用 Kamigo 實作 LINE bot 的開發心得

NiJia

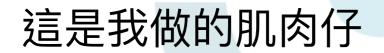
2019/11/27

Chatbot Taiwan #14 meetup @ onramp studio

林家煜 NiJia

- Hyena Backend Developer
- Chatbot Taiwan Co-organizer
- LINE API Expert
- Farmer / Body builder
- https://nijialin.com
- louis70109@gmail.com







為什麼要做成機器人

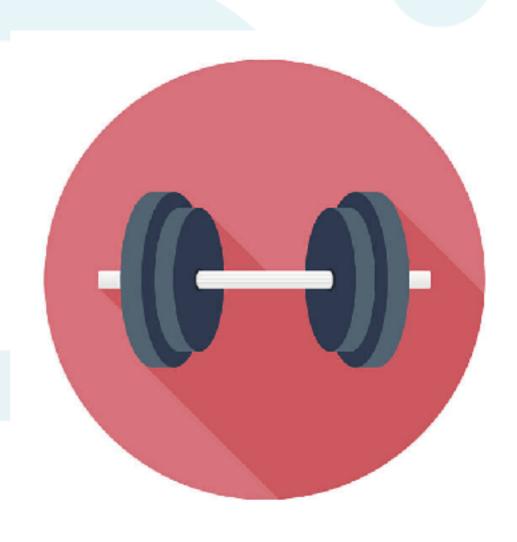
- · 本身是重度 LINE 使用者
- 熊大、莎莉愛好者
- · 不太愛安裝一堆 APP (懶)



• 做成網頁誰要用 (通常都是有教練在幫忙用)

肌肉仔期望功能

- 要能 CRUD
- 隨身一隻手機
- 練完就紀錄
- 需要知道訓練時間
- 紀錄的身份驗證
- 區間紀錄搜尋
- 上次訓練紀錄



- 要能 CRUD <- 基本的
- 隨身一隻手機
- 練完就紀錄
- 需要知道訓練時間
- 紀錄的身份驗證
- 區間紀錄搜尋
- 上次訓練

依照身體狀態計畫課表(X) 讓訓練課表變得可見 像我時間偶爾練會需要有東西幫我記錄 上次訓練

- 要能 CRUD
- 隨身一隻手機 < 一紀錄用(很多人都佔著器材追劇)
- 練完就紀錄
- 需要知道訓練時間
- 紀錄的身份驗證
- 區間紀錄搜尋
- 上次訓練

