**MLB API**

我想另外寫一個腳本 該腳本要能夠實時獲取比賽數據 然後根據對方投手 生成四個部分

1. 攻擊方該隊2024 OPS最高打者 攻擊方近五場OPS最高打者 攻擊方對該投手ops最高打者

2. 該投手在當前狀況下數據：例如當前得點圈有人情況下數據 或是對上左打者數據 根據當前比賽狀況做數據調整

3. 當前打者對該投手打擊數據

4. 當前打者在當前比賽狀況下數據：例如當前得點圈有人情況下數據 或是對上左投手數據 根據當前比賽狀況做數據調整

Aaron judge: 592450

Shohei Ohtani ID: 660271

Chris Sale: 519242 (cy young)

Michael King: 650633 (ace)

Ryan Helsley: 664854 (closer)

Darvish: 506433

DJ LeMalieu:518934

Justin Verlander: 434378

Blake Snell: 605483

Alex Vesia: 681911

Jon Berti: 542932

Ryan Pressly: 519151

Chris Taylor: 621035

New York Yankees: 147

Aaron judge 2024

<https://statsapi.mlb.com/api/v1/people/592450/stats?stats=season&season=2024&group=hitting>

New York Yankees 2024

<https://statsapi.mlb.com/api/v1/teams/147/stats?stats=season&season=2000&group=hitting>

Aaron judge vs Shohei

<https://statsapi.mlb.com/api/v1/people/592450/stats?stats=vsPlayer&group=hitting&opposingPlayerId=605483>

Aaron judge 2025 spring training + regular

<https://statsapi.mlb.com/api/v1/people/592450/stats?stats=gameLog&season=2025&gameType=S,R&group=hitting>

Aaron judge career scoring position

<https://statsapi.mlb.com/api/v1/people/592450/stats?stats=careerStatSplits&group=batting&sitCodes=risp>

Aaron judge 2024 scoring position

<https://statsapi.mlb.com/api/v1/people/592450/stats?stats=statSplits&season=2024&group=batting&sitCodes=risp>

Justin Verlander 2024 vs left hand batter

<https://statsapi.mlb.com/api/v1/people/434378/stats?stats=seasonAdvanced&season=2024&group=pitching&sitCodes=vls>

Justin Verlander 2024 home game

<https://statsapi.mlb.com/api/v1/people/434378/stats?stats=statSplitsAdvanced&season=2024&group=pitching&sitCodes=h>

Justin Verlander 2024 Hot Cold Zone

<https://statsapi.mlb.com/api/v1/people/434378/stats?stats=hotColdZones&season=2024&group=pitching>

Aaron judge 2024 March

<https://statsapi.mlb.com/api/v1/people/592450/stats?stats=statSplits&season=2024&group=batting&sitCodes=3>

**Search for meta of gameTypes**

<https://statsapi.mlb.com/api/v1/gameTypes>

**Check ID by name**

<https://statsapi.mlb.com/api/v1/people/search?names=Aaron%20Judge>

**Check player by ID**

[https://statsapi.mlb.com/api/v1/people/{player\_id}](https://statsapi.mlb.com/api/v1/people/%7bplayer_id%7d)

**Get game by date**

<https://statsapi.mlb.com/api/v1/schedule?sportId=1&date=2025-03-19>

**Get game by game ID**

<https://statsapi.mlb.com/api/v1/game/778564/boxscore>

"best\_vs\_pitcher\_hitter":["Aaron Judge",1.01],"all\_matchups":[["DJ LeMahieu",518934,0.761],["Anthony Rizzo",519203,0.828],["Giancarlo Stanton",519317,0.87],["Jon Berti",542932,0.703],["Gerrit Cole",543037,0.393],["Cody Poteet",547001,0.2],["Marcus Stroman",573186,0.309],["Aaron Judge",592450,1.01],["Tommy Kahnle",592454,0.0],["Nick Burdi",595897,0.0],["Luke Weaver",596133,0.382],["J.D. Davis",605204,0.765],["Clay Holmes",605280,0.0],["Carlos Rodón",607074,0.385],["Jose Trevino",624431,0.637],["Victor González",624647,0.0],["Phil Bickford",641360,0.666],["Nestor Cortes",641482,0.0],["Tim Mayza",641835,0.0],["Jonathan Loáisiga",642528,0.0],["Dennis Santana",642701,0.833],["Gleyber Torres",650402,0.775],["Alex Verdugo",657077,0.742],["Clarke Schmidt",657376,0.5],["Tim Hill",657612,0.0],["Enyel De Los Santos",660853,0.0],["Jahmai Jones",663330,0.535],["Trent Grisham",663757,0.697],["Scott Effross",664123,0.0],["Jake Cousins",664776,0.0],["Anthony Misiewicz",664948,0.0],["Juan Soto",665742,0.953],["Oswaldo Cabrera",665828,0.643],["Jazz Chisholm Jr.",665862,0.757],["Carlos Narvaez",665966,0.564],["Duke Ellis",668752,0.4],["Austin Wells",669224,0.722],["Oswald Peraza",672724,0.612],["Kevin Smith",675656,0.516],["Anthony Volpe",683011,0.661],["Jasson Domínguez",691176,0.747],["Ben Rice",700250,0.613]]}

