

My Experience of Fintech | Fugle

Alan Lin

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outline

我是誰

富果簡介

Fugle Realtime API

Fugle Telegram ChatBot

未來趨勢



我是誰

Alan Lin 林書懷

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第一屆東吳巨資學院

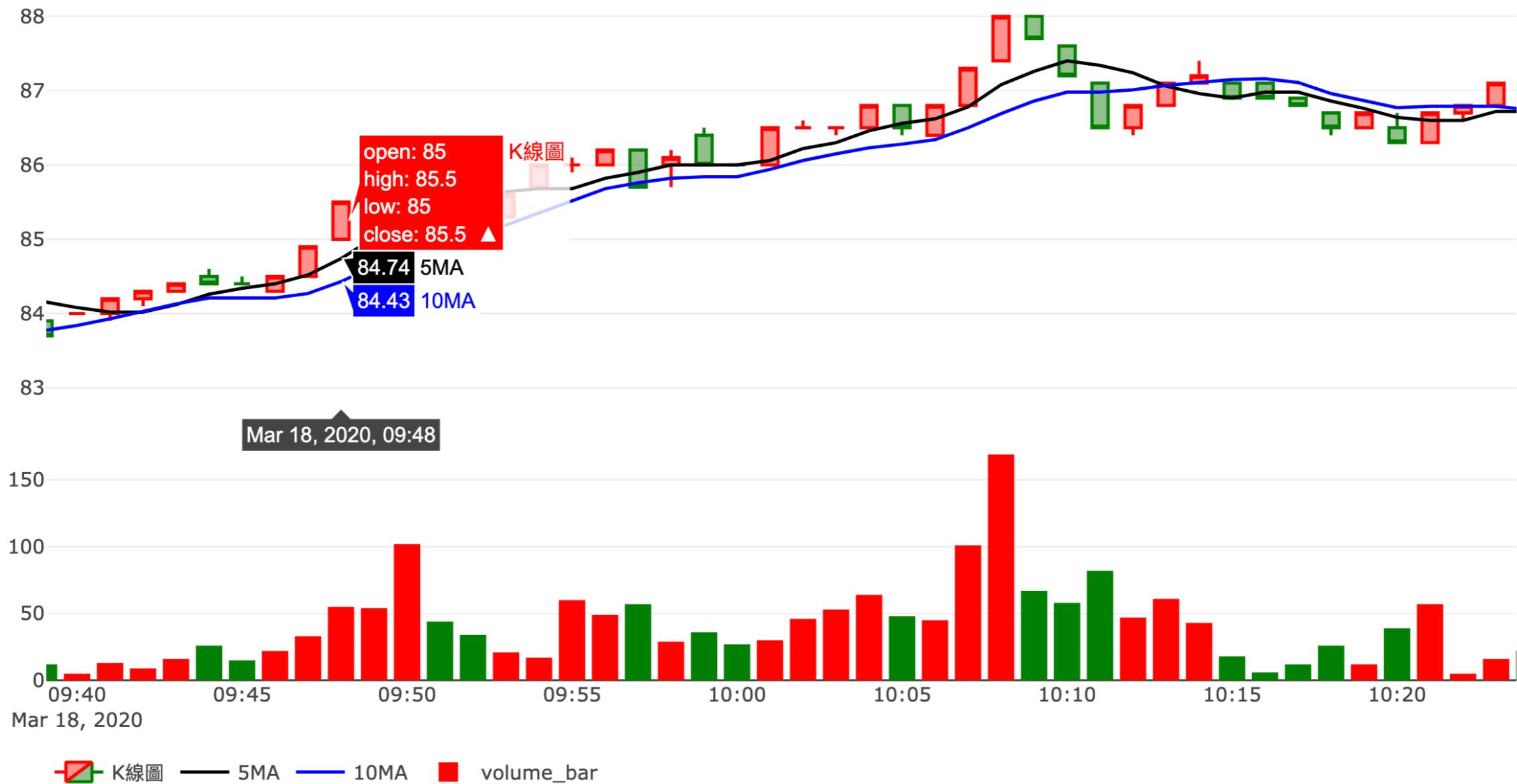


- 專為年輕人量身定做的[投資平台](#)
- 貼近使用者的視覺化服務，包含各項指數及帳戶服務
- 豐富的主題選股，包含：集團股、智慧選股...
- 富果股市小幫手（chatbot），隨時推播公司的重大訊息
- Fugle Realtime API
 - ✓ 全台第一家對大眾開放即時股價的 Realtime API
 - ✓ 包含 Restful 及 Websocket 兩種形式