- 要能 CRUD
- 隨身一隻手機
- 練完就紀錄 < 一 救救金魚腦
- 需要知道訓練時間
- 紀錄的身份驗證
- 區間紀錄搜尋
- 上次訓練

依照身體狀態計畫課表(X) 讓訓練課表變得可見 像我時間偶爾練會需要有東西幫我記錄 上次訓練

- 要能 CRUD
- 隨身一隻手機
- 練完就紀錄
- 需要知道訓練時間 <- 控制狀態
- 紀錄的身份驗證
- 區間紀錄搜尋
- 上次訓練

- 要能 CRUD
- 隨身一隻手機
- 練完就紀錄
- 需要知道訓練時間
- 紀錄的身份驗證 <-之後做分析才有根據
- 區間紀錄搜尋
- 上次訓練

- 要能 CRUD
- 隨身一隻手機
- 練完就紀錄
- 需要知道訓練時間
- 紀錄的身份驗證
- 區間紀錄搜尋 <-特定紀錄&某次紀錄
- 上次訓練

- 要能 CRUD
- 隨身一隻手機
- 練完就紀錄
- 需要知道訓練時間
- 紀錄的身份驗證
- 區間紀錄搜尋
- 上次訓練 < 救救金魚腦













紀錄是我的本命

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請選擇日期

2019	•
November	٧
9	

送出

Cha









镁出



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紀錄是我的本命

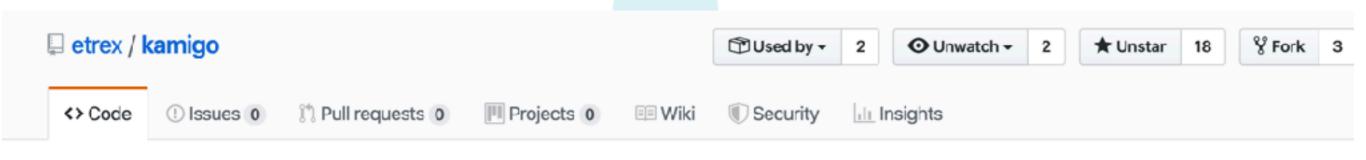




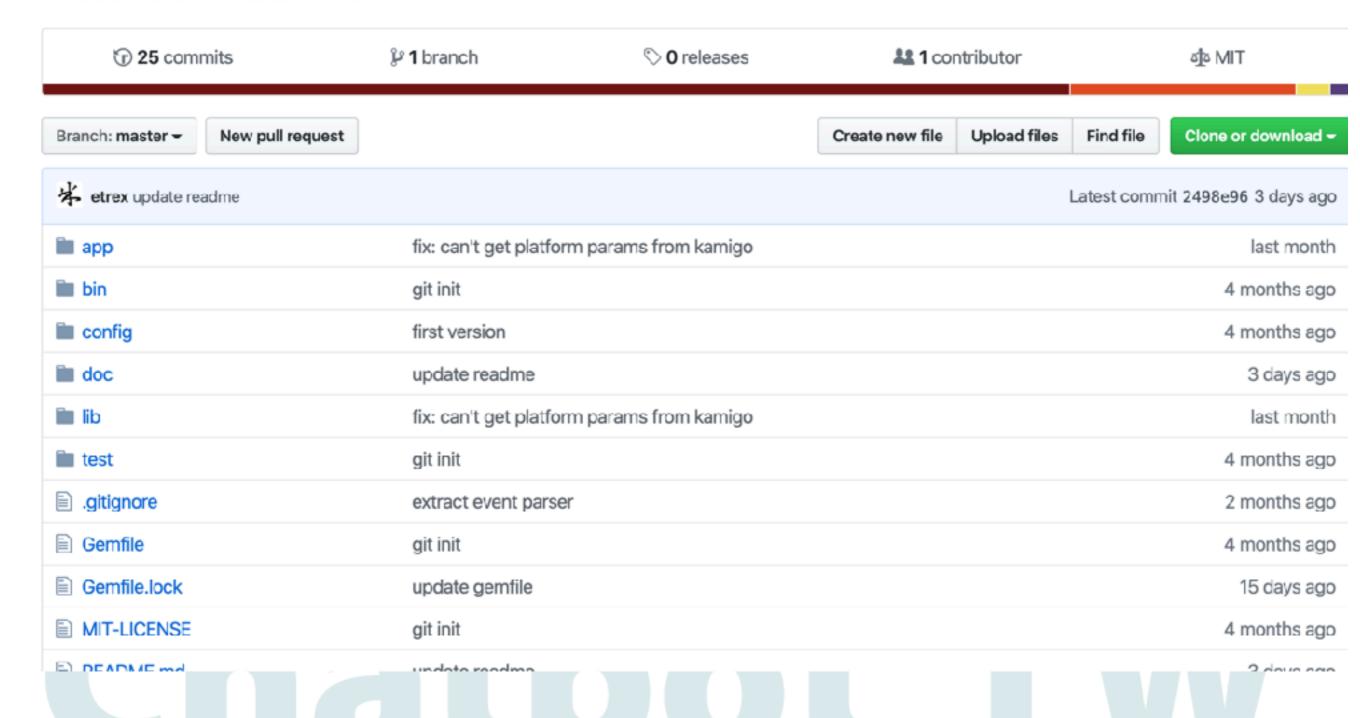




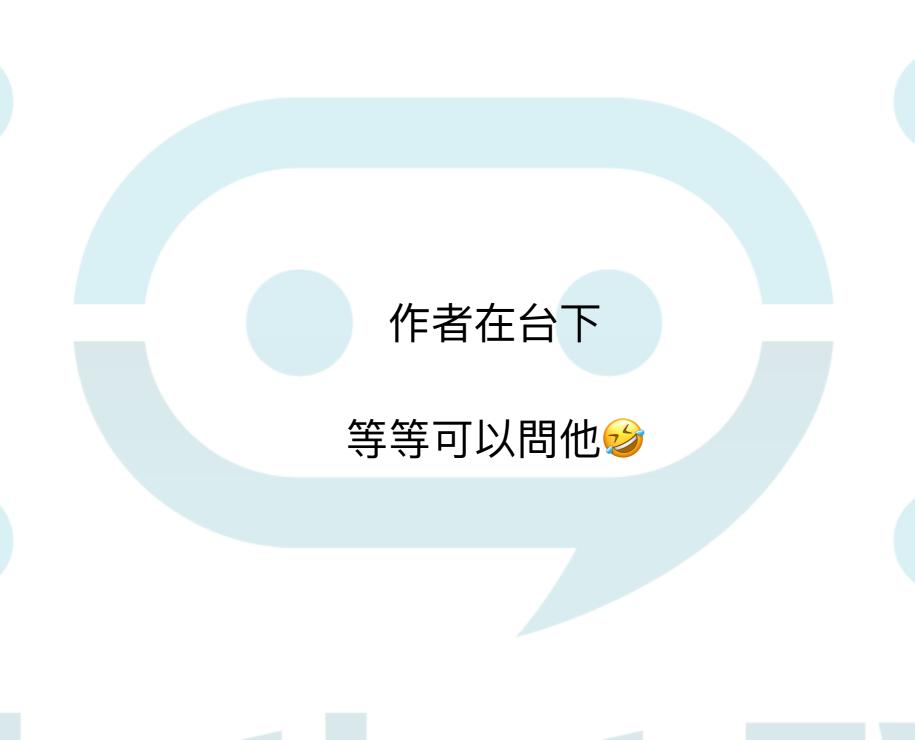
Chatbott

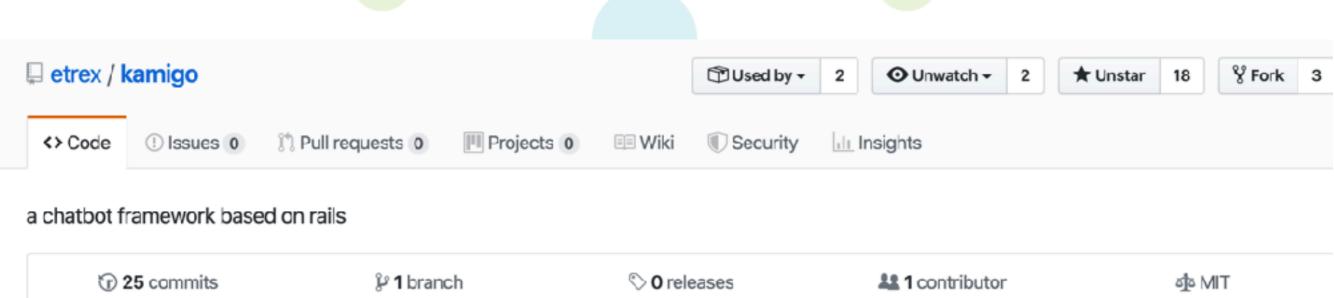


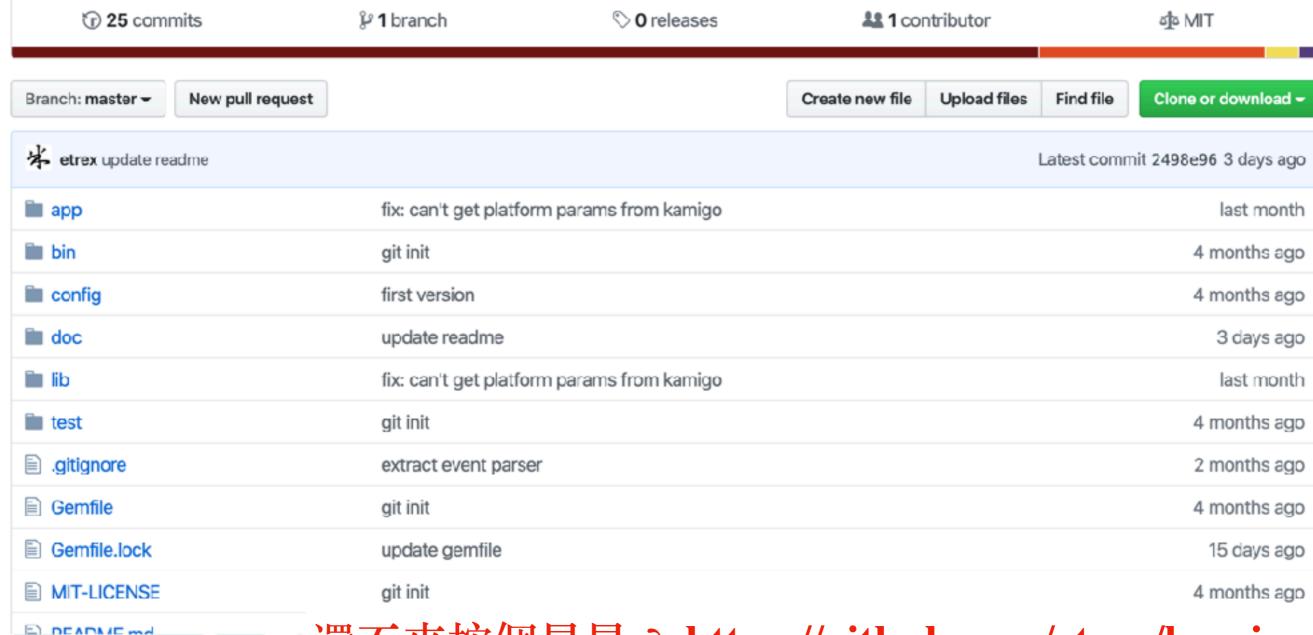
a chatbot framework based on rails











還不來按個星星? https://github.com/etrex/kamigo

• MVC 架構

• 一個請求對應一個 controller

• LIFF & Flex message 都在 View 裡

• 目前 Rails 6.0.x 會爆

[muscle_man] rails g scaffold todo name desc

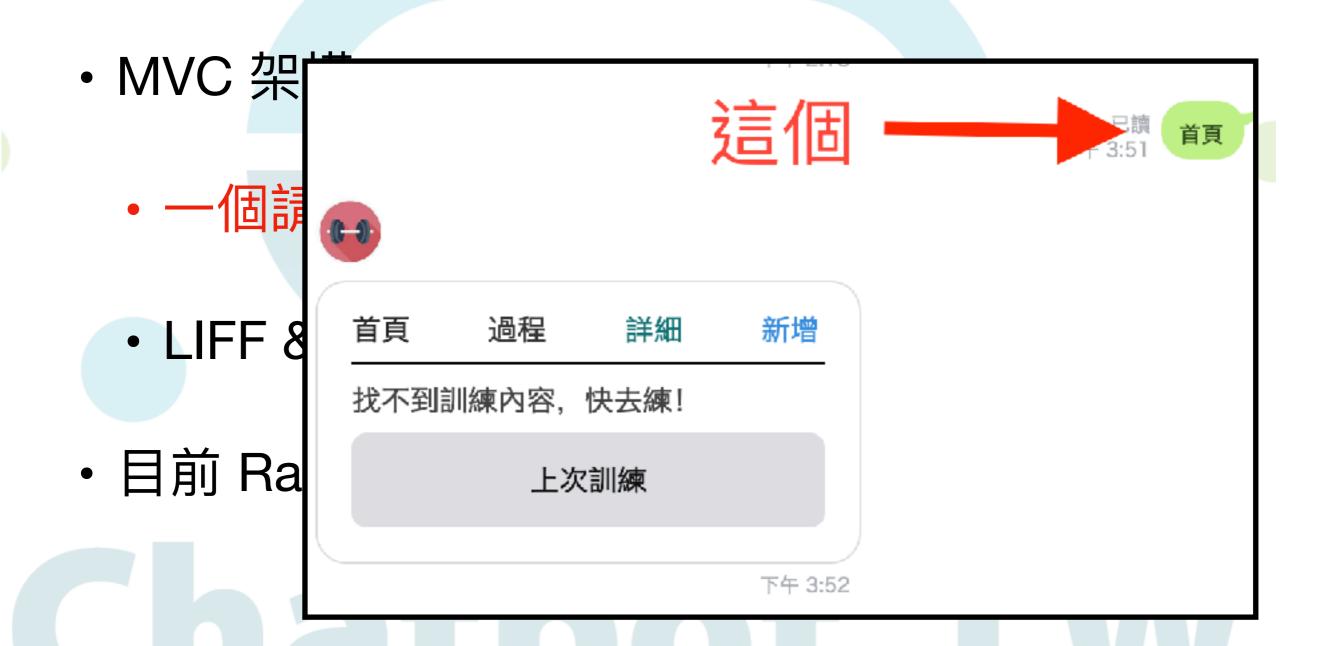
- 一個請求對應一個 controller
- LIFF & Flex message 都在 View 裡
- 目前 Rails 6.0.x 會爆

• MVC 架構

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- Rails 的黑魔法 Scaffol
- MVC 架構
 - · 一個請求對應一個 cor
 - LIFF & Flex message
