**Guvi Mini Project – 2**

**( Back End Documentation )**

**Backend Documentation for Hospital Management System**

**Overview**

This documentation provides details about the backend endpoints for the Hospital Management System. The system manages doctors, patients, and appointments through various endpoints, enabling CRUD (Create, Read, Update, Delete) operations.

**Endpoints**

**Home Page**

**GET /**

* **Description**: Retrieves counts of doctors, patients, and appointments and displays them on the home page.
* **Response**: Renders the index view with the counts.

**Doctor Management**

**GET /adddoctor**

* **Description**: Displays the form to add a new doctor.
* **Response**: Renders the Add\_Doctor view.

**POST /addDoctor**

* **Description**: Registers a new doctor.
* **Request Body**: DoctorModel object.
* **Response**: Redirects to /view\_doctor.

**GET /view\_doctor**

* **Description**: Retrieves and displays the list of all doctors.
* **Response**: Renders the view\_Doctor view with the list of doctors.

**GET /edit/{id}**

* **Description**: Displays the form to update a doctor's details.
* **Path Variable**: id (ObjectId of the doctor).
* **Response**: Renders the update\_doctor view with the doctor's details.

**POST /update\_Doctor/{id}**

* **Description**: Updates the doctor's details.
* **Path Variable**: id (ObjectId of the doctor).
* **Request Body**: DoctorModel object.
* **Response**: Redirects to /view\_doctor.

**GET /delete/{id}**

* **Description**: Deletes a doctor.
* **Path Variable**: id (ObjectId of the doctor).
* **Response**: Redirects to /view\_doctor.

**Patient Management**

**GET /addpatient**

* **Description**: Displays the form to add a new patient.
* **Response**: Renders the Add\_Patient view.

**POST /addPatient**

* **Description**: Registers a new patient.
* **Request Body**: PatientModel object.
* **Response**: Redirects to /view\_patient.

**GET /view\_patient**

* **Description**: Retrieves and displays the list of all patients.
* **Response**: Renders the view\_Patient view with the list of patients.

**GET /edit\_patient/{id}**

* **Description**: Displays the form to update a patient's details.
* **Path Variable**: id (ObjectId of the patient).
* **Response**: Renders the update\_patient view with the patient's details.

**POST /update\_Patient/{id}**

* **Description**: Updates the patient's details.
* **Path Variable**: id (ObjectId of the patient).
* **Request Body**: PatientModel object.
* **Response**: Redirects to /view\_patient.

**GET /delete\_patient/{id}**

* **Description**: Deletes a patient.
* **Path Variable**: id (ObjectId of the patient).
* **Response**: Redirects to /view\_patient.

**Appointment Management**

**GET /addappointment**

* **Description**: Displays the form to add a new appointment with lists of doctors and patients.
* **Response**: Renders the Add\_Appointment view with lists of doctors and patients.

**POST /addAppointment**

* **Description**: Registers a new appointment.
* **Request Body**: AppointmentModel object.
* **Response**: Redirects to /view\_appointment.

**GET /view\_appointment**

* **Description**: Retrieves and displays the list of all appointments.
* **Response**: Renders the view\_appointment view with the list of appointments.

**GET /edit\_appointment/{id}**

* **Description**: Displays the form to update an appointment's details.
* **Path Variable**: id (ObjectId of the appointment).
* **Response**: Renders the update\_appointment view with the appointment's details.

**POST /update\_Appointment/{id}**

* **Description**: Updates the appointment's details.
* **Path Variable**: id (ObjectId of the appointment).
* **Request Body**: AppointmentModel object.
* **Response**: Redirects to /view\_appointment.

**GET /delete\_appointment/{id}**

* **Description**: Deletes an appointment.
* **Path Variable**: id (ObjectId of the appointment).
* **Response**: Redirects to /view\_appointment.

**Data Retrieval Endpoints**

**GET /getdoc**

* **Description**: Retrieves the list of all doctors.
* **Response**: Returns a ResponseEntity with the list of doctors.

**GET /getpat**

* **Description**: Retrieves the list of all patients.
* **Response**: Returns a ResponseEntity with the list of patients.