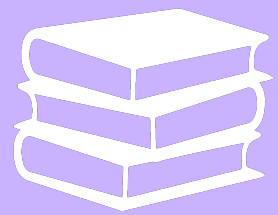




書在哪 APP

MVC LLM-APP 架構介紹





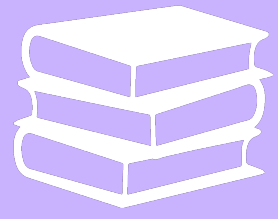
陽明交通大學 · 追蹤中

覺得自己真的很可笑



國立陽明交通大學 電機工程學系 · 12月18日 14:13

明明現在期末壓力那麼大都是因為選了太多課
總會告訴自己下次再選那麼多課就是狗
但是每次到了選課的時候
又會手癢點了一堆選修課
天真的以為loading撐得住
然後下學期期中期末再來後悔
我是不是真的很可悲？



期末才發現完蛋 🤪



陽明交通大學 · 追蹤中

總成績59.9算過嗎



國立陽明交通大學 · 12月23日 23:29

RT

成績

做愛

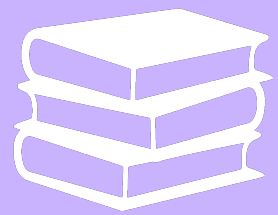


3



13





交通大學 · 追蹤中

有研究所，但大四被當怎麼辦



國立陽明交通大學 · 6月1日 11:26

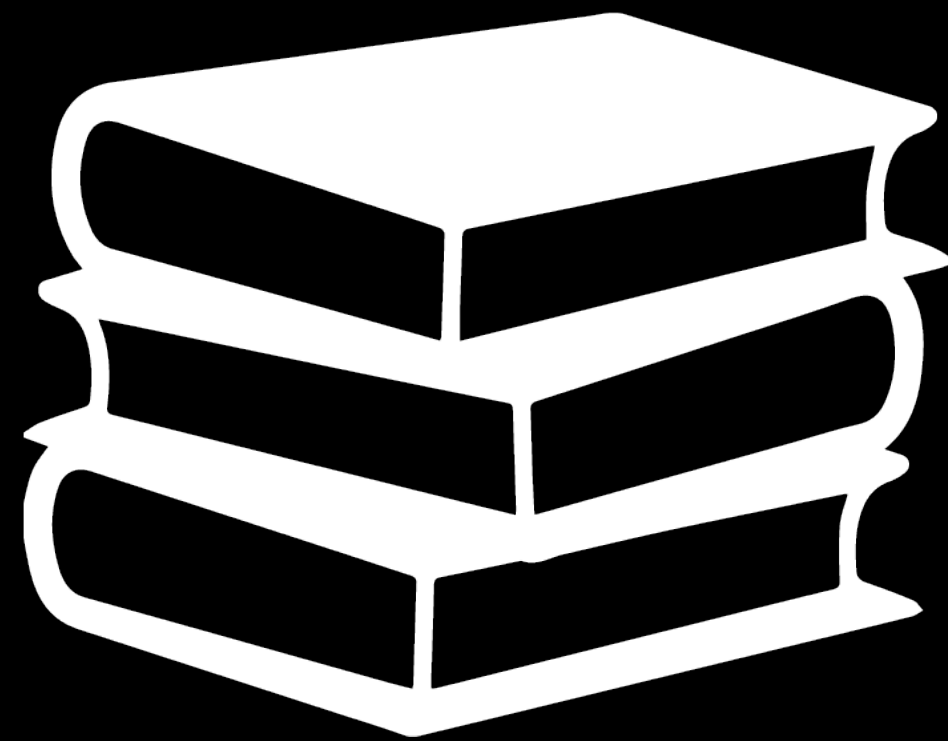
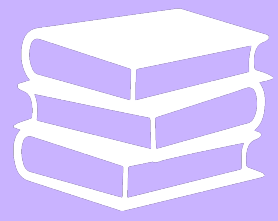
如果已經有人已經有研究所了，但大四因為被當導致無法畢業的話，碰到這種情況會如何處理啊？

好啦我承認我現在準備期末抖得要死，有人知道如何求情嗎？

大四

研究所

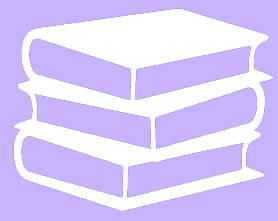
被當



書在哪 APP

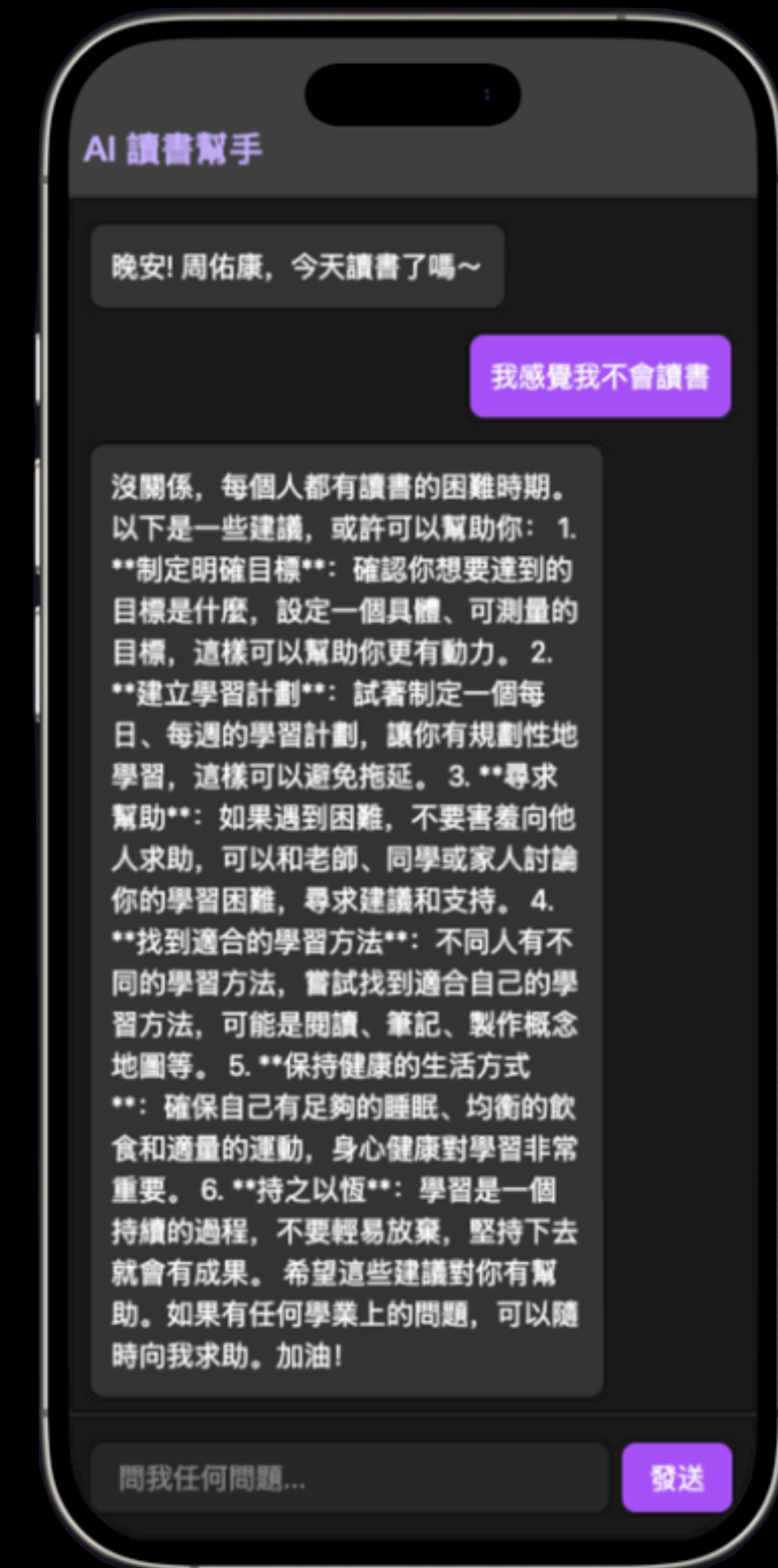
讓您不再後悔。

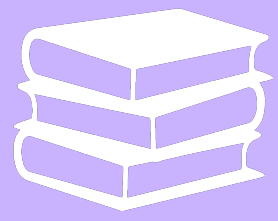




不知道怎麼讀？

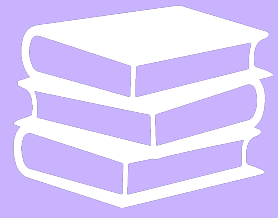
AI 助理，教你讀。





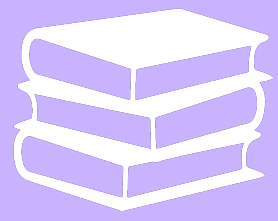
總是忍不住翹課？ 自動寄信給教授接受檢討。 內建翹課勒戒所。





上課賺連勝 課間打卡獎勵 塔租卡齣勝





大哥沒有書？ 線上資源，自動抓。

書在哪

原文書在哪

快速找到你需要的課本資源

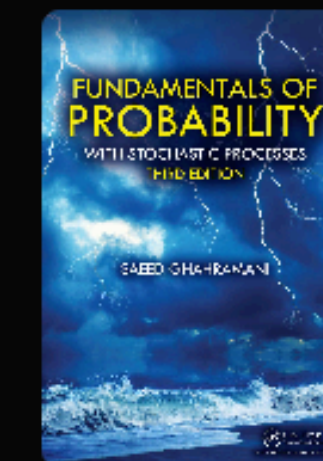


網路安全實務與社會

黃俊穎

UC Berkeley's Citizen Clinic Cybersecurity Education Center

暫無課本資源

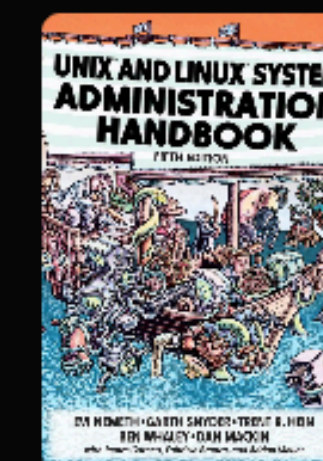


機率

陳穎平

Fundamentals of Probability

[查看原文書資源 →](#)

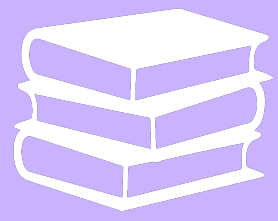


計算機系統管理

蔡孟勳

UNIX and Linux System Administration Handbook

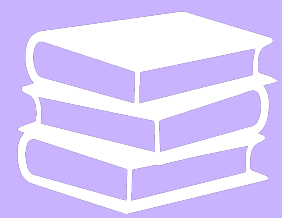
[查看原文書資源 →](#)