- 目前 Rails 6.0.x 會爆

- practice.json.jbuilder
 create.js.erb
 edit.html.erb
 - 💎 edit.liff.erb
 - histo y.liff.erb
 - history.line.erb
 - index_details.line.erb
- index_station.line.erb
- index.html.erb
- index.json.jbuilder
- ndex.line.erb
- 💎 last_reco<mark>r</mark>d.line.erb
- new.html.erb
- new.liff.erb
- search.liff.erb
- search.line.erb
 - show.html.erb
 - show.json.jbuilder
 - show.line.erb
 - 👽 update.js.erb

• Rails 的黑魔法 - Scaffold: CRUD 快速集成

```
respond_to do |format|-

respond_to do |format|-

format.html { redirect_to @practices, notice: 'Practice was successfully

format.json { render :show, status: :created, location: @practices }-

format.line { render :search }-

end-
```

- LIFF & Flex message 都在 View 裡
- 目前 Rails 6.0.x 會爆

• Rails 的黑魔法 - Scaffold: CRUD 快速集成

• MVC 架構

• 一個請求對應一個 controller

LIFF & Flex message 都在 View 裡

• 目前 Rails 6.0.x 會爆 (某次 Live demo ...)

Kamigo 宗旨

可以同時開發 Chatbot 與 Web

並共用 Controller 以及 Model

設計理念: https://github.com/etrex/kamigo/blob/master/doc/01_intro.md

Kamigo 宗旨

可以同時開發 Chatbot 與 Web

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但我只用來開發 Chatbot!!

設計理念: https://github.com/etrex/kamigo/blob/master/doc/01_intro.md

Kamigo 宗旨

可以同時開發 Chatbot 與 Web

並共用 Controller 以及 Model

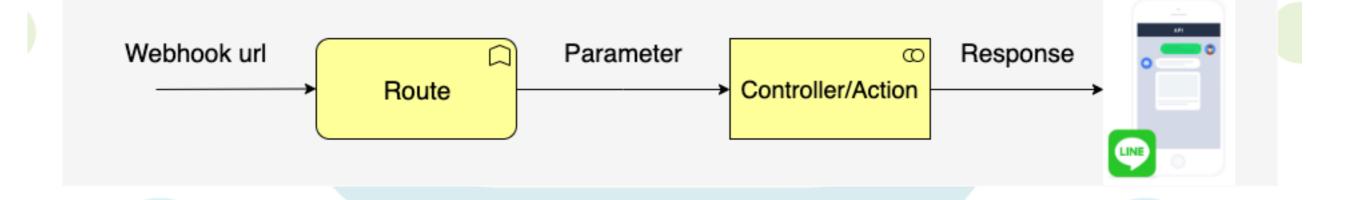
但我只用來開發 Chatbot!!

