📝 Project Title

Hospital Patient Record Analyzer

🔍 Problem Statement

Hospitals handle many patients every day, and it can be difficult to keep track of all their visits and which doctors they have seen. Without an organized system, staff might not easily see who visits most often, which doctors are busiest, or how many total visits happen in a month.

This project aims to solve that problem by creating a simple Python program that reads data from a hospital.json file. The program will help organize and summarize patient information, making it easier to understand hospital activity and doctor workloads.

🎯 Project Objectives

Objective 1: To analyze and summarize patient and doctor data from the hospital JSON file.

Objective 2: To help users see trends such as the most visited doctor and the most frequent patient.

Objective 3: To practice using Python for data analysis and JSON file handling.

⚙️ Planned Features

Feature 1: Count how many visits a patient has made. (starter)

Feature 2: List the doctors a patient has consulted. (starter)

Feature 3: Find the patient with the most visits.

Feature 4: Find the most visited doctor.

Feature 5: Compute the average number of visits per doctor.

(Optional Feature 6: Show the most common department or reason for visits.)

⌨️ Planned Inputs and Outputs

Inputs:

Patient name (to search their record)

Doctor name (to see their total visits)

Option number from menu (to choose a feature)

Outputs:

Total number of patients

Patient visit counts

List of doctors consulted by each patient

Patient with the most visits

Most visited doctor

Average visits per doctor

🧠 Logic Plan (Option 1: Pseudocode)

Start Program

Load the JSON file (hospital.json)

Display a menu with choices:

1. Count how many visits a patient made

2. List doctors a patient has consulted

3. Show patient with the most visits

4. Show most visited doctor

5. Show average visits per doctor

Ask the user to choose an option

Use if-else to perform the selected feature

Display results clearly in the console

Ask the user if they want to try another feature

Repeat until the user chooses to exit

End Program

📂 GitHub Repository Link

https://github.com/AndreYuanAngPSHSSMCACCOUNT3/Final-Project-CS2