Problem Statement: Vaccination Center

Pseudocode:

// Import required libraries and dependencies

// Define the main VaccinationCenterController class

class VaccinationCenterController {

// Define API endpoints

// Endpoint to retrieve a list of available vaccination centers

GET /vaccination-centers

function getVaccinationCenters() {

// Retrieve vaccination centers from the database or any other data source

// Return the list of vaccination centers as a JSON response

}

// Endpoint to retrieve details of a specific vaccination center by its ID

GET /vaccination-centers/{centerId}

function getVaccinationCenter(centerId) {

// Retrieve the vaccination center with the specified ID from the database or any other data source

// Return the vaccination center details as a JSON response

}

// Endpoint to register a person for vaccination

POST /vaccination-centers/{centerId}/register

function registerForVaccination(centerId, registrationData) {

// Retrieve the vaccination center with the specified ID from the database or any other data source

// Validate the registration data

// Generate a unique registration ID

// Save the registration details in the database or any other data source

// Return the registration ID as a JSON response

}

// Add other necessary endpoints for updating vaccination center details, managing appointments, etc.

}

// Define the main Application class

class VaccinationCenterApplication {

// Define the main method

function main() {

// Create an instance of the VaccinationCenterController class

VaccinationCenterController vaccinationCenterController = new VaccinationCenterController()

// Configure Spring Boot application

// Set up routing and mapping of API endpoints to their respective controller methods

// Start the Spring Boot application

}

}

// Start the application by invoking the main method of the VaccinationCenterApplication class

VaccinationCenterApplication.main()