因為每次的搜尋都會確認用戶身份 (其實只是還沒實作在 Web)

設計理念: https://github.com/etrex/kamigo/blob/master/doc/01_intro.md



一般 Webhook 做法

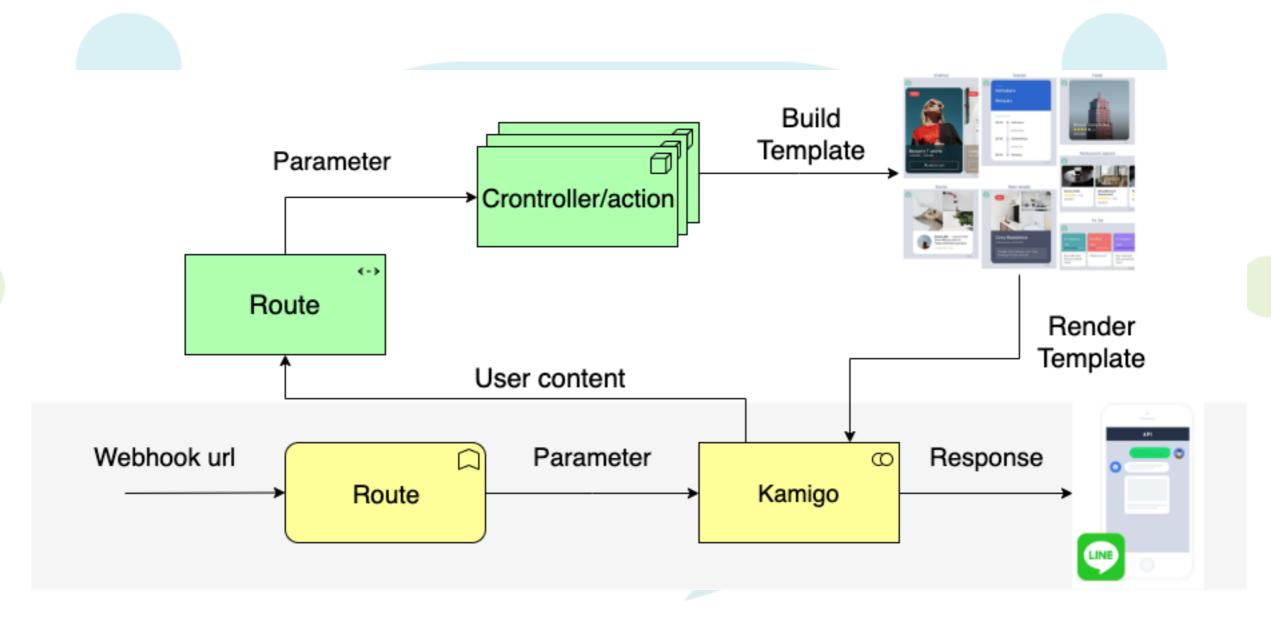


參考



Chatbot

Kamigo 做法



Chatbot





絕對不會說我是米粉

Chatbot TW

帶來的好處

- 一開始就只是覺得很厲害
- 一個 Event 交給一個 Route(Controller)
- · 寫起來很像在寫 Rails
- ·組 flex message 不用看一堆括號
- 支援一些簡單的語意理解規則
- 懶

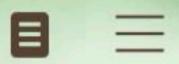
接著來看一下路由可以怎麼設計

```
Rails.application.routes.draw do-
     --root to: "practices#index"-
     --get '首頁', to: "practices#index"-
     → get "上次(*train)", to: "practices#last_record"¬
     --get "今日訓練", to: "practices#index_details"¬
     → get "過程(*any_type)", to: "practices#index_station"¬
     ··resources :practices do-
     --- collection do-
      ··· post :search-
     get :search
11
     post :history-
12
     get :history-
13
     ----get :index_details-
14
     get :index_station-
15
     ----get :last_record-
16
     end-
17
     end-
18
19
20
     resources :users do-
     ···collection do
21
     ····get :line_login-
22
     post :line_login-
23
     get :auth-
24
     end-
25
     end-
26
     reget 'liff_entry', to: 'liff#entry'¬
27
     --post 'liff_route', to: 'liff#route'-
28
     - get "(*other)", to: "others#index"¬
29
     end∍
30
```





< 36 □ 肌肉仔



下午12:21

POST /practices/search {"trip": {"departing(1i)":"2019","departing(2i)":"10","departing(3i)":"14"}}

已讀 下午 12:21

首頁

2019-10-14

訓練項目 重量(kg)

