**Hospital Portal Web Application**

**Code Implementation and Functionality Report**

1. Introduction:

The Hospital Portal Web Application is an effective tool for managing patient information, scheduling appointments, and easing hospital operations. This report describes the web application's code structure and features.

2. Technologies Used:

* Python
* HTTPServer
* MySQL
* CGI (Common Gateway Interface)

3. Code Structure:

The codebase is divided into two major sections:

* *Hospital Portal Handler (hospital\_portal.py):*

o Processes HTTP requests and returns HTML pages.

o Handles patient addition, appointment scheduling, viewing appointments, and patient discharge logic.

* *Database Handler(portalDatabase.py):*

o Oversees MySQL database interactions.

o Adds patients, schedules appointments, displays appointments, discharges patients, and retrieves patient data.

4. Patient Management:

* *Add Patient (/addPatient):*

o New patients can be added by users to the database.

o Name, ID, age, admission and discharge dates are all included in the patient's information.

* *View All Patients (/):*

o Presents a table with every patient.

o The ID, name, age, admission and discharge dates of each patient are listed.

5. Appointment Scheduling

* *Schedule Appointment (/scheduleAppointment):*

o Patients can make appointments with particular doctors through the users' scheduler.

o The appointment's date, time, doctor ID, and patient ID are all included in the appointment information.

* View Appointments (/viewAppointments):

o Shows a table with every appointment that is scheduled.

o The appointment time, date, and IDs of the patient, doctor, and scheduler are noted with each appointment.

6. Patient Discharge

* *Discharge Patient (/dischargePatient):*
  + Users can discharge patients by entering their ID.
  + Removes the discharged patient from the system.

7. Web Page Structure:

• Pages in HTML are organised for simple navigation.

• Home, Add Patient, Schedule Appointment, View Appointments, and Discharge Patient navigation links are all consistent.

8. Conclusion:

An easy-to-use interface for scheduling appointments and managing patient data is offered by the Hospital Portal Web Application. The codebase is well-structured, adheres to industry best practises, and is expandable to support new features. Robustness and dependability are guaranteed by error-handling and debugging systems.