Software Requirements Specification (SRS) for LHospital

1. Introduction

1.1 Purpose

The purpose of LHospital is to provide an online hospital platform that allows patients to book appointments, view doctors' visiting hours, and receive online treatment consultations. The system aims to improve hospital workflow efficiency and patient convenience.

1.2 Scope

In scope:

- User registration and profile management.

- Appointment booking system.

- Display of doctors' visiting schedules.

- Online treatment session access.

- Administrative access to patient and doctor data.

Out of scope:

- Payment handling and billing functions.

1.3 Intended Audience and Reading Suggestions

- **Primary users:** Patients, Doctors, Staff.

- **Secondary audience:** Development team, testers, and future maintainers.

2. Overall Description

2.1 Product Perspective

LHospital is a standalone web-based application with a MySQL database backend. It provides a user interface accessible from standard web browsers.

2.2 Product Functions

- **User Management:** Sign-up, log-in, and profile maintenance.

- **Doctor Schedule Viewing:** Patients can view available time slots for each doctor.

- **Appointment Booking:** Patients can request and confirm appointments.

- **Online Treatment:** Virtual consultation via integrated communication tools.

- **Admin Dashboard:** Access to patient and doctor information.

2.3 User Classes and Characteristics

- **Patients:** May be new or returning; require intuitive UI and fast access.

- **Doctors:** Require schedule management and patient list access.

- **Staff/Admin:** Require full data access for hospital management.

2.4 Operating Environment

- **Frontend:** HTML, CSS, JavaScript.

- **Backend:** PHP.

- **Database:** MySQL.

- **Platform:** Web browsers (Chrome, Firefox, Edge).

3. Functional Requirements

ID	Requirement Description
FR1	The system shall allow new users to sign up and store their data in the database.
FR2	The system shall allow patients to log in and view doctors' schedules.
FR3	The system shall allow patients to book appointments.
FR4	The system shall allow doctors to update their availability.
FR5	The admin shall be able to view user and doctor information.
FR6	The system shall provide an interface for online treatment.

4. Non-Functional Requirements

ID	Category	Description
NFR1	Performance	Page load time must be under 600ms for core pages.
NFR2	Scalability	The system should handle an increasing number of users without major performance loss.
NFR3	Availability	The system should be available 24/7 with minimal downtime.

5. External Interface Requirements

5.1 User Interface

- Simple, responsive web interface.

- Navigation menu for quick access to appointments, doctor schedules, and online treatment.

5.3 Software Interface

● MySQL database for data storage and retrieval.

5.4 Communication Interface

● Standard web HTTP/HTTPS protocol.

6. Constraints

● No payment or billing features will be implemented.

● Development timeframe: June 22 – August 21.

7. Assumptions and Dependencies

● Users will have access to a stable internet connection.

● Doctors and staff will keep their schedules up-to-date in the system.