史密斯平胸 50.0

X

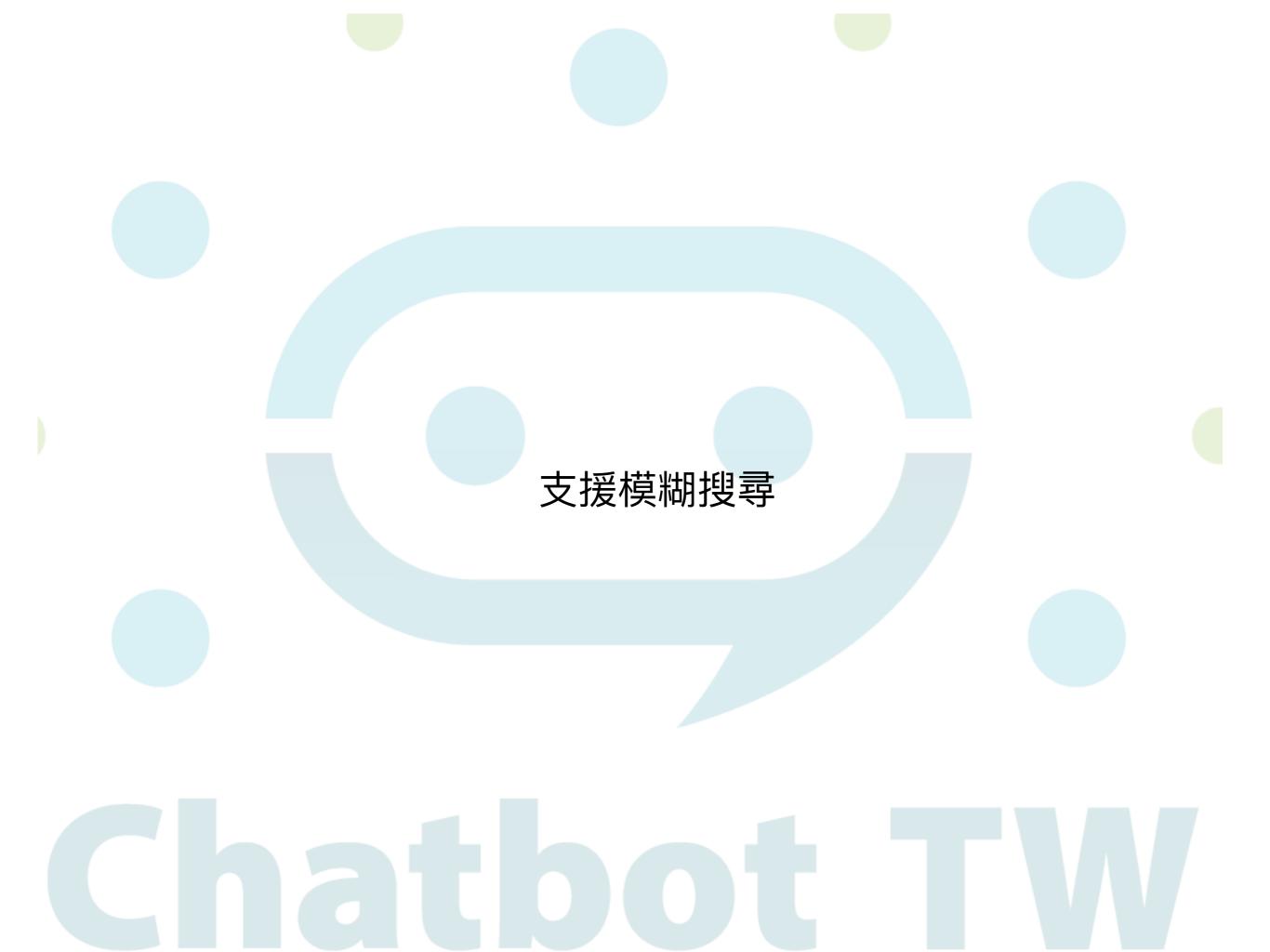
史密斯上胸 40.0



00

```
Rails.application.routes.draw do-
     --root to: "practices#index"-
     --get '首頁', to: "practices#index"-
     - get "上次(*train)", to: "practices#last_record"¬
      --get "今日訓練", to: "practices#index_details"¬
     → get "過程(*any_type)", to: "practices#index_station"¬
      ··resources :practices do-
      ···collection do-
                              映射到對應的路由上
      ····post :search-
10
11
     get :search
      ··· post :history-
12
      ···get :history-
13
      get :index_details-
14
      get :index_station-
15
      ····get :last_record-
16
     end-
17
     end-
18
19
20
     resources :users do-
     ···collection do
21
      ····get :line_login-
22
      ----post :line_login-
23
     get :auth-
24
     end-
25
     end-
26
     reget 'liff_entry', to: 'liff#entry'¬
27
     --post 'liff_route', to: 'liff#route'-
28
     - get "(*other)", to: "others#index"¬
29
     end∍
30
```

```
Rails.application.routes.draw do-
     --root to: "practices#index"-
     --get '首頁', to: "practices#index"-
     - get "上次(*train)", to: "practices#last_record"¬
     get "今日訓練", to: "prac
get "過程(*any_type)", t
                                      dex_details"-
                                      ices#index_station"¬
      resource GET /practices/search {xxxx}
         collection do-
                          也會對應路由
          post :search-
10
11
      get :search
      ····post :history-
12
       get :history-
13
         get :index_details-
14
      get :index_station-
15
      ····get :last_record-
16
     end-
17
     end-
18
19
20
     resources :users do-
      ···collection do
21
      ····get :line_login-
22
      ----post :line_login-
23
     get :auth-
24
25
     end-
     end-
26
     reget 'liff_entry', to: 'liff#entry'¬
27
     --post 'liff_route', to: 'liff#route'-
28
     → get "(*other)", to: "others#index"¬
29
     end-
30
```



範例

下午 1:17

已讀 下午 1:18

上一次練了什麼?



首頁	2019-10-14	
訓練項目	重量(kg)	
史密斯平胸	50.0	×
史密斯上胸	40.0	×
啞鈴夾胸	16.0	×
Cable王	18.7	×
Cable三頭	6.8	×
Cable平胸	4.6	×

```
Rails.application.routes.draw do-
     --root to: "practices#index"-
     --get '首頁', to: "practices#index"-
       ·get "上次(*train)", to: "practices#last_record"¬
      · get "ラロ訓練", to: "practices#index_details"¬
     →get "過程(*any_type)", to: "practices#index_station"¬
     ··resources :practices do-
     --- collection do-
      ··· post :search-
     get :search
     post :history-
12
     get :history-
13
     ----get :index_details-
14
     get :index_station-
15
     ----get :last_record-
16
     end-
17
     end-
18
19
20
     resources :users do-
     ···collection do
21
     ····get :line_login-
22
     post :line_login-
23
     get :auth-
24
     end-
25
     end-
26
     reget 'liff_entry', to: 'liff#entry'¬
27
     --post 'liff_route', to: 'liff#route'-
28
     - get "(*other)", to: "others#index"¬
29
     end∍
30
```

```
Rails.application.routes.draw do-
     --root to: "practices#index"-
3
     - get '首頁', to: "practices#index"-
       get "上次(*train)", to: "practices#last_record"¬
              置我就只判斷"上次xxx"對於
     其他的交給 Rails 幫忙
      get :search-

→ post :history -

12
     ····get :history-
13
     get :index_details-
     --- get :index_station-
15
     ····get :last_record-
16
     end-
17
     end-
18
19
20
     resources :users do-
     ···collection do
21
     get :line_login-
22
     ----post :line_login-
23
     get :auth-
24
25
     end-
     end-
26

    get 'liff_entry', to: 'liff#entry'¬
27
     --post 'liff_route', to: 'liff#route'-
28
     → get "(*other)", to: "others#index"¬
29
     end-
30
```

