

# **Janitri Backend Assignment**

## **Overview**

This assessment is designed to assess your skill in backend development, particularly in API development using the Spring Boot. You will be creating a simplified version of a company's backend that creates devices that monitor patient's heart rate data. You will be focussing on managing users, places, patients etc. The primary goal is to develop RESTful APIs to handle different functionality of the system.

## **Objectives**

- Create a Spring Boot project with the specified functionalities.
- Create a set of RESTful APIs to interact with the system.
- Ensure secure and efficient data handling.
- Ensure robust Error handling and data validation.
- Document your work.
- Writing unit tests is up to your will.
- You may create any more tables as you feel necessary.
- Ensure you follow good design practices and maintain clean and extendible code.

## **Requirements**

### **Data Models**

You are required to create the following data models.

- Users : To manage user information.
- Patients : To manage patient information.

Feel free to create any tables as you see fit, the device used by this company monitors the patient's heart rate.

### **API endpoints**

Develop the following endpoints.

- User Registration and Login : For registration and login you can consider email and password validation, no need to use any authentication or authorization protocols, just match the email and password.
- Manage Patients : Endpoint to add a patient, and to retrieve patient details.
- Heart rate details : Endpoint to record and retrieve heart rate data for patients.

### **Data Relationships**

The relationship between these tables are intentionally left for you to define. We are interested in seeing your approach in database design and relationship modeling.

### **Submission guidelines**

- Create a github repo and push all the changes to that repo.
- Include a readme file with :
  - Instructions on how to set up and run your project.
  - Any assumptions or decisions you made in this project.
  - API documentation.
  - Any other relevant information you might wanna share with us.