套件

Heroku 專案佈署(3)

▶ 檔名 : runtime.txt

```
python-3.6.10
```

python 版本

Heroku 專案佈署(4)

▶ 檔名 : config.ini

```
[line_bot]
Channel_Access_Token = YOUR_CHANNEL_SECRET
Channel_Secret = YOUR_CHANNEL_SECRET

[imgur_api]
Client_ID = YOUR_IMGUR_CLIENT_ID
Client_Secret = YOUR_IMGUR_CLIENT_SECRET
Album_ID = YOUR_IMGUR_ALBUM_ID

[other_api]
API_Get_Image = API_Get_Image
```