- 茂林 - KY



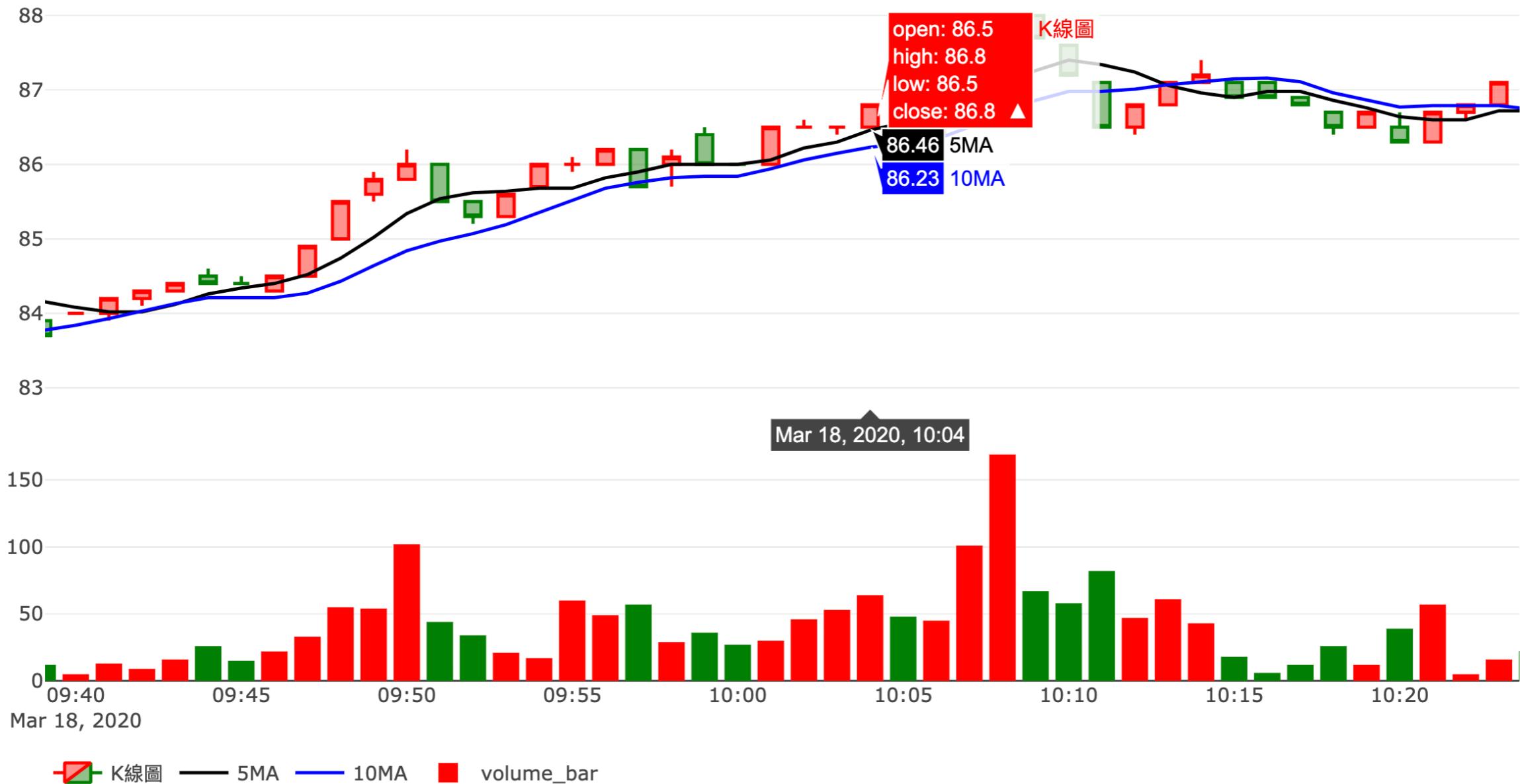
4935 分K線圖



富果簡介

- 茂林 - KY

4935 分K線圖





富果簡介

- [選股機器人-測試](#)