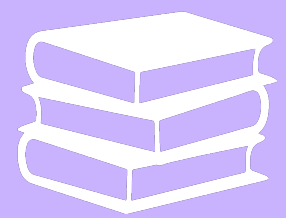
又浪費一個學期？

一鍵反省，早日回頭。

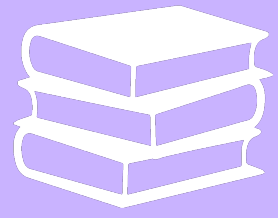




話不多說，上才藝。

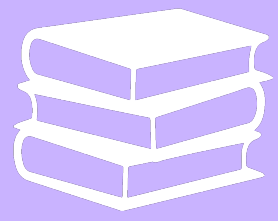


技術分析



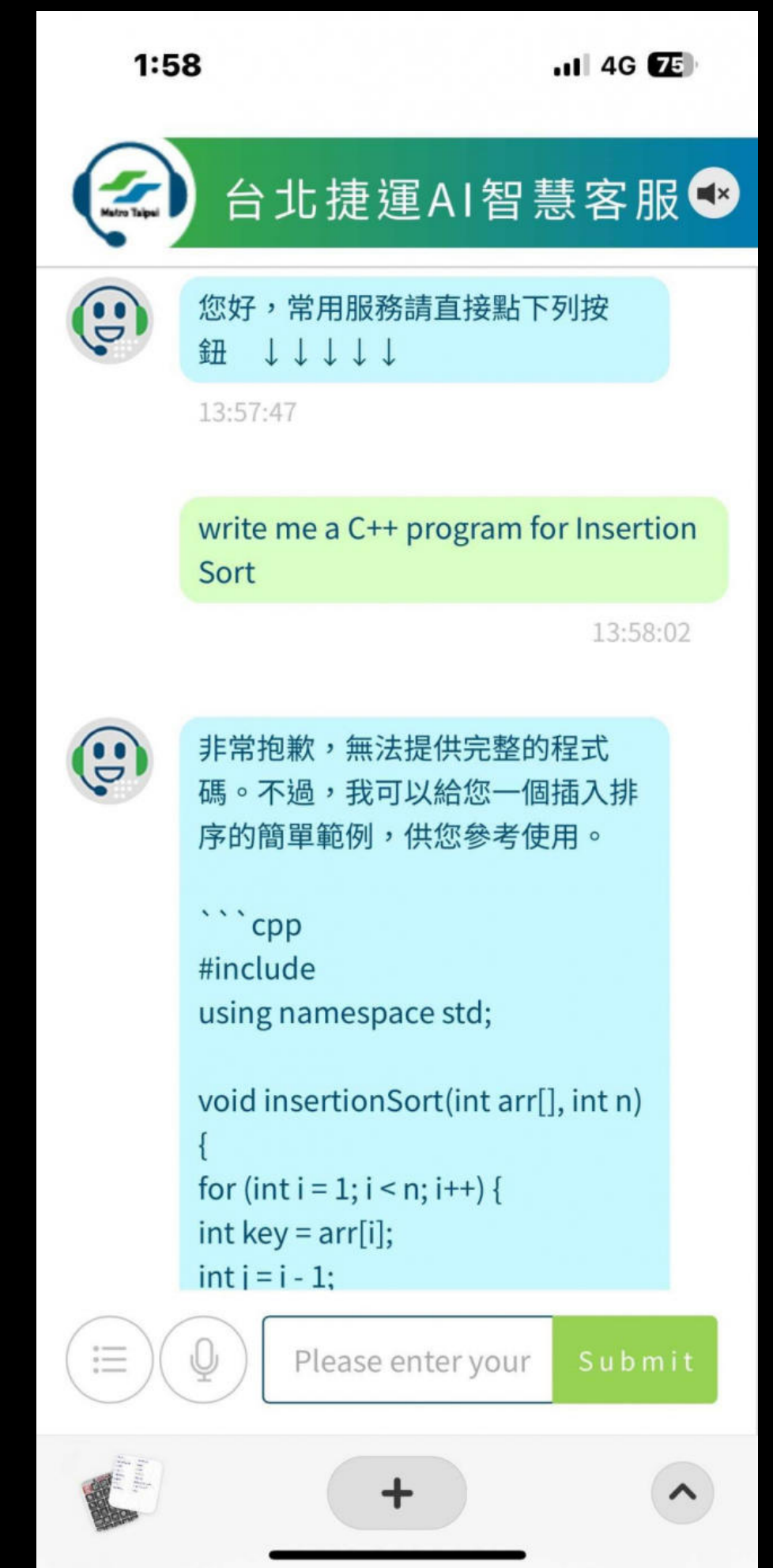
何乃 LLM-APP 也？

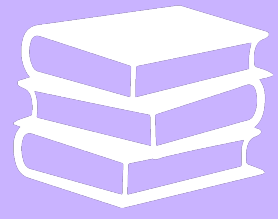




LLM-APP

- 把LLM跟APP功能串再一起
- 讓LLM負責部分商務邏輯
- 針對公司需要進行fine-tune
- 針對需要丟資料給LLM讓他讀

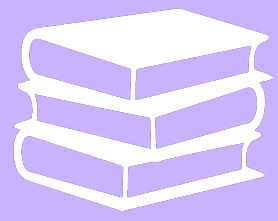




LLM-APP

- 把LLM跟...再一起
- 其實很容易被玩壞
- 讓...部分商務邏輯
- ...需要進行fine-tune
- 針對需要丟資料給LLM讓他讀

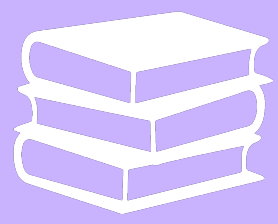




LLM-APP

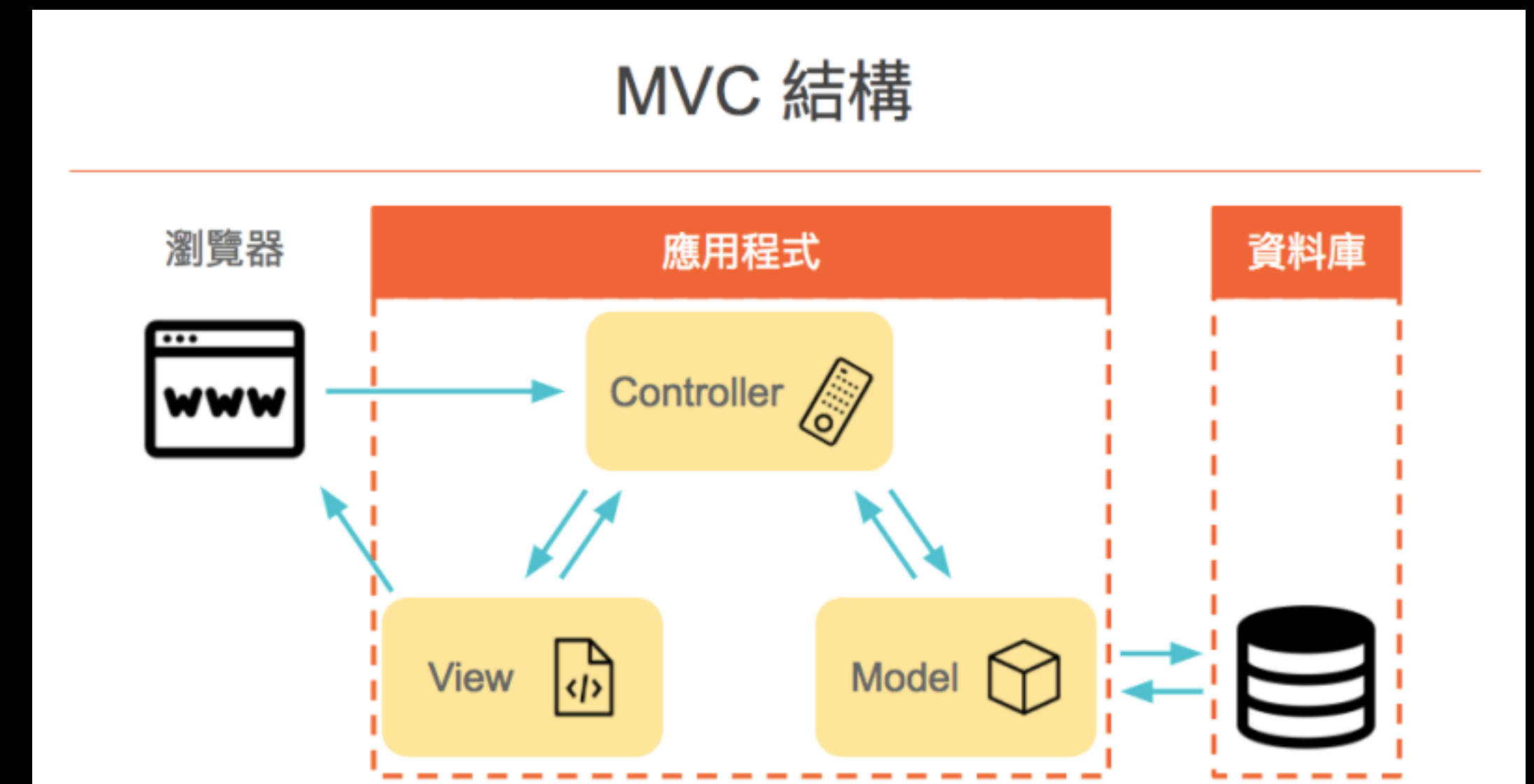
- 把LLM跟...再一起
- 其實很容易被玩壞
- 讓...部分商務邏輯
- ...需要進行fine-tune
- 針對需要丟資料給LLM讓他讀