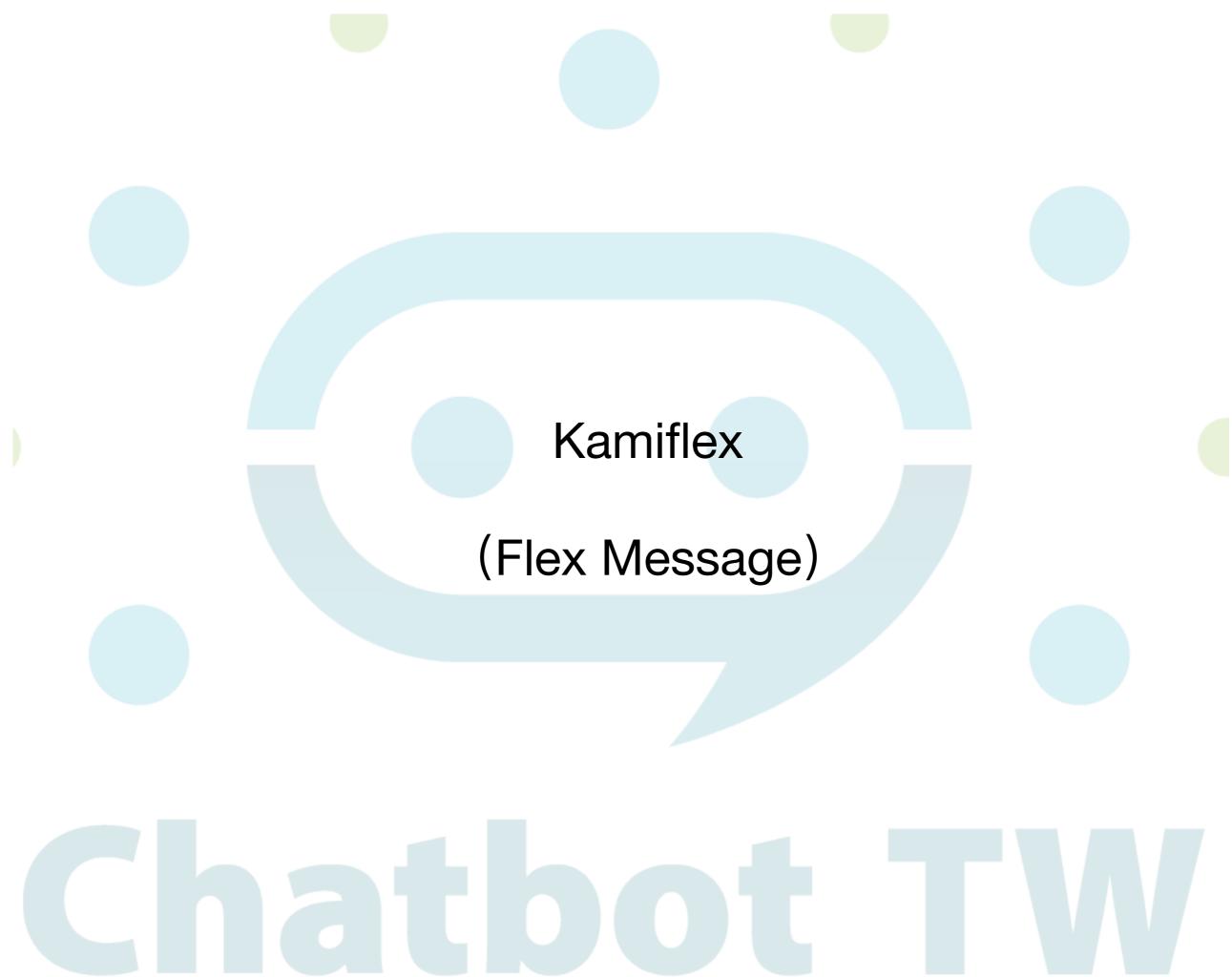
```
Rails.application.routes.draw do-
     --root to: "practices#index"-
     --get '首頁', to: "practices#index"-
     - get "上次(*train)", to: "practices#last_record"¬
     --get "今日訓練", to: "practices#index_details"¬
     → get "過程(*any_type)", to: "practices#index_station"¬
     ··resources :practices do-
     ···collection do-
         post:search-
     get :search
     post :history-
12
     ---get :history-
13
     --- get :index_details-
14
     ----get :index_station-
15
     ····get :last_record-
16
     end-
17
     end-
18
19
     Tresour 到最後沒人要的文字就會在這
20
     --- collection do
21
     ····get :line_login-
22
     ----post :line_login-
23
     get :auth-
24
     end-
25
     end-
26
     27
     --post 'liff_route', to: 'lift#route'-
28

    get "(*other)", to: "others#index"¬
29
30
     end¬
```

所以

- 只要符合 上次xxx 接送往對應 Controller
- 還有可以判斷中文的路由!!
- · 不用再寫一堆 if else, 全讓路由去處理
- Rails 寫起來好舒服





這是你看到的訊息



首頁	2019-10-14	
訓練項目	重量(kg)	
史密斯平胸	50.0	×
史密斯上胸	40.0	×
啞鈴夾胸	16.0	×
CableΞ	18.7	×
Cable三頭	6.8	×
Cable平胸	4.6	×

```
··"type": "flex",¬
   ·· "altText": "this is a flex message",¬
   contents: {
   --- "type": "bubble",¬
   "body": {-
   --- "type": "box",
   "layout": "vertical",-
   contents": [-
   |--|--|--{-
   type": "box",
11
   "horizontal",
12
13
   contents": [-
   14
15
   16
   "flex": 0,-
18
   "type": 'message",-
19
   ····":"首頁",¬
20
   -----"text": '首頁"-
   color": "#212121"
   26
   "text": "2019-10-28",
27
   margin": "xs"
   ...以下省略三百行。
33
```

這是原本的樣子

我以前就是這樣刻 JSON



這是我寫的內容

```
<%= raw(Kamiflex.build(self) do-
--bubble do-
body do-
     body_header(flag, train_date)-
if @practices.present?-
    vertical_box spacing: "sm", margin: "lg" do-
     horizontal_box margin: "lg" do-
      ····text "訓練項目", weight: "bold"-
        ···text "重量(kg)", align: "end"¬
   text " ", align: "end"-
   | · · · · · horizontal_box @practices, margin: "lg" do |practice|-
   text "#{practice.bar_type}#{practice.moving}", action: message_action("GET /practices/#{practice.id}"),
           color: "#241663" -
      ····text practice.weight.blank? ? "-" : practice.weight.to_s, action: message_action("GET /practices/
           #{practice.id}"), align: "end", margin: "xs", color: "#6e2142"-
        --text "X", align: "end", action: message_action("DELETE /practices/#{practice.id}")-
  ····if @total.present?-
   separator-
        ---horizontal_box margin: "lg" do-
       ----text "總共訓練時間約: #{@total[0]}時 #{@total[1]}分 #{@total[2]}秒", margin: "xs", color: "#6e2142"¬
end-
end end
end-
else
-----none practice_message-
end # @practices present condition
end # body-
end # bubble-
end )%>¬
```



Kamiflex 幫忙做的事

```
·· "type": "flex",¬
     -- "altText": "this is a flex message",-
     "contents": {-
     "type": "bubble",
     "body": {-
     type": "box",-
     "layout": "vertical",-
     contents": [-
     10
     type": "box",-
11
                                           bubble do-
     "layout": "horizontal",-
                                           vertical_box do-
     "contents": [-
                                           📤 horizontal_box @todos, spacing: "sm", margin: "xs" do |todo|-
13
     . . . . . . . . . . . . . . . . . . .
     end
15
                                           -end-
     margin": "xs",-
16
                                           end
     spacing": "sm"
17
     18
20
```

Chatbot TW

22

如此一來就可以用 Ruby 的風格去開發 Flex message

整個語意看起來就乾淨多了!!

