Great — you're interested in a **health-related FYP**, using **HTML**, **CSS**, **JS**, **Bootstrap**, and integrating your IT courses like **OOP**, **DB systems**, **networks**, etc.

Here's a unique, practical, and innovative health-related FYP idea:

▶ FYP IDEA: "Community Health Tracker & Early Alert System"

☐ Overview:

A web-based health platform that allows citizens in a community or town to self-report symptoms (like fever, cough, rash, etc.) and uses this data to track health trends and alert nearby users or health officials about potential outbreaks or spikes in illness.

It promotes **early detection**, **preventive action**, and **public health awareness** — without needing hospitals or clinical data.

Real-World Problem it Solves:

- Health issues like dengue, flu, or COVID-like symptoms spread quickly due to lack of early warning.
- People often ignore early symptoms or don't know that others around them are sick.
- Public health teams don't have access to **localized**, **real-time** data from the general population.

This system helps:

- Citizens monitor their symptoms
- Officials and NGOs detect early patterns
- Communities act faster to prevent spread

% Key Features:

1. Symptom Reporting Tool

- Users log daily health status (select symptoms)
- Option to upload temperature, heart rate (if available)
- Data is stored anonymously

2. Live Health Map

- Displays symptom heatmap (area with more reported symptoms appears redder)
- Uses Google Maps API with clustering

3. Early Alert System

- If symptom reports spike in one area, alert is triggered
- Sends notification to nearby users
- Health team (admin) is notified to investigate

4. Health Tips & Awareness

- Show health tips based on trending symptoms
- Example: "High fever and rashes trending in Area A possible dengue risk"

5. Admin Panel

- Manage user reports
- Visualize trends over time
- Export health reports for action (PDF/CSV)

¶ Innovative Twist:

• A **basic rules-based AI model** (in JS) to suggest possible illnesses based on reported symptoms

Example: User reports fever + joint pain → suggest "Possible Chikungunya — consult doctor if persists"

• Can integrate **QR codes** posted around schools or communities to allow fast symptom reporting via mobile

□ Tech Stack:

- Frontend: HTML, CSS, JS, Bootstrap
- Backend/Database: Firebase / Google Sheets / Node.js with JSON
- Maps: Google Maps JS API (for location data and heatmaps)
- Charts: Chart.js for trend analytics
- **Hosting**: Firebase / GitHub Pages

Course Integration:

Course How it's Applied

Programming / OOP Symptom objects, user profiles, health rule engine

Database Systems Storing reports, timestamps, areas Computer Networks Data flow, API usage, live reporting

System Admin Access control, admin panel, database security

Intro to IT Problem analysis, stakeholder roles, system lifecycle

♦ Why It's a Great FYP:

• Solves a real public health problem

- **Local impact** can be used in any community or city
- **Uses available tools** fits your skillset
- **Innovative** early alert + heatmap + symptom engine
- Non-clone, meaningful solution
- Scalable can be extended to include doctor/clinic integration later