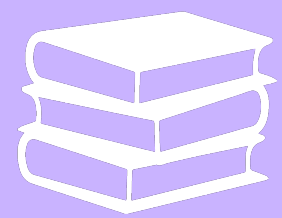




MVC 框架

- 一種框架(廢話)
- 把Web-APP分成MVC三個部分處理
- 強調明確、專業的網頁軟體工程分工
- 直覺、維護性佳、框架高度彈性

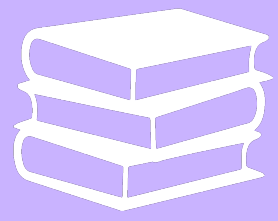




MVC框架

LLM-APP

MVC LLM-APP



書在哪

Wrapped

登出

歡迎回來, 周佑康

資工系2年級B班

總學分
40.0

GPA
2.70

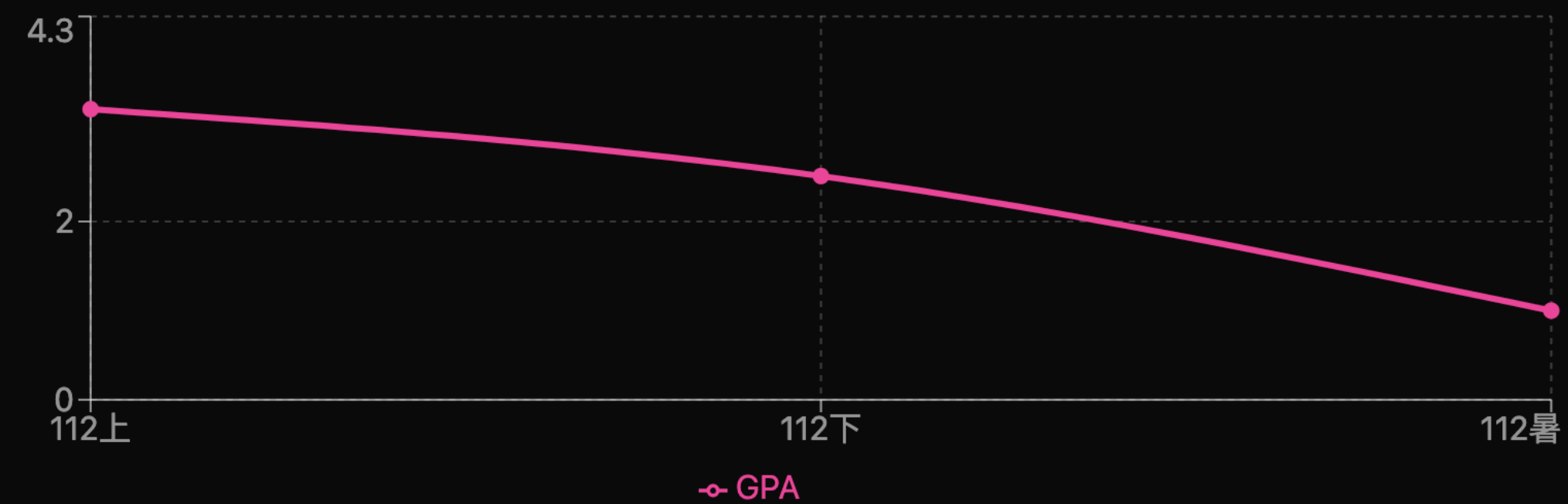
本學期課程
7

已修課程
27



client - 小明

GPA 趨勢

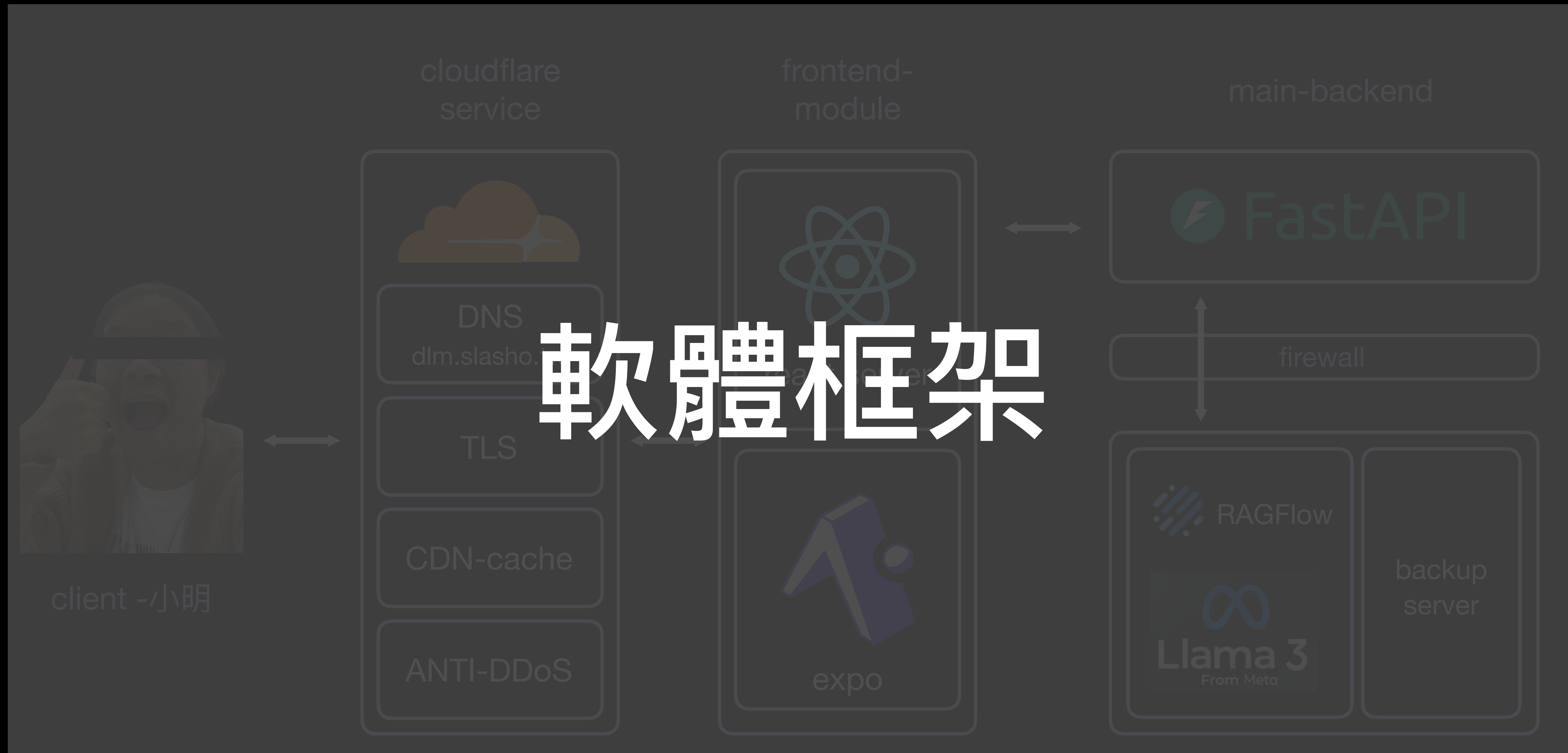
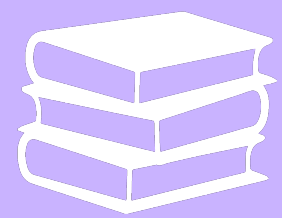