DA_test

@DAgod_bot

SEND MESSAGE

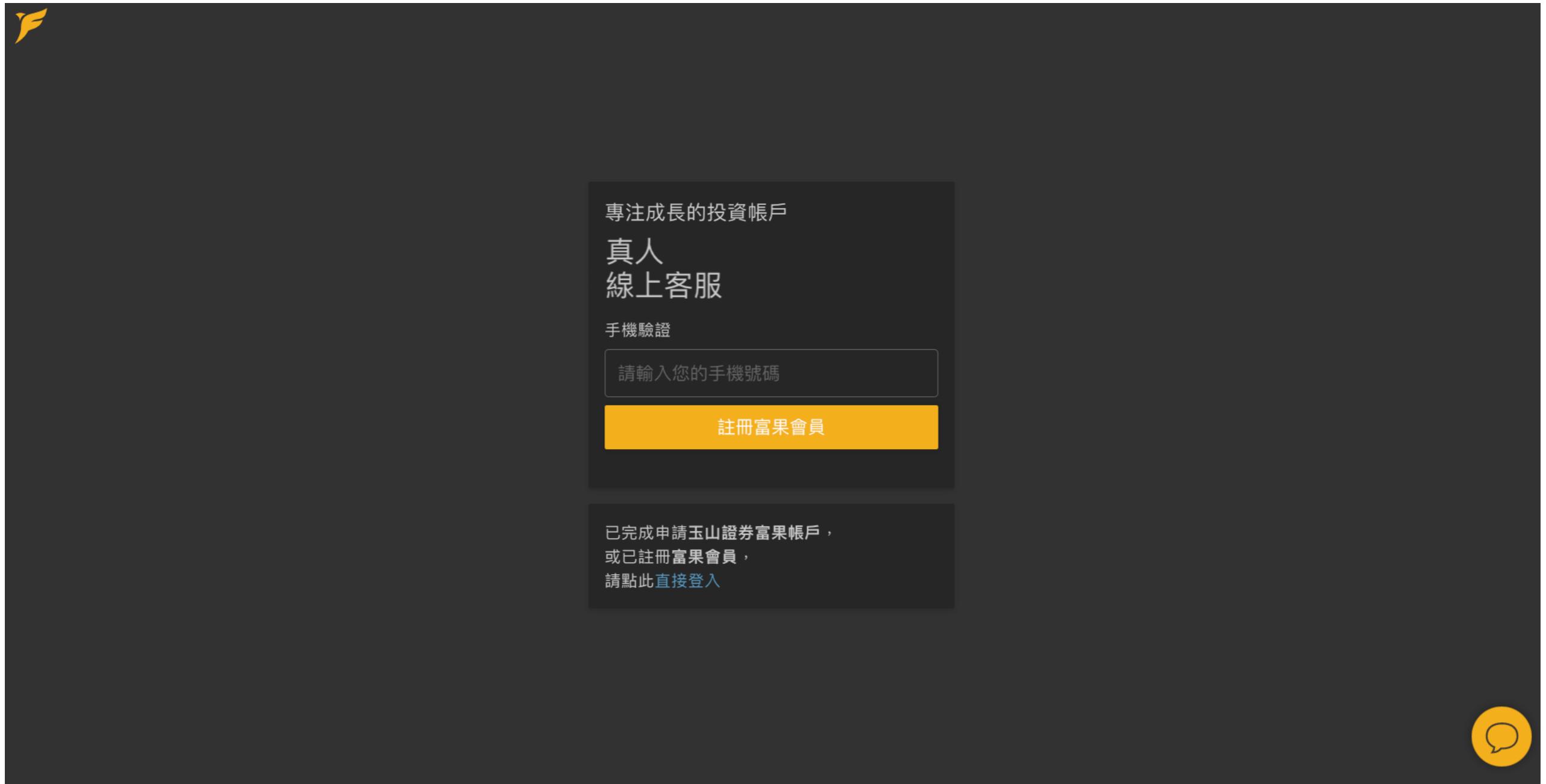
Fugle Realtime API





Fugle Realtime API

- 註冊 [Fugle](#)



A screenshot of the Fugle registration page. The page has a dark background with a central light gray registration form. At the top of the form, there is a sub-headline: "專注成長的投資帳戶" (Focus on growth investment accounts) and the main headline: "真人
線上客服" (Human online customer service). Below the headline is a "手機驗證" (Mobile verification) section containing a text input field with placeholder text "請輸入您的手機號碼" (Please enter your mobile number) and a yellow "註冊富果會員" (Register Fugle member) button. At the bottom of the form, there is a link: "已完成申請玉山證券富果帳戶，
或已註冊富果會員，
請點此直接登入" (If you have already applied for the Yu Shan Securities Fugle account or registered as a Fugle member, please click here to log in directly).



Fugle Realtime API

- 輸入優惠序號
 - ✓ Fugle 首頁 -> 我的 -> 我的優惠紀錄 -> 新增優惠序號

The screenshot shows the Fugle mobile application interface. On the left is a vertical sidebar with icons and labels: Personal Information, My Profile, Agreement, My Reward History, Reward Points, My Referral Code, Subscription Cards, and Back to Work Area. The main content area has a header 'My Rewards'. Below it is a table titled 'Exchange Record' with columns: Activity Name, Serial Number, and Exchange Time. To the right is a form titled 'Add Reward Code' with a text input field labeled 'Please enter the serial number' and a yellow 'Send' button. A red box highlights the input field and send button.



Fugle Realtime API

- 申請 [API Token](#)

The screenshot shows the Fugle API Premium Membership dashboard. On the left is a sidebar with a yellow background and white text:

