

Python Setup Guide

Basic Setup Steps:

1. Download Python from the official website: <https://www.python.org/downloads/>
(Recommended versions: 3.9, 3.10, or 3.11)
2. Install the downloaded Python version on your system.
3. Open the Command Prompt (or terminal).
4. Create a virtual environment using the following command: `python -m venv <env_name>`
5. Activate the virtual environment:
 - **Windows:**
`<env_name>\Scripts\activate`
 - **macOS/Linux:**
`source <env_name>/bin/activate`

Installing Required Modules:

1. Install FastAPI: `pip install fastapi`
2. Install JWT: `pip install jwt`
3. Install all dependencies from the requirements.txt file: `pip install -r requirements.txt`

Running the API:

1. Navigate to the project root directory (FundBuddy), make sure the virtual environment is activated.
2. Run the application using: `uvicorn main:app --reload`
3. The FastAPI server should start and run on **port 8000** by default.
4. It's recommended to use **PyCharm** as the code editor for viewing and editing the FastAPI project.

Note:

If you encounter any errors related to missing modules, please install them manually using:

`pip install <module_name>`

Database Details

1. For simplicity, I have used an **SQLite3** database named funddata.db, which is located in the project directory.
2. To view the database with a graphical interface, you can use any SQLite database UI tool. *(I used **TablePlus** for this purpose.)*

Frontend Setup (React JS)

1. The frontend is built using **React JS** to display data fetched from the backend API.
2. To set up React, first download and install **Node.js** from <https://nodejs.org/en>.
3. It's recommended to use **Visual Studio Code (VS Code)** as the code editor for viewing and editing the React project.
4. To install all npm packages run the command : npm install
5. To enable routing in the React app, install React Router by running: npm install react-router-dom
6. To run the React project (UI), navigate to the project directory (e.g., fund-schemes) and start the development server with: npm start
7. The React app will launch on **port 3000**. On the homepage, you'll find navigation tabs like **Home**, **Login**, and **Signup**.
8. After signing up and logging in, the application will fetch mutual fund family details from the backend API and display them on the homepage.

Postman API Endpoints

1. **Signup:**
http://127.0.0.1:8000/signup
2. **Login:**
http://127.0.0.1:8000/login
(Upon successful login with valid credentials, you'll receive an access token.)
3. **Fund Schemes:**
http://127.0.0.1:8000/funds_schemes
(Pass the token as a query parameter: ?token=<your_access_token>)
4. **Portfolio:**
http://127.0.0.1:8000/schemes_portfolio
(Pass the token as a query parameter: ?token=<your_access_token>)