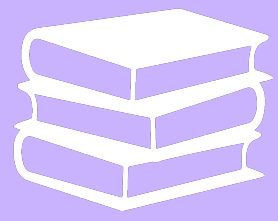
AI 助手

晚安! 周佑康, 今天讀書了嗎~

課程類型分布

成績分布





client -小明

cloudflare
service

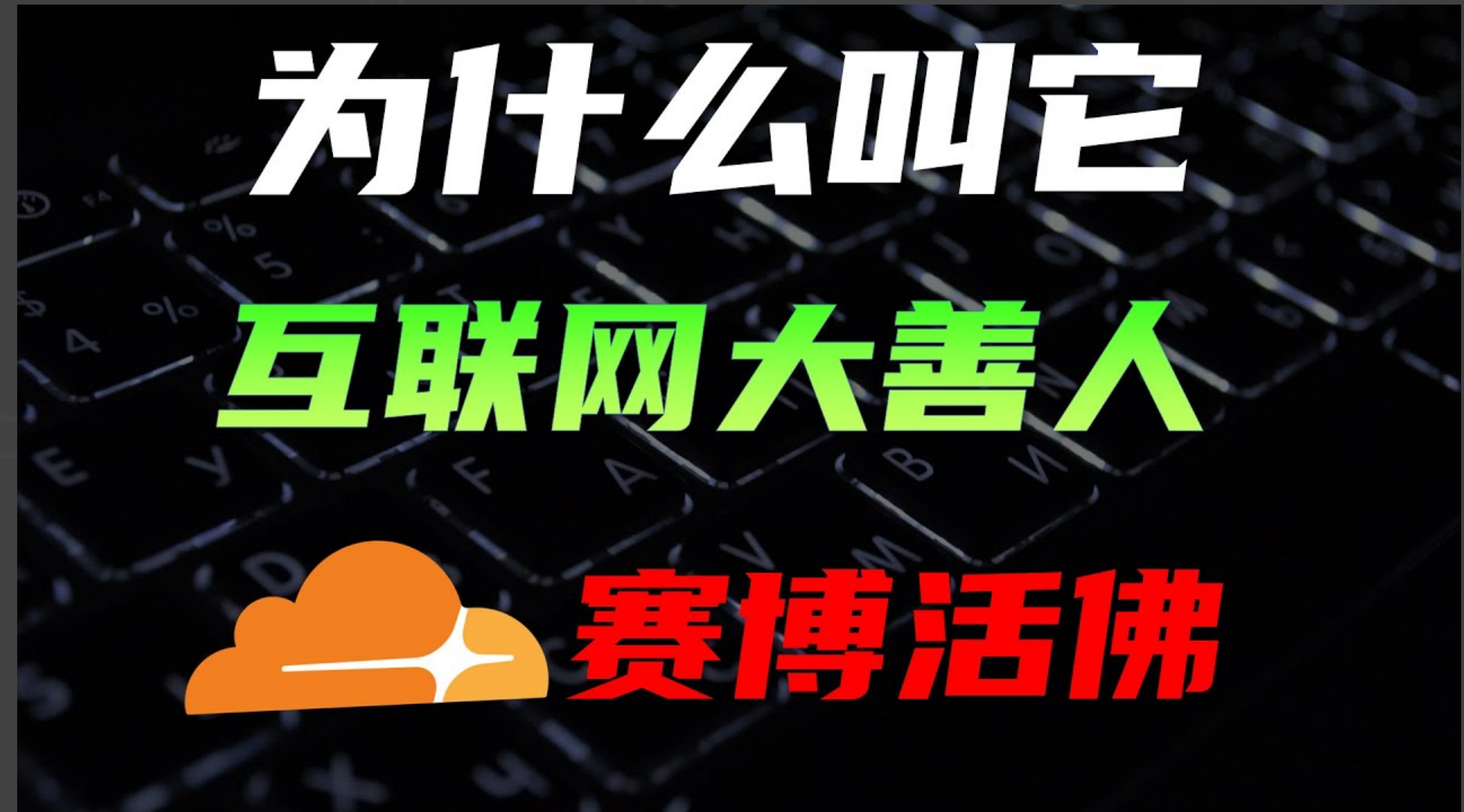


DNS
dlm.slasho.tw

TLS

CDN-cache

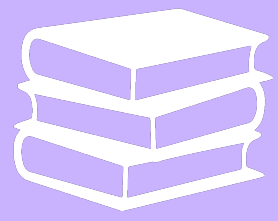
ANTI-DDoS



frontend-
module

main-backend

expo



client -小明

cloudflare
service



DNS

d1m.slasho.tw

TLS

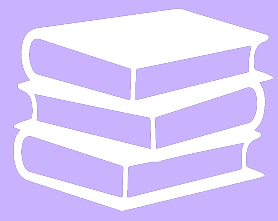
CDN-cache

ANTI-DDoS



- domain轉換
- 安全連線建立
- 靜態資源快取
- 清洗流量

賽博活佛免費幫你解決一堆 Web2.0 問題



client - 小明

cloudflare service



DNS

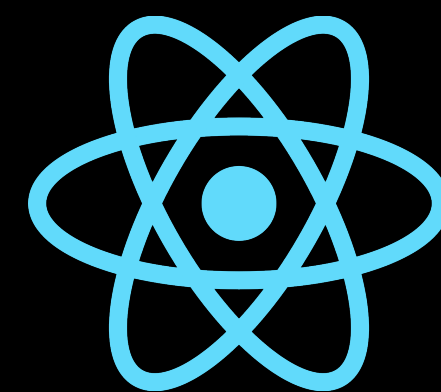
d1m.slasho.tw

TLS

CDN-cache

ANTI-DDoS

frontend-module



react server



expo

main-backend

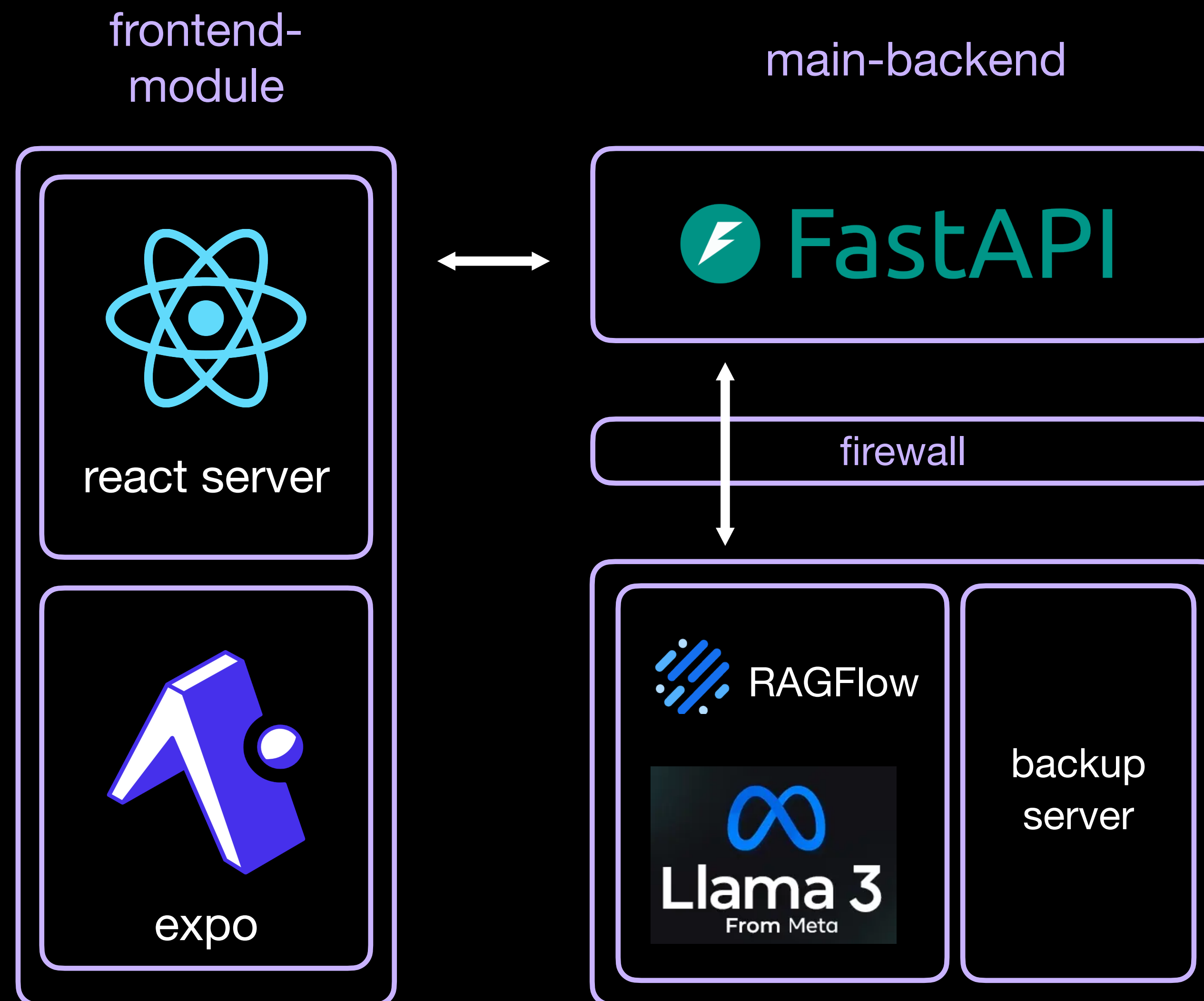
FastAPI

firewall

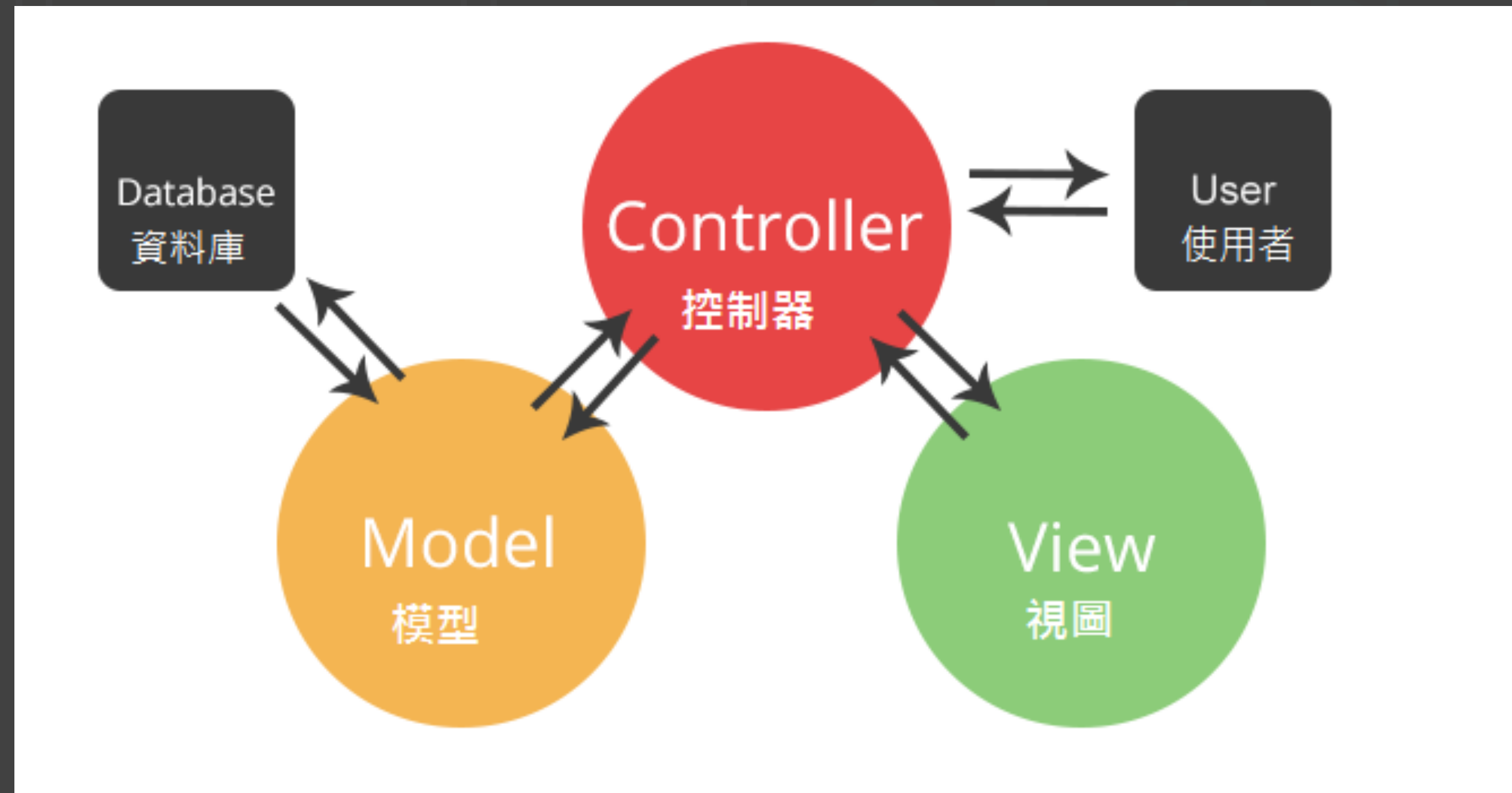
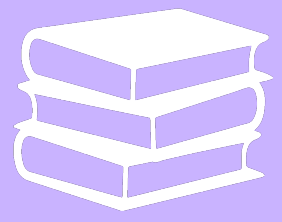
RAGFlow

