

## Task Description: Data Visualization via REST API and Front-End Integration

We have an Excel file containing economic data that needs to be made accessible via a REST API and visualized using a simple front-end application. Below is a breakdown of the task:

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### 1. Backend (REST API)

You will need to create a RESTful API that will:

- **Read and process the Excel file:**
  - The Excel file is available at this URL: [WEO Excel Data](#).
  - Extract relevant data from the Excel file (countries, years, subjects, and corresponding values).
- **Filter data based on API parameters:**
  - **Filters:**
    - **Country:** A selected country from a predefined list
    - **Subject Descriptor:** A subject from a predefined list
  - **Return a filtered list** of data in the following format:

```
[
  { "year": 2010, "value": 12 },
  { "year": 2011, "value": 14 },
  { "year": 2012, "value": 15 }
]
```
- **Data Handling:**
  - Ensure that the backend filters the data correctly based on the provided parameters (country, and subject).
  - If no data is available for the specified filters, return an empty list.
  - Date range always be defined from 1980 --- 2023

### 2. Front-End (Single Page Application)

You will create a simple front-end application with the following functionality:

- **User Interface:**
  - **2 Dropdowns:**
    1. **Country:** A dropdown with 3-4 countries (any countries)
    2. **Subject Descriptor:** Dropdown with 3-4 predefined subjects (any of them)
- **Chart Display:**
  - Use **Highcharts** to visualize the data returned from the backend in a line chart format.
  - The chart should show the values (y-axis) over the years (x-axis).
  - The chart should update dynamically based on the selections made by the user in the dropdowns.

### Tech Stack

- **Backend:**
  - .Net core 8
  - Libraries to handle Excel files (any library can be used).
- **Frontend:**
  - **Framework:** You may use any modern JavaScript framework you are comfortable with (e.g., React, Vue.js, Angular).
  - **Charting Library:** Highcharts

The solution to be provided on a publicly accesible repository hosting service (Github, bitbucket, etc)