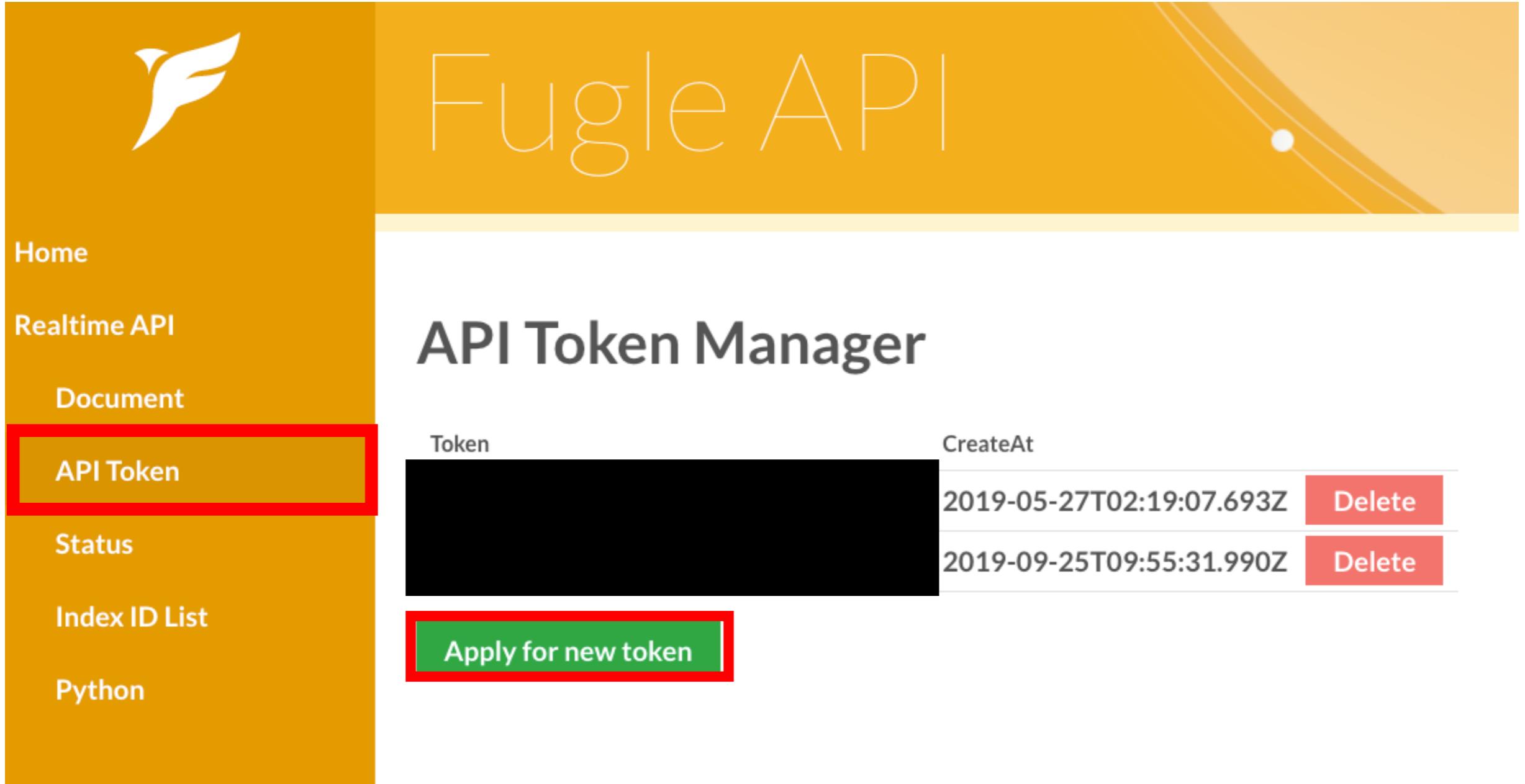
- Home
- Realtime API
- Document
- API Token
- Status
- Index ID List
- Python

The main content area has a light gray background. At the top, it says "Fugle API". Below that, a large box displays the following information:

登入狀態: 已登入
用戶 : Alan LinLinLin
FugleTrade : 已完成開戶

At the bottom left of the main area, there is a small copyright notice: "copyright © Fugle all rights reserved".

- 申請 API Token



Home

Realtime API

Document

API Token

Status

Index ID List

Python

Fugle API

API Token Manager

Token	CreateAt	
[REDACTED]	2019-05-27T02:19:07.693Z	Delete
[REDACTED]	2019-09-25T09:55:31.990Z	Delete

Apply for new token



Fugle Realtime API

- 開始實作
- 下載參考範例：
 - `git clone https://github.com/frieadgood/0319_ntu_scu.git`

Fugle Telegram ChatBot



Fugle Telegram ChatBot

- 加入 [@BotFather](#) 為好友



BotFather

@BotFather

BotFather is the one bot to rule them all. Use it to create new bot accounts and manage your existing bots.

SEND MESSAGE

Fugle Telegram ChatBot

- /start
- /newbot

I can help you create and manage Telegram bots. If you're new to the Bot API, please [see the manual](#).