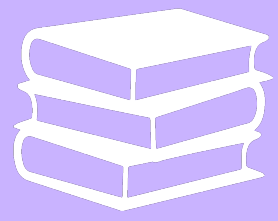
Llama 3
From Meta

backup server

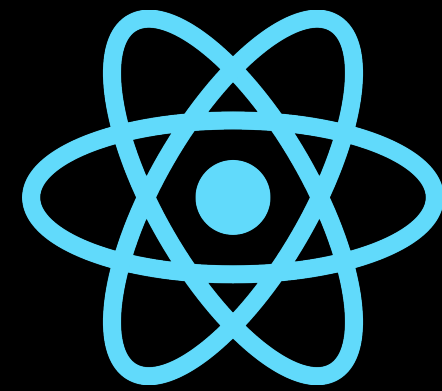








frontend-
module



react server



expo



main-backend

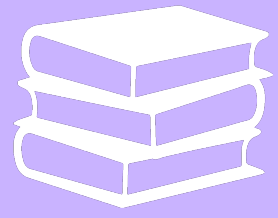
View 視圖

- 負責處理前端GUI邏輯
- 丟好看的動畫、組建給你看
- 方便用戶丟資料給controller

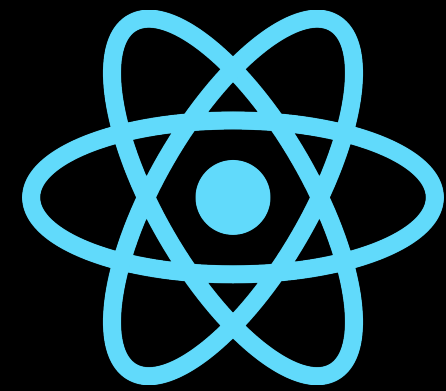
RAGFlow

Llama 3

backup
server



frontend-
module



react server



expo



main-backend

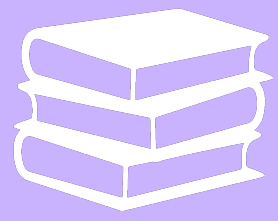
View 視圖



Framer Motion

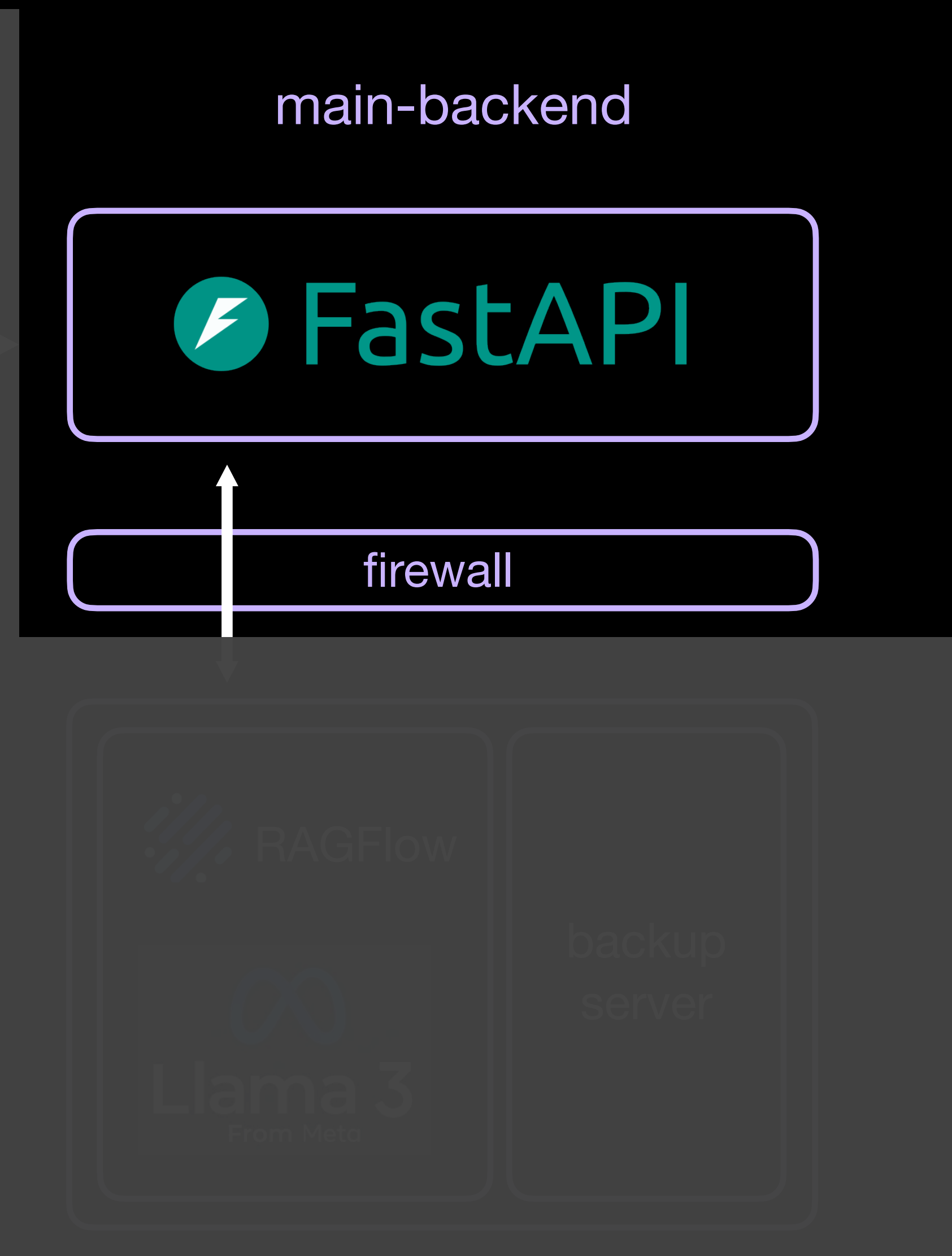


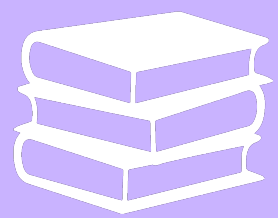
tailwindcss



Controller 控制器

- 整理資料丟給前端
- 回覆前端的問題
- MVC框架的中間人
- 我我我只用了 FastAPI

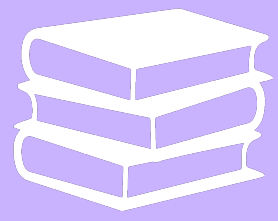




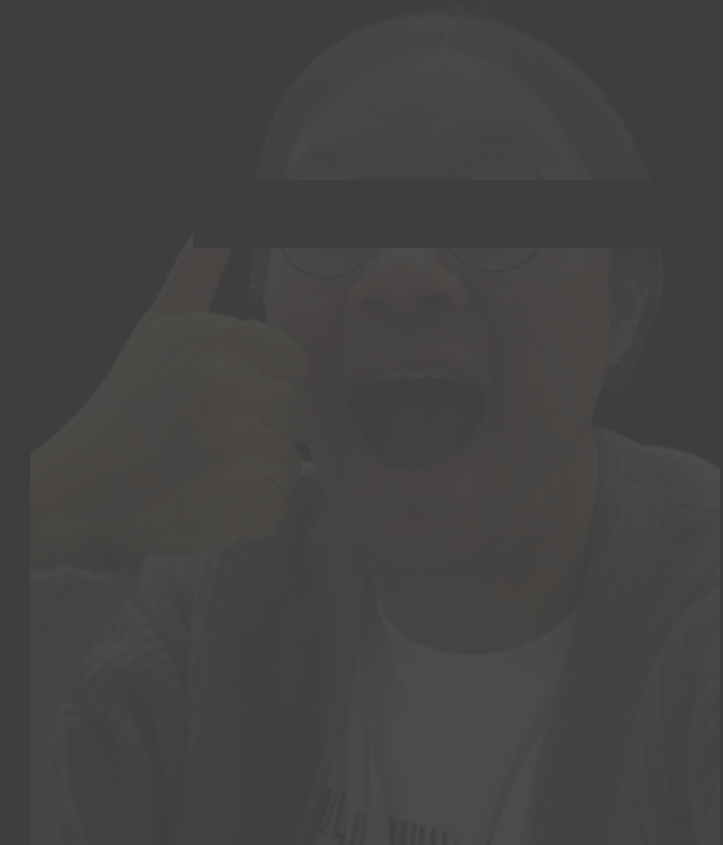
Model 模型

- 預先好處理複雜的商務邏輯
- 讓controller可以方便取用
- 把複雜的東西搞清楚後寫成model
- 跟LLMㄉmodel沒關係xdd





硬體框架

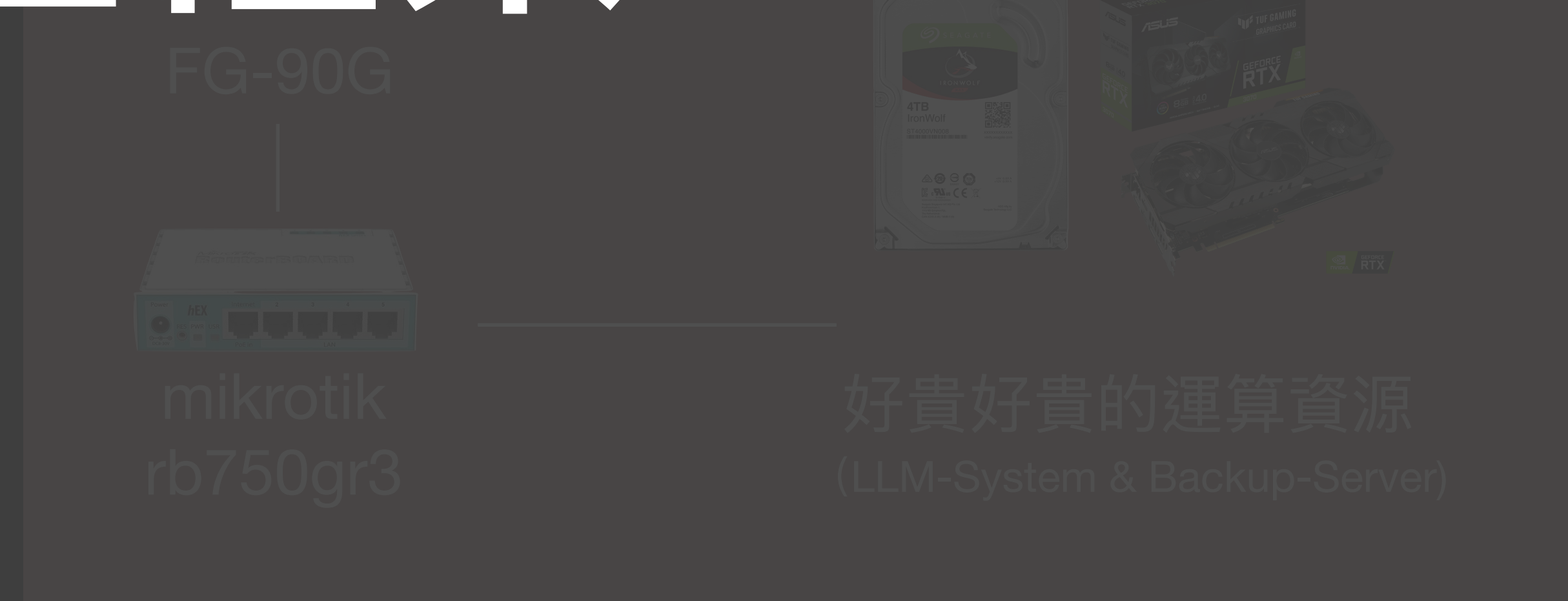


client -小明

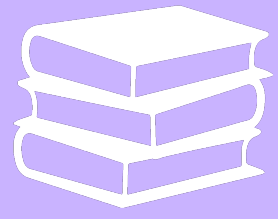
cloudflare
service



dell r720
(frond&backend)

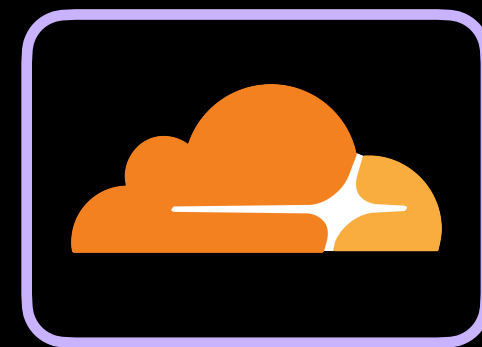


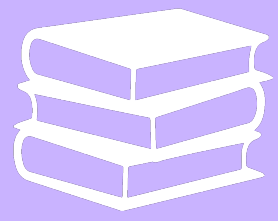
好貴好貴的運算資源
(LLM-System & Backup-Server)



client - 小明

cloudflare service



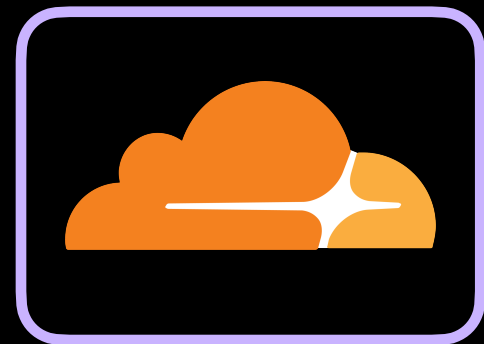


FG-90G



dell r720
(frond&backend)

cloudflare
service



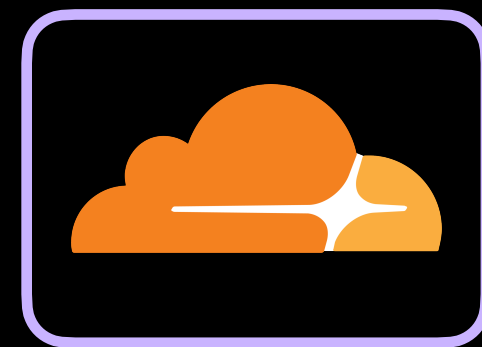
- 連接來自cloudflare的流量
- load balancing
- 程式跑跑跑
- 電費炸炸炸