Chatbot TW



接下來說一下 Kamiliff

這是我的 LIFF

line://app/1613867810-ymYpONB4? liff_size=full&path=%2Fpractices%2Fnew

這是一般 LIFF 網址

line://app/1613867810-ymYpONB4? liff_size=full&path=%2Fpractices%2Fnew

後台的設定

Name	LIFF URL	Size
compact	line://app/1613867810-nB7EAG2g	Compact
tall	line://app/1613867810-rowDxVBE	Tall
liff_test	line://app/1613867810-XzpPGJWw	Full
full	line://app/1613867810-ymYpONB4	Full

Kamiliff 加的東西

"line://app/1613867810-ymYpONB4? liff_size=full&path=%2Fpractices%2Fnew"

LIFF 尺寸控制

"line://app/1613867810-ymYpONB4? liff_size=full&path=%2Fpractices%2Fnew"

LIFF 的三種尺寸在這裡設定

Url encode

"line://app/1613867810-ymYpONB4? liff_size=full&path=%2Fpractices%2Fnew" 斜線

路由控制

"line://app/1613867810-ymYpONB4? liff_size=full&path=%2Fpractices%2Fnew"

/practices/new



看著螢幕思考許久



就是這個啦!

動詞	Prefix	路徑	Controller
GET	users	/users	UsersController
POST	users	/users	UsersController
GET	new_user	/users/new	UsersController
GET	edit_user	/users/:id/edit	UsersController
GET	user	/users/:id	UsersController
PATCH	user	/users/:id	UsersController
PUT	user	/users/:id	UsersController
DELETE	user	/users/:id	UsersController

(示意圖)

需要 LIFF 的 Route

動詞	Prefix	路徑	Controller
GET	users	/users	UsersController
POST	users	/users	UsersController
GET	new_user	/users/new	UsersController
GET	edit_user	/users/:id/edit	UsersController
GET	user	/users/:id	UsersController
PATCH	user	/users/:id	UsersController
PUT	user	/users/:id	UsersController
DELETE	user	/users/:id	UsersController

(示意圖)

一句話 Hack 產生 LIFF path

liff_path(path: new_practice_path, liff_size: 'full')

一句話 Hack 產生 LIFF path

liff_path(path: new_practice_path, liff_size: 'full')

Kamiliff 提供的方法

後台只要設定三個就好

LIFF URL	Size
line://app/1566713654-5ByzX7Wz	Tall
line://app/1566713654-A8y60ov6	Compact
line://app/1566713654-m5pgO6xg	Full

其他都讓 Kamiliff 去處理

LIFF URL	Size
line://app/1566713654-5ByzX7Wz	Tall
line://app/1566713654-A8y60ov6	Compact
line://app/1566713654-m5pgO6xg	Full