You can control me by sending these commands:

[/newbot](#) - create a new bot
[/mybots](#) - edit your bots [beta]

Edit Bots

[/setname](#) - change a bot's name
[/setdescription](#) - change bot description
[/setabouttext](#) - change bot about info
[/setuserpic](#) - change bot profile photo
[/setcommands](#) - change the list of commands
[/deletebot](#) - delete a bot

Bot Settings

[/token](#) - generate authorization token
[/revoke](#) - revoke bot access token
[/setinline](#) - toggle [inline mode](#)
[/setinlinegeo](#) - toggle inline location requests
[/setinlinefeedback](#) - change inline feedback settings
[/setjoininggroups](#) - can your bot be added to groups?
[/setprivacy](#) - toggle privacy mode in groups

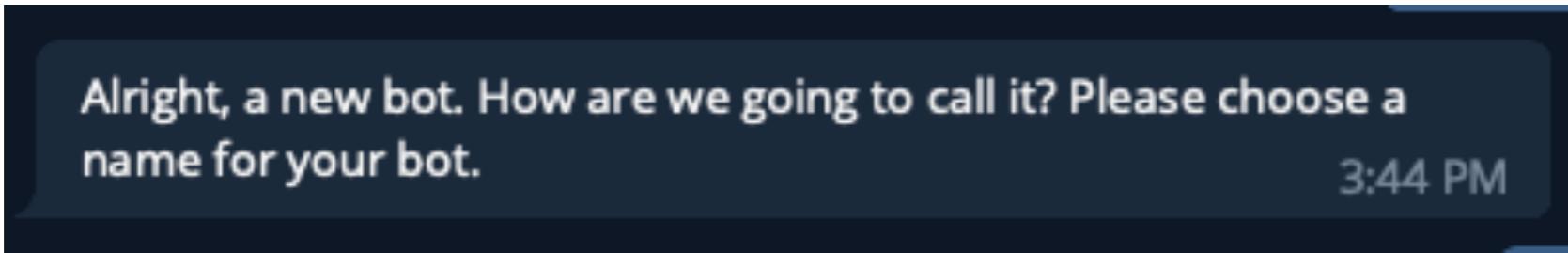
Games

[/mygames](#) - edit your games [beta]
[/newgame](#) - create a new game
[/listgames](#) - get a list of your games
[/editgame](#) - edit a game
[/deletetgame](#) - delete an existing game

10:13 PM

Fugle Telegram ChatBot

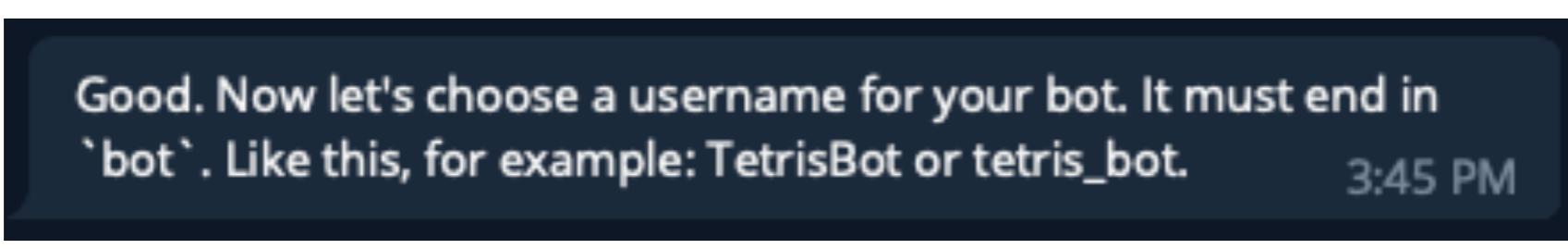
- Choose a name for your bot



Alright, a new bot. How are we going to call it? Please choose a name for your bot.

3:44 PM

- Choose a username for your bot (end in 'bot')



Good. Now let's choose a username for your bot. It must end in 'bot'. Like this, for example: TetrisBot or tetris_bot.

3:45 PM

Fugle Telegram ChatBot

- Mission Complete !

Done! Congratulations on your new bot. You will find it at t.me/saferhr_bot. You can now add a description, about section and profile picture for your bot, see [/help](#) for a list of commands. By the way, when you've finished creating your cool bot, ping our Bot Support if you want a better username for it. Just make sure the bot is fully operational before you do this.