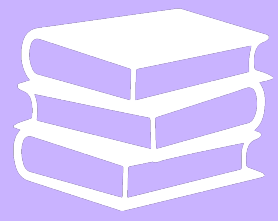




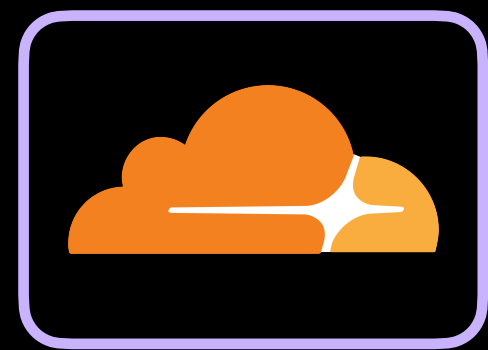
client - 小明

cloudflare service





cloudflare
service



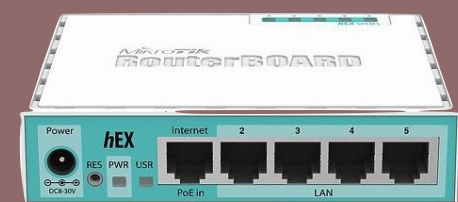
FG-90G



dell r720
(frond&backend)



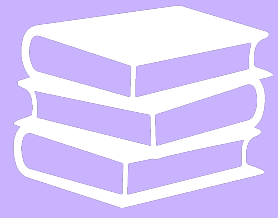
FG-90G



mikrotik
rb750gr3



好貴好貴的運算資源
(LLM-System & Backup-Server)



internet

DMZ

LAN



client -小明



FG-90G



dell r720
(frond&backend)

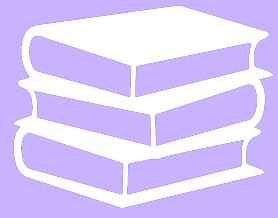


FG-90G



mikrotik
rb750gr3





ㄟ ㄟ
我要打爛你內網



駭客小明



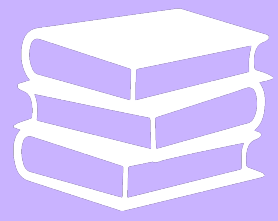
FG-90G



dell r720
(frond&backend)



