Java Technical Assignment

The Task

We have a platform where doctors can register their patients through a mobile or web portal.
For this to work we need to build backend APIs to achieve task like:

- Adding a doctor
- Adding a patient & it's symptom
- Suggesting the doctor based on patient's symptom

Doctor's entity

In our database we will have doctor's name, city, email, phone number and speciality.

- ***City*** *can have 3 values only i.e. Delhi, Noida, Faridabad*
- ***Speciality*** *can have 4 values i.e. Orthopedic, Gynecology, Dermatology, ENT specialist*

A doctor can be added or removed from the platform.

Patient's entity

In our database we will have patient's name, city, email, phone number and symptom.

- ***City*** *can have any value*
- ***Symptom*** *can have the following values only*
    - *Arthritis, Backpain, Tissue injuries (comes under Orthopedic speciality)*
    - *Dysmenorrhea (comes under Gynecology speciality)*
    - *Skin infection, skin burn (comes under Dermatology speciality)*
    - *Ear pain (comes under ENT speciality)*

A patient can be added or removed from the platform.

Following fields should have the mentioned validations at the backend:

1. **Name** (should be at least 3 characters)
2. **City** (should be at max 20 characters)
3. **Email** (should be a valid email address)
4. **Phone number** (should be at least 10 number)

Suggesting Doctors

There will be another API that will accept patient ID, and suggest the doctors based out of the
patient location and the symptom.

E.g. 1: If the patient ID that we received as request param in this API, that patient have Arthritis as symptom then all the doctors of that location who is an Orthopedic will be sent as the response, since Arthritis comes under Orthopedic speciality.

Important Note: This suggesting doctor API is the evaluating API where the logic needs to be working. The suggested doctor in the API should be based on the symptom of the patient that links to doctor's speciality. E.g. 2: If a patient have Eye pain then only ENT specialist doctor should be suggested.

Edge-Case 1: If there isn't any doctor on that location (i.e. outside Delhi, Noida, Faridabad), the response should be "We are still waiting to expand to your location"

Edge-Case 2: If there isn't any doctor for that symptom on that location, the response should be "There isn't any doctor present at your location for your symptom"

How you need to achieve this task?

- You need to use **Spring Boot Framework** for core functionalities along with **Hibernate** for carrying out database operations.
- Use Swagger to list all your APIs (optional but a very good plus point)

Things to submit:

- The expected output is the zip form of the code, shared via a Google drive folder. It should also contain the postman collection link that you have used to test the application i.e. created doctors, patients and suggestion API.
- Please upload the drive link in **this form**, you don't need to email us. Ensure that the drive folder is shared. [Form Link: https://forms.gle/AT86trr8S6kMH7B4A]