프론트엔드의 래먼데이터 API 활용

backend 서버 start

- lahmansbaseballdb.sqlite가 있는 폴더 열기 (VsCode-File-Open Folder)

- mlb_crud.py 생성

```python
from sqlalchemy import create_engine, text


SQLALCHEMY_DATABASE_URL = "sqlite:///./lahmansbaseballdb.sqlite"

engine = create_engine(
    SQLALCHEMY_DATABASE_URL
)


def read_player_batting_data(playerID: str):
    with engine.connect() as conn:
        rows = conn.execute(
            text("select * from batting where playerID = :playerID"),
            {'playerID': playerID}
        )

        columns = rows.keys()

        data = []
        for row in rows:
            data_dict = {column: row[idx] for idx, column in enumerate(columns)}
            data.append(data_dict)

        return data


def read_player_pitching_data(playerID: str, yearID: str):
    with engine.connect() as conn:
        rows = conn.execute(text("select * from pitching where playerID =
:playerID AND yearID = :yearID"), {'playerID': playerID, 'yearID': yearID})

        columns = rows.keys()

        data = []
        for row in rows:
            data_dict = {column: row[idx] for idx, column in enumerate(columns)}
            data.append(data_dict)

        return data
```

```python
def read_player_info(playerID: str):
    with engine.connect() as conn:
        rows = conn.execute(text("select * from people where playerID =
:playerID"), {'playerID': playerID})

    columns = rows.keys()

    data = []
    for row in rows:
        data_dict = {column: row[idx] for idx, column in enumerate(columns)}
        data.append(data_dict)

    return data
```

- mlb_api.py 생성

```python
from fastapi import FastAPI, Body
from fastapi.middleware.cors import CORSMiddleware # 14_프론트엔드_래먼데이터
_API_활용 추가

import mlb_crud


app = FastAPI(title="레먼데이터베이스 API")

# 14_프론트엔드_래먼데이터_API_활용 추가
app.add_middleware(
    CORSMiddleware,
    allow_origins=["*"],
    allow_credentials=True,
    allow_methods=["*"],
    allow_headers=["*"]
)

@app.get("/players/{playerID}")  # 경로 매개변수 활용 예시
def player_info_route(playerID: str):
    return crud.read_player_info(playerID)


@app.get("/batting")  # 쿼리 매개변수 활용 예시
def batting_route(playerID: str):
    return crud.read_player_batting_data(playerID)


@app.post("/pitching")  # Request Body 활용 예시
def pitching_route(
    playerID: str = Body(...),
    season: int = Body(...)
):
    return crud.read_player_pitching_data(playerID, season)
```

- 실행

  - **윈도우**

    ```
    call .venv/Scripts/activate
    uvicorn mlb_api:app --host 0.0.0.0 --port 8999 --reload
    ```

  - **MacOS**

    ```
    source .venv/bin/activate
    uvicorn mlb_api:app --host 0.0.0.0 --port 8999 --reload
    ```

---

frontend 류현진 데이터 목록 조회

GET : https://kusf-api.run.goorm.site/pitching/seasons?playerID=ryuhy01&start_year=2010&end_year=2020

vscode 실행

front.html 작성

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>

    <script src="https://code.jquery.com/jquery-3.7.0.min.js" integrity="sha256-2Pmvv0kuTBOenSvLm6bvfBSSHrUJ+3A7x6P5Ebd07/g=" crossorigin="anonymous"></script>
</head>

<script>
    //모든 html이 로딩 되었을 때, 실행
    $(function() {
        getPlayerInfo();
    });

    function getPlayerInfo() {
        $.ajax ({
            url : "http://localhost:8999/players/ryuhy01",           // 요청이 전송될 URL 주소
            type    : "GET",                                         // http 요청 방식 (default: 'GET')
            //data  : {key : value},                                 // 요청 시 포함되어질 데이터
            success : function(data, status, xhr) {                  // 정상적으로 응답 받았을 경우에는 success 콜백이 호출되게 됩니다.
```

```
                    console.log(data);
                    $("#playerInfo").text(JSON.stringify(data));
                    /*
                    JSON.stringify : javascript 객체를 JSON 문자열로 변환
                    JSON.parse : JSON 문자열을 javascript 객체로 변환
                    */
                },
                error   : function(xhr, status, error) {     // 서버에서 error가 생겼을
때 호출됩니다.
                    console.log(xhr);
                },
            });
        }
    </script>

    <body>
        <div id="playerInfo">
        </div>
    </body>
    </html>
```

결과

[{"playerID":"ryuhy01","birthYear":1987,"birthMonth":3,"birthDay":25,"birthCountry":"South
Korea","birthState":"Incheon","birthCity":"Incheon","deathYear":null,"deathMonth":null,"deathDay":null,"deathCountry":null,"deathState":null,"deathCity":null,"nameFirst":"Hyun-
Jin","nameLast":"Ryu","nameGiven":"Hyun-Jin","weight":255,"height":75,"bats":"R","throws":"L","debut":"2013-04-02","finalGame":"2019-09-28","retroID":"ryu-h001","bbrefID":"ryuhy01","birth_date":"1987-03-
25","debut_date":"2013-04-02","finalgame_date":"2019-09-28","death_date":null}]