

Take-Home Project: Financial Data Filtering App

Objective:

Build a financial data filtering app using data from a single API endpoint. The app will fetch annual income statements for AAPL (Apple) and allow users to filter and analyze key metrics.

API Endpoint to Use:

https://financialmodelingprep.com/api/v3/income-statement/AAPL?period=annual&apikey=<api_key>

You can obtain a free API key from [Financial Modeling Prep](https://financialmodelingprep.com/)

This endpoint returns the annual income statements for Apple Inc., and the response includes key financial data such as revenue, net income, gross profit, and expenses.

Requirements:

1. Fetch and Display Data:

- Fetch the data from the API endpoint and display it in a table.
- Include the following columns in the table:
 - Date (e.g., "2024-09-28")
 - Revenue
 - Net Income
 - Gross Profit
 - EPS (Earnings Per Share)
 - Operating Income

2. Filtering:

- Allow users to filter the data using the following criteria:
 - Date Range: Filter results between specific years (e.g., 2020–2024).
 - Revenue: Filter rows where Revenue falls within a user-specified range.
 - Net Income: Filter rows where Net Income falls within a user-specified range.

3. Sorting:

- Allow users to sort the table by:
 - Date (ascending/descending).

- Revenue (ascending/descending).
- Net Income (ascending/descending).
- 4. **Responsive Design:**
 - Ensure the app is mobile-friendly and looks good on both desktop and mobile devices.

Technical Requirements:

1. Frontend:
 - Use React (JavaScript or TypeScript).
 - Styling should be implemented with TailwindCSS.
2. Backend (Optional):
 - If you wish to filter data on the server side instead of the frontend, implement a simple backend using Python (Flask or FastAPI).
 - The backend should:
 - Fetch data from the API.
 - Handle filtering and sorting based on user requests.
 - Expose an endpoint for the frontend to fetch filtered data.
3. Deployment:
 - Deploy using Vercel, Netlify, GitHub Pages, AWS or any service you prefer

Deliverables:

GitHub repository containing:

- Source code for the project.
- A README file with:
 - Instructions to run the project locally.
 - A link to the deployed app.

Submission Deadline:

Please submit the assignment by **January 12, 2025, at 11:59 PM PST.**