Use this token to access the HTTP API:

`1014937534:AAGQH5Sir35v7AcErfg9zC2qV6xQhBEg5-4`

Keep your token **secure** and **store it safely**, it can be used by anyone to control your bot.

For a description of the Bot API, see this page:

<https://core.telegram.org/bots/api>

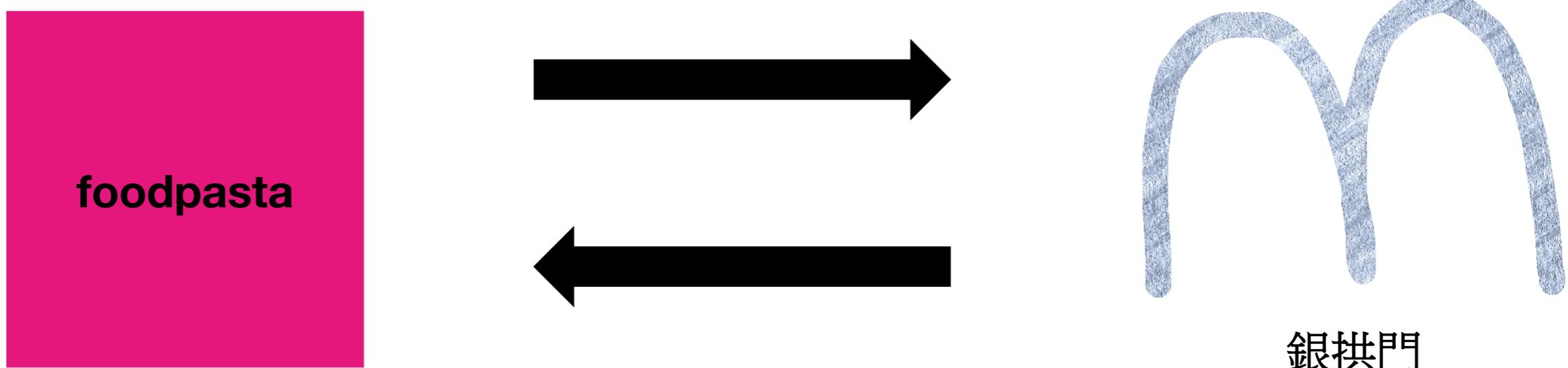
3:45 PM

- Query conversation history
 - [https://api.telegram.org/bot{\\$your_token}/getUpdates](https://api.telegram.org/bot{$your_token}/getUpdates)
- Copy API Token to config.ini file

BUT !!!