Connor Wong: 657136

**Run the script**

source venv/bin/activate

uvicorn mlb\_matchup:app –reload

streamlit run mlb\_matchup.py

**Git**

git add .

git commit -m "更新說明，如修復數據庫錯誤"

git push origin main

**僅更新數據**

python main.py --update-season --update-recent

在一個終端啟動 API 服務器：

~~python run\_api.py~~

在另一個終端啟動 UI：

python run\_ui.py

~~streamlit run mlb\_score\_tracker.py~~

python run\_simple.py

run\_simple.py > live\_tracker.py > mlb\_visualizations.py, ui\_components.py, mlb\_data.py

**模組功能說明**

**1. 配置模組 (config/)**

**team\_config.py: 存放MLB球隊ID和名稱映射，以及數據庫配置**

**2. 數據庫模組 (database/)**

**db\_setup.py: 負責初始化數據庫和創建表格**

**db\_operations.py: 提供數據庫查詢、插入和更新等操作的通用函數**

**3. API模組 (api/)**

**mlb\_api.py: 處理與MLB API的所有請求，獲取比賽、球員和統計數據**

**app.py: FastAPI應用，提供REST API端點**

**4. 數據處理模組 (data\_processing/)**

**player\_data.py: 處理球員數據，包括更新賽季數據、最近比賽數據和對戰數據**

**5. UI模組 (ui/)**

**streamlit\_app.py: Streamlit用戶界面，提供互動式數據瀏覽和可視化**

**6. 通用工具模組 (utils/)**

**helpers.py: 提供輔助函數，如格式化數據、API請求重試和JSON數據處理**

**7. 主程序 (main.py)**

**系統入口點，負責初始化和啟動整個系統**

**提供命令行參數處理，可選擇性啟動各組件**

**擴展建議**

**數據匯出功能: 可以在 utils/ 中添加新模組，支持將分析結果匯出為CSV或Excel**

**數據緩存層: 考慮添加Redis緩存，減少對MLB API的請求頻率**

**批量分析工具: 添加批量分析多個對戰組合的功能**

**歷史數據比較: 實現跨賽季數據比較功能**

**數據可視化增強: 添加更多圖表和視覺化效果，如熱圖和趨勢圖**

建議挺好 我希望能夠繼續以下優化順序一步一步做 想先確定以下的開發是可行的 1. .current pitcher跟box score的位置可以對調 2. 根據當前投手以及打者直接給出對戰數據 3. 當用戶按下analyze xxx team batter vs pitcher時 會跳到另一個tab: Team batter vs Pitcher analysis, 裡面包含該隊打者對上該投手OPS最高 2024ops最高 近五場ops最高的數據 並且用戶在該tab時 會暫停自動更新 4. 該頁面有個按鍵能夠返回實時賽況 當按下時會重新刷新一次 5. 另外能夠有個獨立的tab 能提供用戶自行選擇對戰投手與隊伍打者的分析

it works great, now i have the following requests

1. 當用戶在tab1 能夠每30秒自動刷新

2. 然後當用戶按下analyze xxx team batter vs pitcher時 會跳到tab2: Team batter vs Pitcher analysis, 裡面包含該隊打者對上該投手OPS最高 2024ops最高 近五場ops最高的數據 並且用戶在該tab時 會暫停自動更新 4. 該頁面有個按鍵能夠返回實時賽況 當按下時會返回tab1 並且能夠每30秒更新一次

**Split possible value:**

**batter:**

**vs\_RHP: vr**

**vs\_LHP: vl**

**pitcher:**

**vs\_RHB: vr**

**vs\_LHB: vl**

menOnBase:

Empty: r0

RISP: risp

Men\_On: ron

Pitcher API

<https://statsapi.mlb.com/api/v1/people/506433/stats?stats=careerStatSplits&group=pitching&sitCodes=risp>

<https://statsapi.mlb.com/api/v1/people/506433/stats?stats=statSplits&season=2024&group=pitching&sitCodes=risp>

Batter API

<https://statsapi.mlb.com/api/v1/people/592450/stats?stats=statSplits&season=2024&group=batting&sitCodes=risp>

<https://statsapi.mlb.com/api/v1/people/592450/stats?stats=careerStatSplits&group=batting&sitCodes=risp>

<https://statsapi.mlb.com/api/v1/people/678554/stats?stats=statSplits&season=2024&group=batting&sitCodes=r0>

/api/v1/people/678554/stats?stats=statSplits&season=2024&group=hitting&sitCodes=rO

i want to split the fip- and war stats to 5 levels, and for every level, display in different color, FIP- <=80: Red, 80<FIP-<=90: Purple, 90<FIP-<=110: blue, 110<FIP-<=120: green, FIP- > 120: brown; for WAR, WAR >=2: Red, 1<=WAR<2: Purple, 0.5<=WAR<1: blue, 0<=WAR<=0.5: green, WAR < 0: brown