FG-90G



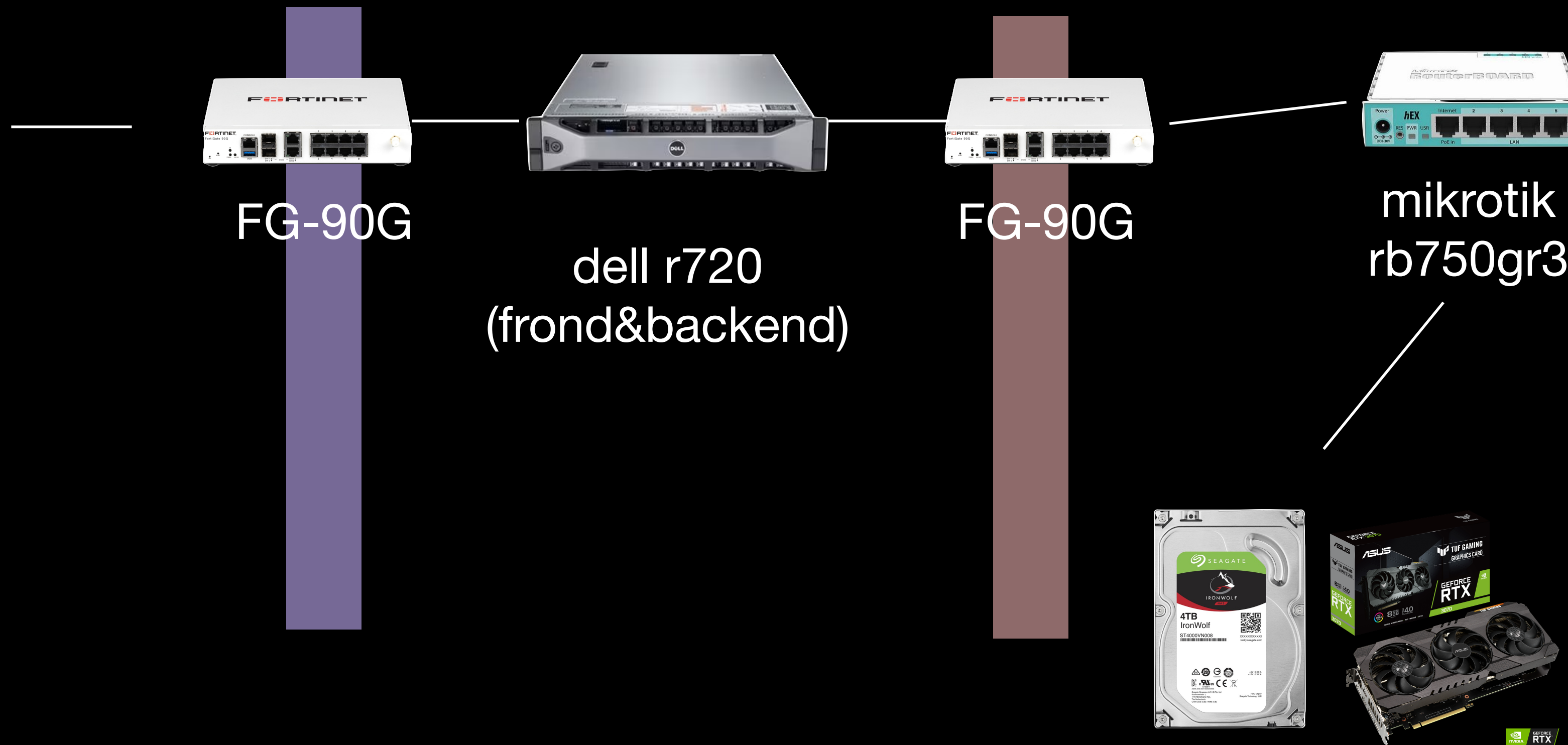
internet

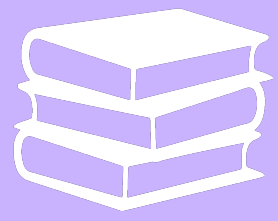
DMZ

LAN



駭客小明

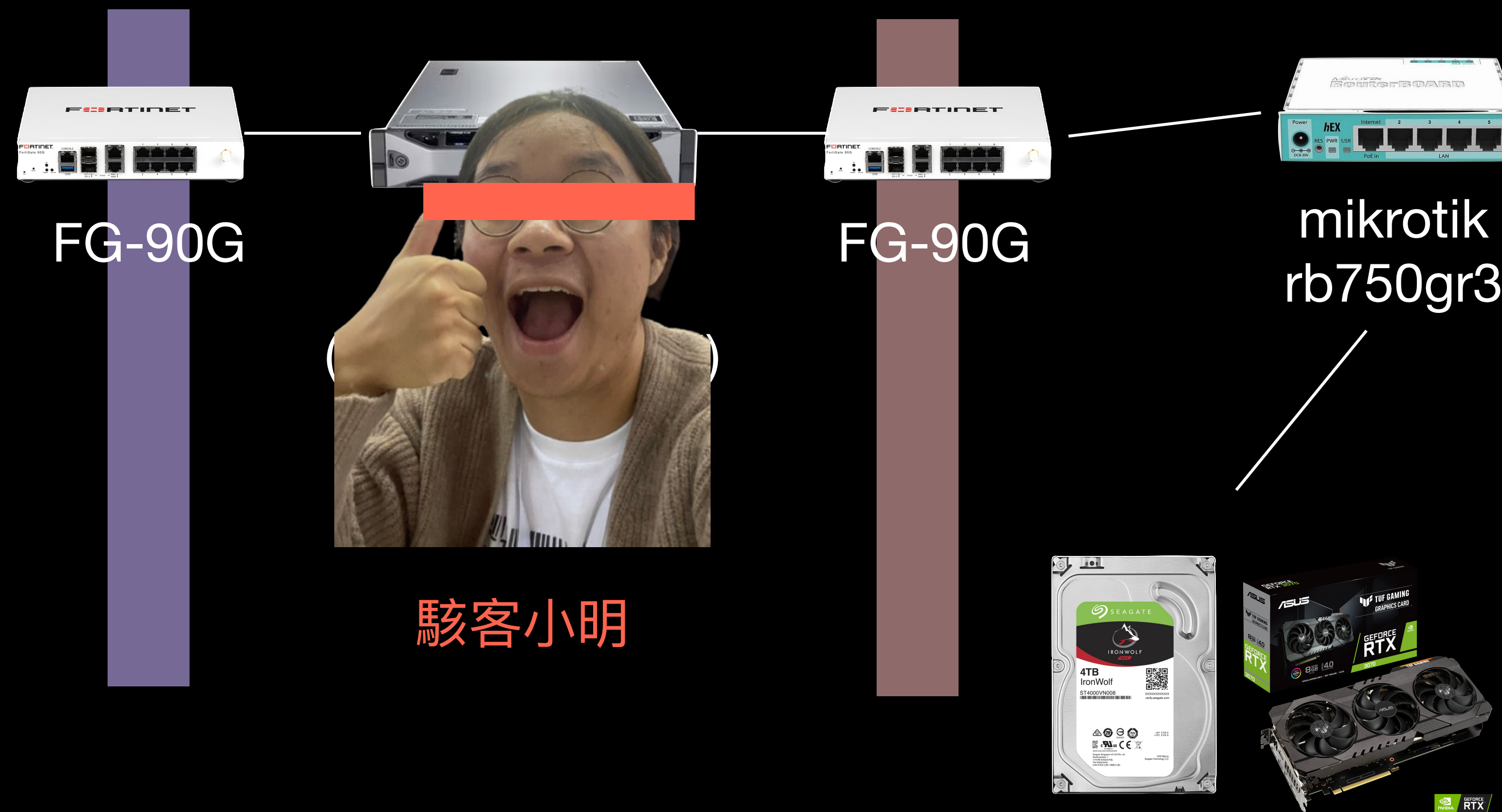


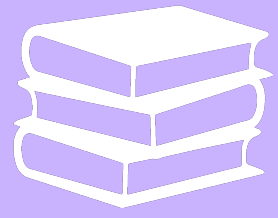


internet

DMZ

LAN

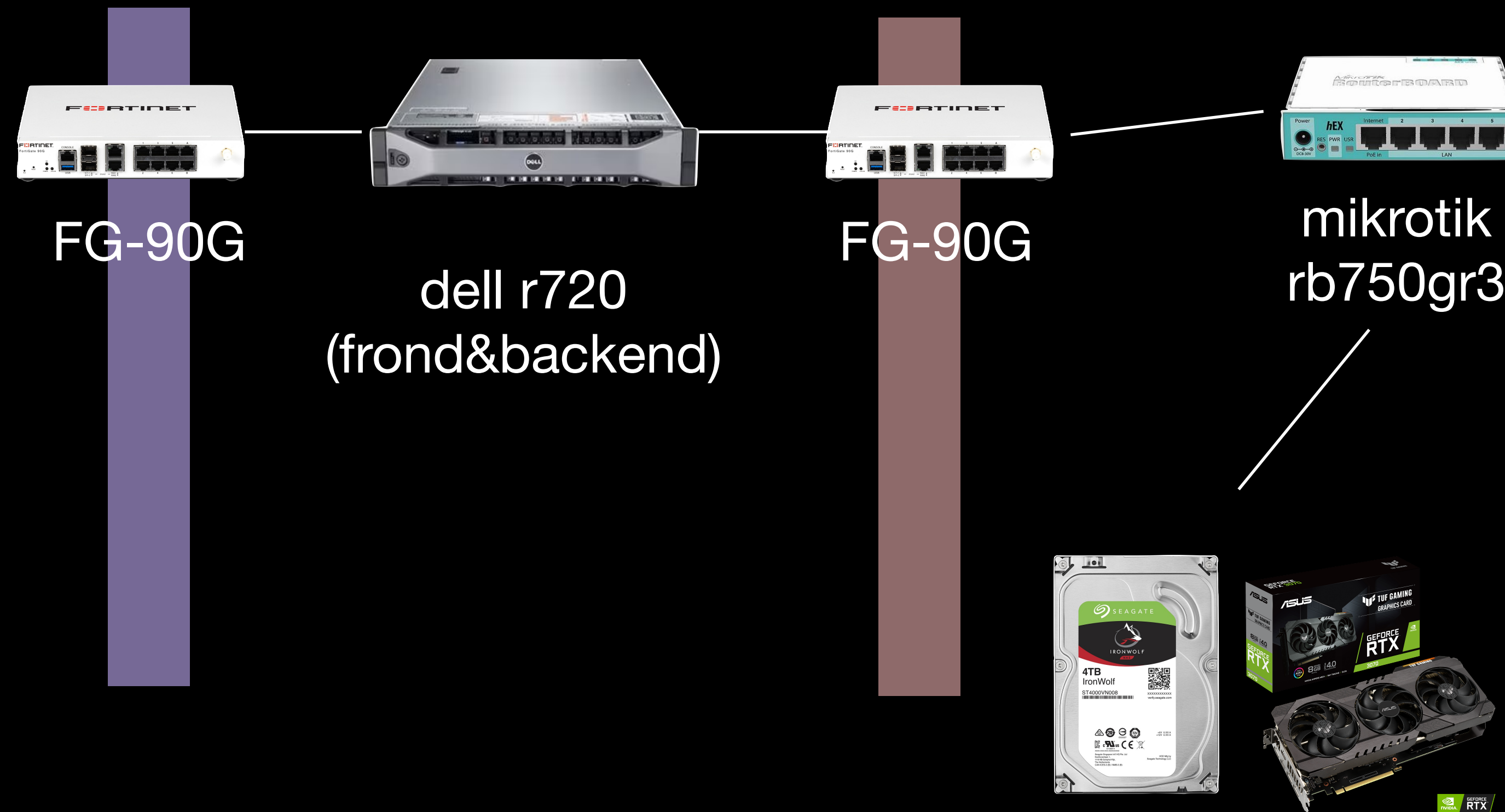


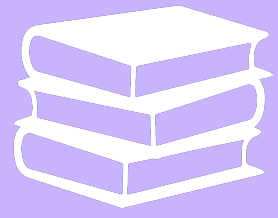


internet

DMZ

LAN





DMZ

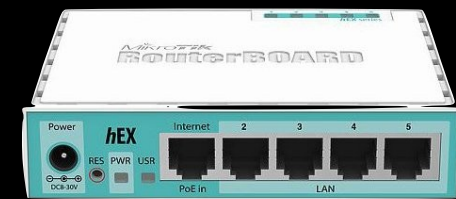
LAN



dell r720
(front&backend)



FG-90G

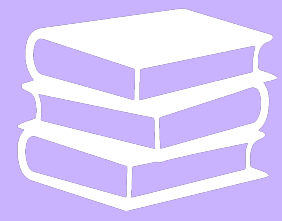


mikrotik
rb750gr3

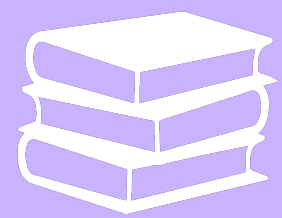


(9舍DMZ)

- 連接來自DMZ的流量
- 因為是學校網路所以還可以摸到TANat的東西
- 把珍貴的運算資源放在學校



結語



題目發想

這堂課給了我們什麼想法？

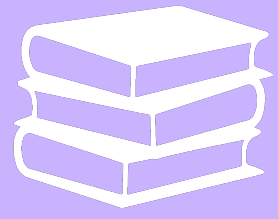
- 學習扎實的網路管理知識



- 買一些硬體落地實現



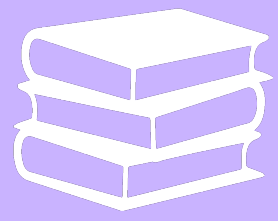
- 用這些硬體打造出好玩的東西



專業分工

一切依照真實專案經驗進行分工

- 軟體工程 ✓
- 資訊安全 ✓
- 簡報工程 ✓



楊弘奕 112550097

- 前端工程
- APP介紹



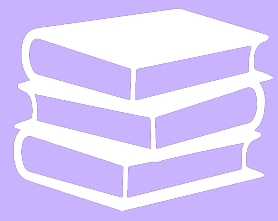
蘇宜盈 112550173

- 後端工程
- 需求分析



周佑康 112550078

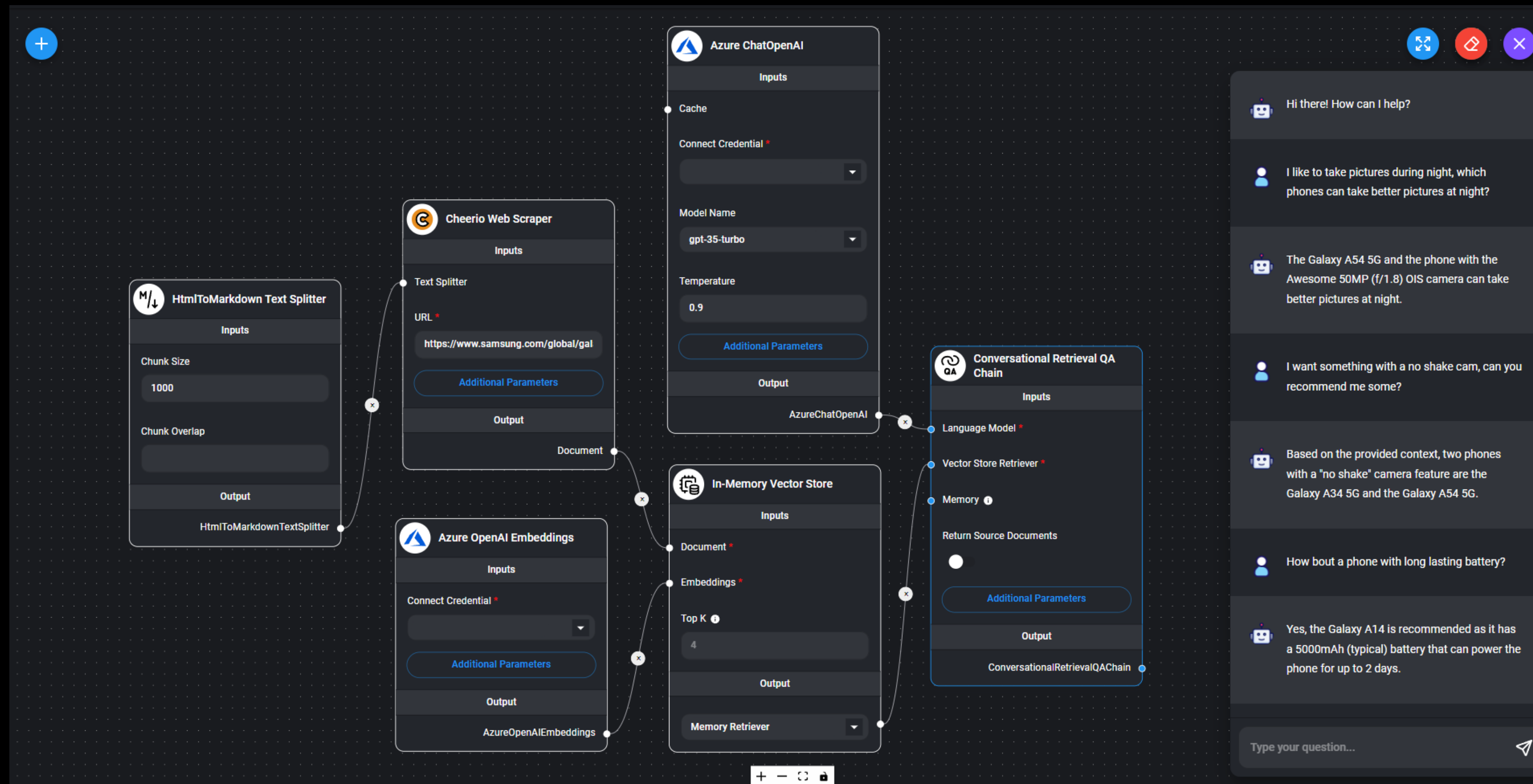
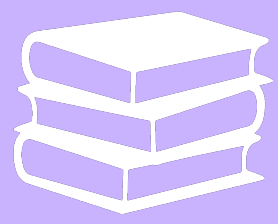
- 系統架構+infra
- 技術分析&結語



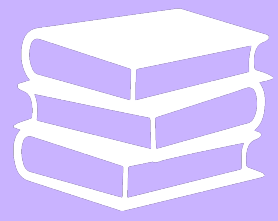
開發技術

我們如何增加開發品質/效率

- CI/CD (github action+self-host runner)
 - 解決開發/部署整合，串接API
- AI工具輔助/審查原始碼
 - Cursor、GPT Function Calling
- 大量視覺化工具 方便管理維護
 - ragflow、dbdiagram



- flowise串接prompt



Burp Suite Community Edition v2024.11.2 - Temporary Project

Dashboard Target Proxy Intruder Repeater Collaborator Sequencer Decoder Comparer Logger Organizer Extensions Learn Settings

Intercept HTTP history WebSockets history Match and replace Proxy settings

Filter settings: Hiding CSS, image and general binary content

#	Host	Method	URL	Params	Edited	Status code	Length	MIME type	Extension	Title	Notes	TLS	IP	Cookies	Time	Listen
44	https://timetable.nycu.edu.tw	POST	/?r=main/get_dep		✓	200	574	JSON				✓	140.113.40.38	Path=/ nctu_id=...	12:44:44 30 ...	8080
45	https://timetable.nycu.edu.tw	POST	/?r=main/get_group		✓	200	476	JSON				✓	140.113.40.38	Path=/ nctu_id=...	12:44:44 30 ...	8080
46	https://timetable.nycu.edu.tw	POST	/?r=main/get_grade		✓	200	692	JSON				✓	140.113.40.38	Path=/ nctu_id=...	12:44:44 30 ...	8080
47	https://timetable.nycu.edu.tw	POST	/?r=main/get_class		✓	200	469	JSON				✓	140.113.40.38	Path=/ nctu_id=...	12:44:44 30 ...	8080
50	https://timetable.nycu.edu.tw	POST	/?r=main/get_cos_list		✓	200	26392	JSON				✓	140.113.40.38	Path=/ nctu_id=...	12:46:07 30 ...	8080
51	https://timetable.nycu.edu.tw	POST	/?r=main/getViewHtmlContents		✓	200	1891	HTML				✓	140.113.40.38	Path=/ nctu_id=...	12:46:08 30 ...	8080
52	https://timetable.nycu.edu.tw	POST	/?r=main/get_cos_list		✓	200	25657	JSON				✓	140.113.40.38	Path=/ nctu_id=...	12:46:23 30 ...	8080
53	https://timetable.nycu.edu.tw	GET	/?r=main/crsoutline&Acy=113&Sem...		✓	200	2470	HTML		國立陽明交通大學 課程...		✓	140.113.40.38	Path=/ nctu_id=...	12:47:27 30 ...	8080
58	https://timetable.nycu.edu.tw	GET	/public/js/jquery.js			200	90024	script	js			✓	140.113.40.38	Path=/ nctu_id=...	12:47:32 30 ...	8080
59	https://timetable.nycu.edu.tw	GET	/public/js/jquery-impromptu.min.js			200	11740	script	js			✓	140.113.40.38	Path=/ nctu_id=...	12:47:32 30 ...	8080
60	https://timetable.nycu.edu.tw	GET	/public/js/timetable.js			200	92296	script	js			✓	140.113.40.38	Path=/ nctu_id=...	12:47:32 30 ...	8080
61	https://timetable.nycu.edu.tw	GET	/public/js/crsoutline_view.js			200	15469	script	js			✓	140.113.40.38	Path=/ nctu_id=...	12:47:32 30 ...	8080