Fugle Telegram ChatBot

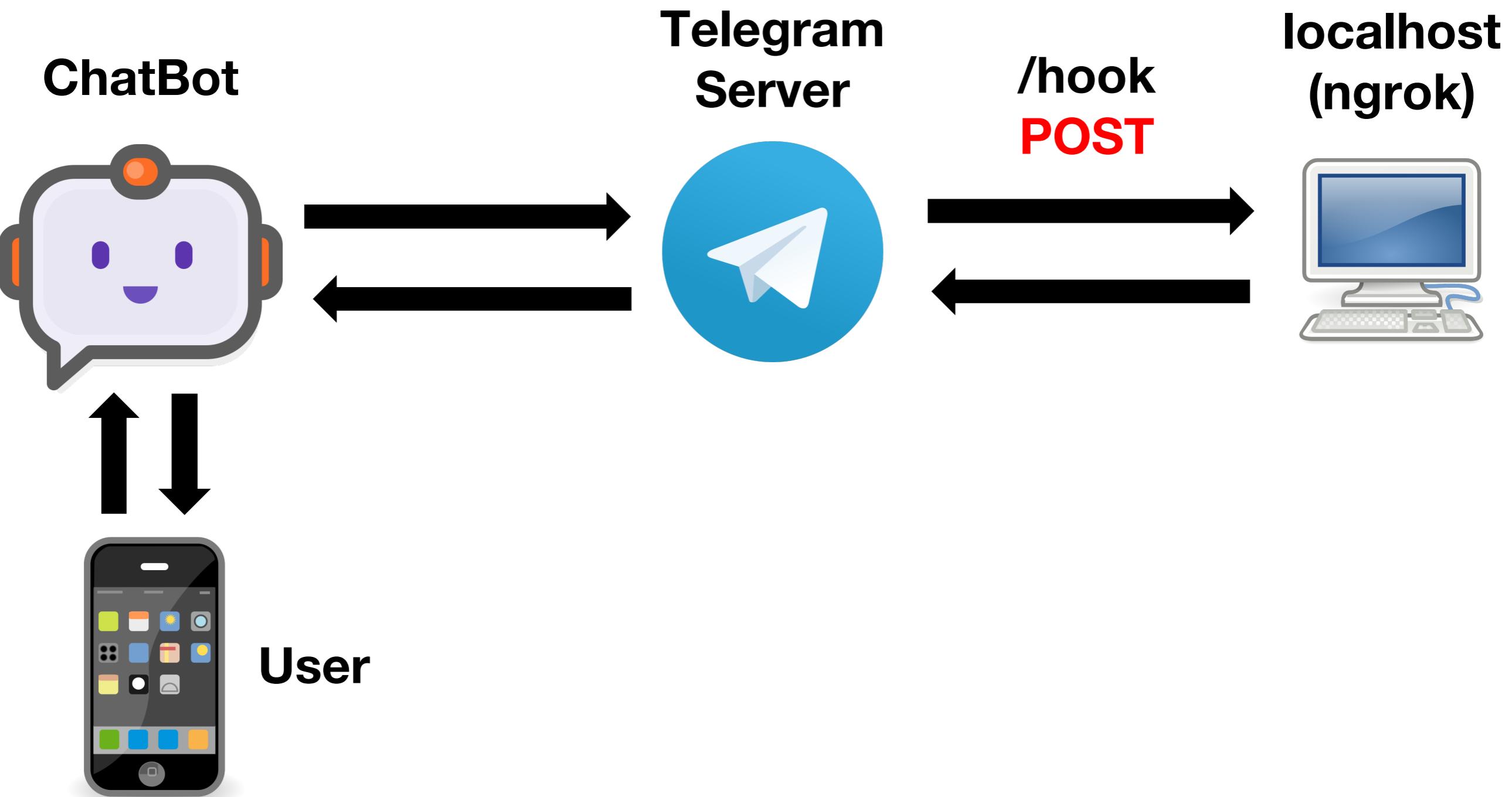
- Webhook
 - Whenever a user sends a message to your Chatbot, it will respond directly



Fugle Telegram ChatBot

- [ngrok](#)
 - 是一個暫時的 **domain name service** 能夠讓外網暫時訪問在本機端指定 **port** 執行的 **service**
 - 免費版的重新連線後會得到不一樣的 **url**
- **Flask**
 - **Flask** 為一種簡單的 **python web** 開發框架
 - 也常用來建立 **Web API**

Fugle Telegram ChatBot





Fugle Telegram ChatBot

- References

- <https://python-telegram-bot.readthedocs.io/en/stable/index.html>
- <https://github.com/inconshreveable/ngrok>
- <https://flask.palletsprojects.com/en/1.1.x/>

實作時間



未來趨勢



- 機器學習法人 OD 型態
 - OD，異常偵測 (Outlier Detection) ，經常用於流量異常分析或檢測風險訊號
 - Isolation Forest
- 異常個股的隔日波動約有 70% 大於其日平均波動值，總體波動幅度相較平均成長 65%
- 隔週波動則約有 65% 大於其周平均波動值，總體波動幅度較平均成長 44%

- Real-time Anomaly Detection
 - 預測未來 15 分鐘會產生異常波動？
 - 獲利 & 避險

Thanks