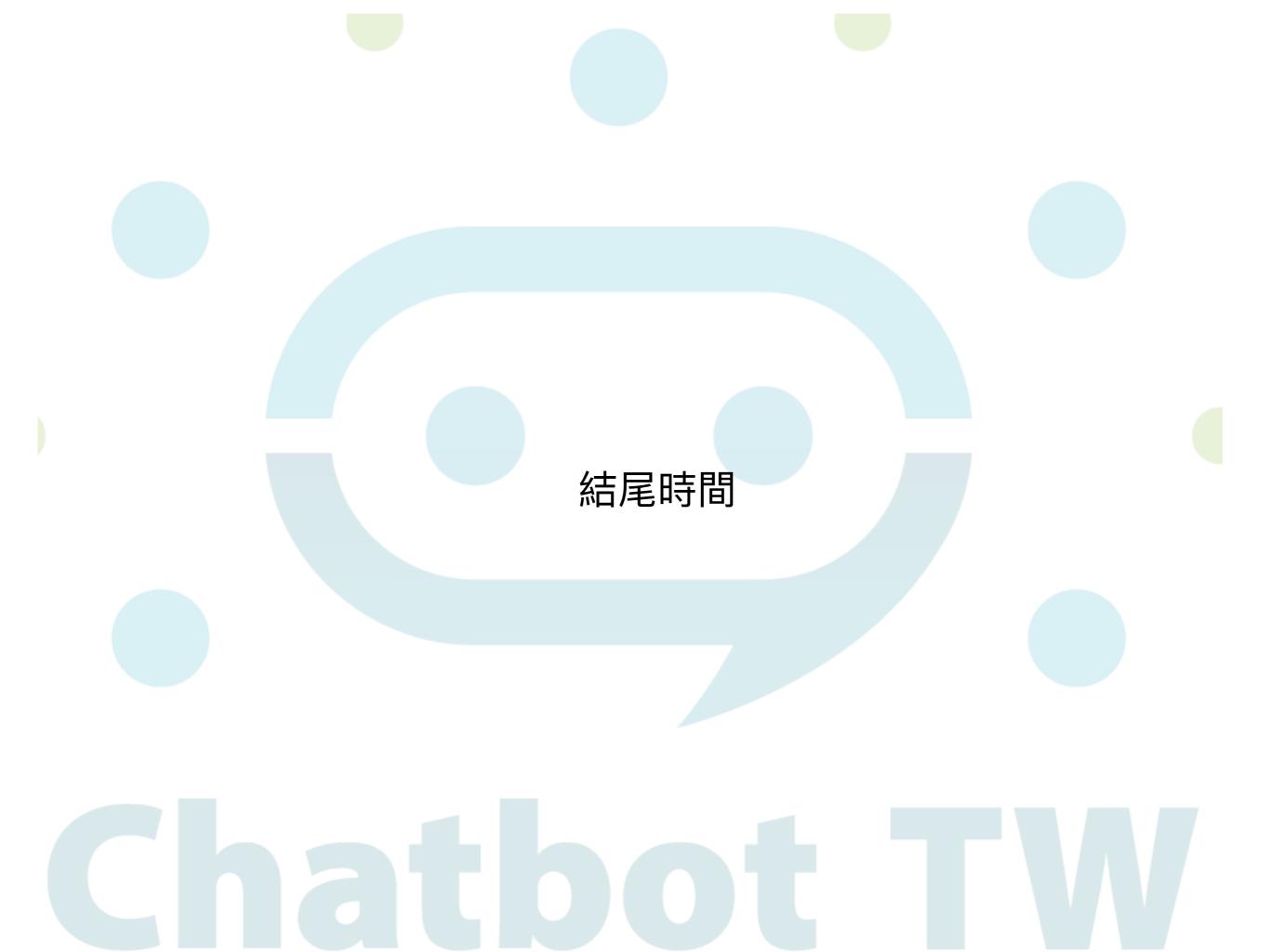


題外話

Kamigo 現在使用的還是 v1 但是 LIFF 已經有 v2 囉!

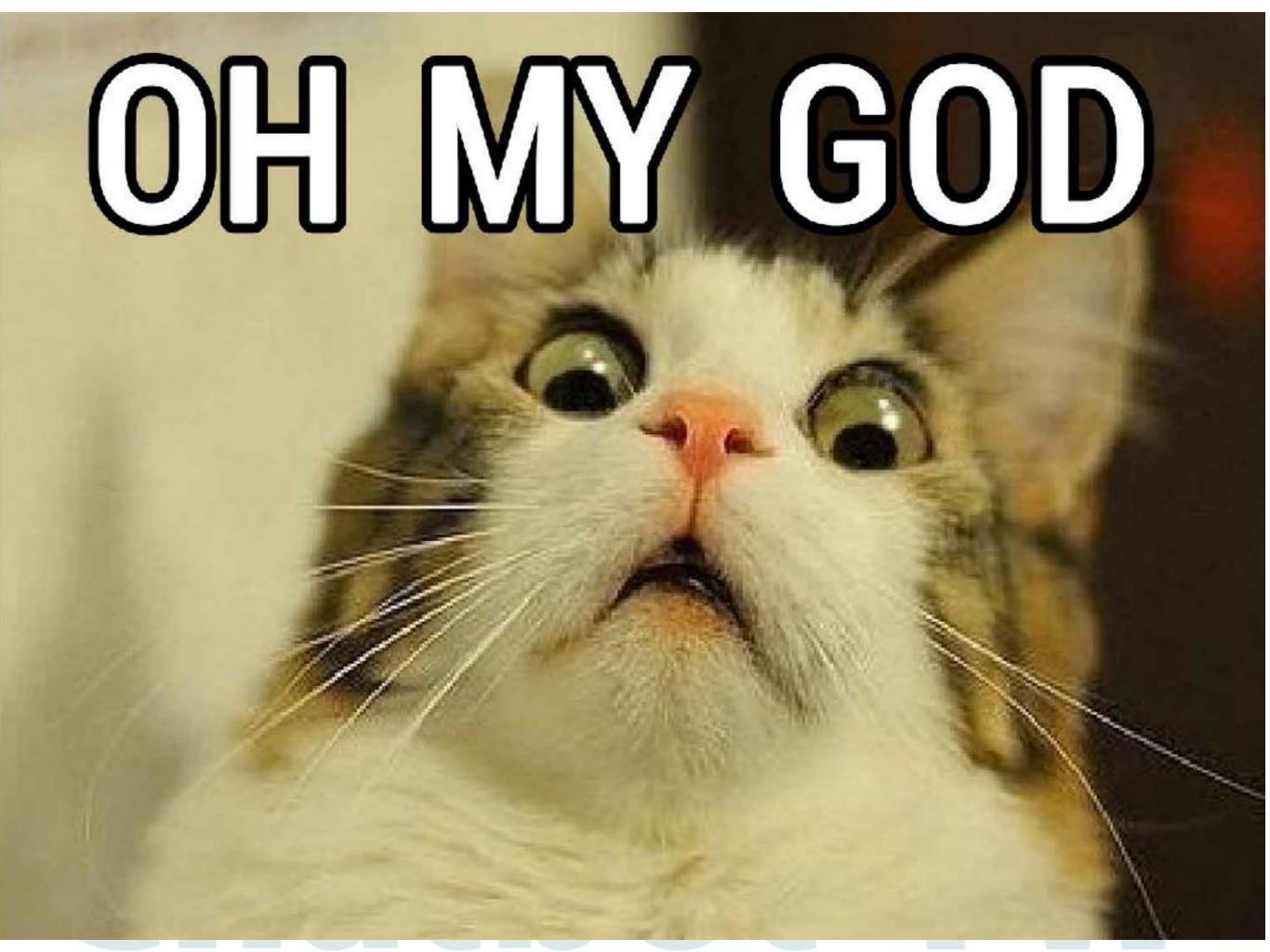
題外話





最後看看我以前寫的東西

```
if text[0] == "sign"
 res = HTTParty.get('https://api.twitch.tv/kraken/users', query: {'login': "#{text[1]}"}, headers: {'Authorization': 'OAu
 user = res.parsed response["users"][0]
 twitch.update_attributes({
   _id: user['_id'],
   display_name: user['display_name'],
   name: user['name'],
   created_at: user['created_at']})
 msg = "_id: #{user['_id']}\ndisplay_name: #{user['display_name']}\nname: #{user['name']}\n建立時間: #{user['created_at']}\
 message = { "type": "text", "text": msg }
 reply_to_line(message)
elsif text[0] == "follow"
 unless twitch.name.nil?
   res = HTTParty.get("https://api.twitch.tv/kraken/users/#{twitch['_id']}/follows/channels", headers: {'Authorization':
   channel = ""
   r = res.parsed_response
   r["follows"].each_with_index { |val, idx|
      streams = HTTParty.get("https://api.twitch.tv/kraken/streams/", query: {'channel': "#{channel}"}, headers: { 'Client-II
   total = []
   total_mobile = []
   st = streams.parsed_response["streams"]
   if st.blank?
     total = "現在追隨的實況主都沒開唷^_^"
   else
     st.each do |s|
```



讓我能無腦的開發

專心在機器人身上

如果寫的語言沒有怎麼辦?

沒有就自己寫一個!!

沒有就自己寫一個!!

沒有就自己寫一個!!





工商服務時間

徵志工、講者!

歡迎休息時間來詢問了解!