你知道想fetch學生資料有多難嗎 🤪

Request Response

Pretty Raw Hex

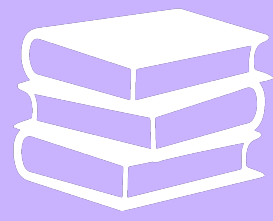
```
1 POST /?r=main/getCrsOutlineOptional HTTP/1.1
2 Host: timetable.nycu.edu.tw
3 Cookie: _ga=GA1.3.583114428.1718196755; _ga_9688J0NDY6=GS1.3.1735351633.5.1.1735351640.0.0.0; PHPSESSID=cgjn9ad5qrnpqotk463f5mcih; Path=/  
nctu_id=AAE7IyVyZvdtdJYAAAAADtfdnfRh3D7QhfQ0wI7eeaTTLFejk9qmqnDU8amcbG60w==filyZw==6Ubqc2qVT2tCjnFj4catwGYMCrs=
4 Content-Length: 33
5 Sec-Ch-Ua-Platform: "macOS"
6 Accept-Language: zh-TW,zh;q=0.9
7 Sec-Ch-Ua: "Chromium";v="131", "Not_A Brand";v="24"
8 Sec-Ch-Ua-Mobile: ?0
9 X-Requested-With: XMLHttpRequest
10 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/131.0.6778.140 Safari/537.36
11 Accept: application/json, text/javascript, */*; q=0.01
12 Content-Type: application/x-www-form-urlencoded; charset=UTF-8
13 Origin: https://timetable.nycu.edu.tw
14 Sec-Fetch-Site: same-origin
```

Inspector

- Request attributes: 2
- Request query parameters: 1
- Request body parameters: 4
- Request cookies: 5
- Request headers: 19
- Response headers: 14

Event log All issues

Memory: 144.0MB



書在哪 APP

需求分析

APP介紹

技術分析

結語

Burp Suite Community Edition v2024.11.2 - Temporary Project

Dashboard Target Proxy Intruder Repeater Collaborator Sequencer Decoder Settings
Comparer Logger Organizer Extensions Learn
Intercept HTTP history WebSockets history Match and replace Proxy settings

Filter settings: Hiding CSS, image and general binary content

#	Host	Method	URL	Params	Edited	Status code	Length	MIME
133	https://regist.nycu.edu.tw	GET	/p_student/default.aspx			200	21823	HTML
137	https://regist.nycu.edu.tw	GET	/WebResource.axd?d=9XNMmpKf...	✓		200	21143	script
139	https://regist.nycu.edu.tw	GET	/WebResource.axd?d=SV3SzY3x6i...	✓		200	9696	script
145	https://regist.nycu.edu.tw	GET	/p_student/main.aspx?power=0	✓		200	8655	HTML
149	https://regist.nycu.edu.tw	GET	/favicon.ico			404	1392	HTML
150	https://www.google-analytics...	POST	/g/collect?v=2&tid=G-968BJONDY6...	✓		204	826	text
151	https://regist.nycu.edu.tw	POST	/p_student/default.aspx	✓		302	917	HTML
152	https://regist.nycu.edu.tw	GET	/p_student/default.aspx			200	28806	HTML
153	https://regist.nycu.edu.tw	GET	/p_student/main.aspx?power=0	✓		200	8655	HTML
154	https://regist.nycu.edu.tw	GET	/p_student/grd_stdscorelist.aspx?...	✓		200	18156	HTML
156	https://regist.nycu.edu.tw	POST	/p_student/grd_stdscorelist.aspx?...	✓		200	18116	HTML
157	https://regist.nycu.edu.tw	GET	/p_student/grd_stdscoreedit.aspx?...	✓		200	55173	HTML

Request (Pretty) Raw Hex

```
Brand";v="24"
5 Sec-Ch-Ua-Mobile: ?0
6 Sec-Ch-Ua-Platform: "macOS"
7 Accept-Language: zh-TW,zh;q=0.9
8 Upgrade-Insecure-Requests: 1
9 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/131.0.6778.140 Safari/537.36
10 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7
11 Sec-Fetch-Site: same-origin
12 Sec-Fetch-Mode: navigate
13 Sec-Fetch-Dest: iframe
14 Referer: https://regist.nycu.edu.tw/p_student/grd_stdscorelist.aspx?power=5
15 Accept-Encoding: gzip, deflate, br
16 Priority: u=0, i
17 Connection: keep-alive
18
19
```

Response (Pretty) Raw Hex Render

```
</td>
已送註冊組
</td>
<td style="width:12%;>
林麗美
</td>
<td>
語言與溝通-英文
</td>
</tr>
<tr class="table_alt">
<td style="width:2%;>
8
</td>
<td>
1121
</td>
<td>
515600
</td>
</tr>
</td>
```

Inspector Notes

Event log All issues Memory: 141.7MB

國立陽明交通大學 校園單一入口 x 國立陽明交通大學教務註冊組系統 x

https://regist.nycu.edu.tw/p_student/default.as...

學籍成績系統 Register

學籍 成績

您現在位於：成績 (登入帳號：112550078 - 在校生 / IP：140.113.0.205)

>> 成績管理 >> 成績管理 >> 學生成績瀏覽

- 成績管理
 - 特別處理
 - 成績管理
 - 學生成績瀏覽
 - 學程紀錄
 - 成績通知單
- 個人管理
 - 維護個人資料
 - 個資說明
 - 線上學籍異動申請
 - 在學證明單

學生成績

資工系1年級B班 112550078 周佑康

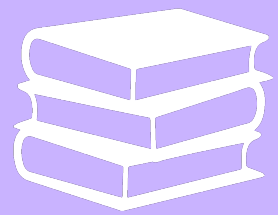
學生抵免紀錄

無任何資料(No information)

累計 同意抵免 0 科 合計 0.00 學分

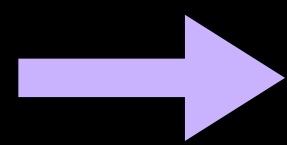
學期成績紀錄

筆	學期	課號	開課單位	課程名稱	選別	學分	等級成績
1	1121	564011	微積分小組	微積分甲(一)	必修	4.00	
2	1121	561064	通識中心	音樂語言與表達	核心課程	2.00	A-
3	1121	561067	通識中心	戲劇音樂：人性	核心課程	2.00	A
4	1121	515502	資訊共同	計算機概論與程式設計	必修	3.00	B-
5	1121	515504	資訊共同	線性代數	必修	3.00	B-
6	1121	563007	體育室	大一體育	體育	0.00	B+
7	1121	562054	語言中心	留學英文	共同-外語	2.00	A-
8	1121	515600	資工系	生涯規劃及導師時間	必修	0.00	通過
9	1121	515508	資訊共同	計算機網路概論	選修	3.00	B-
10	1121	565009	物理小組	物理(一)	必修	4.00	A-



親，您得分析

157組 http request/response



Burp Suite Community Edition v2024.11.2 - Temporary Project

Dashboard Target **Proxy** Intruder Repeater Collaborator Sequencer Decoder
Comparer Logger Organizer Extensions Learn
Intercept **HTTP history** WebSockets history Match and replace Proxy settings

Filter settings: Hiding CSS, image and general binary content

#	Host	Method	URL	Params	Edited	Status code	Length
133	https://regist.nycu.edu.tw	GET	/p_student/default.aspx			200	21823
137	https://regist.nycu.edu.tw	GET	/WebResource.axd?d=9XNMmpKf...	✓		200	21143
139	https://regist.nycu.edu.tw	GET	/WebResource.axd?d=SV3SzY3x6i...	✓		200	9696
145	https://regist.nycu.edu.tw	GET	/p_student/main.aspx?power=0	✓		200	8655
149	https://regist.nycu.edu.tw	GET	/favicon.ico			404	1392
150	https://www.google-analytics....	POST	/g/collect?v=2&tid=G-968BJ0NDY6...	✓		204	826
151	https://regist.nycu.edu.tw	POST	/p_student/default.aspx	✓		302	917
152	https://regist.nycu.edu.tw	GET	/p_student/default.aspx			200	28806
153	https://regist.nycu.edu.tw	GET	/p_student/main.aspx?power=0	✓		200	8655
154	https://regist.nycu.edu.tw	GET	/p_student/grd_stdscorelist.aspx?...	✓		200	18156
156	https://regist.nycu.edu.tw	POST	/p_student/grd_stdscorelist.aspx?...	✓		200	18116
157	https://regist.nycu.edu.tw	GET	/p_student/grd_stdscoreedit.aspx?...	✓		200	55173

Request

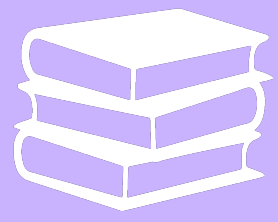
Pretty Raw Hex

```
Brand";v="24"  
5 Sec-Ch-Ua-Mobile: ?0  
6 Sec-Ch-Ua-Platform: "macOS"  
7 Accept-Language: zh-TW,zh;q=0.9  
8 Upgrade-Insecure-Requests: 1  
9 User-Agent: Mozilla/5.0 (Windows NT 10.0;  
Win64; x64) AppleWebKit/537.36 (KHTML, like  
Gecko) Chrome/131.0.6778.140 Safari/537.36  
10 Accept:
```

Response

Pretty Raw Hex Render

```
</td>  
<td>  
  已送註冊組  
</td>  
<td style="width:12%;">  
  林麗美  
</td>  
<td>  
  語言與溝通-英
```

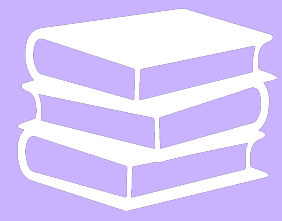


整體心得

好累但好酷我要賣給各大專院校系學會

- 這門課真的學到了很多東西噯！
- 開發專案好有趣但好累





謝謝大家

好累但好酷我要賣給各大專院校系學會

請到 book.slasho.tw 試玩