

**Software Requirements**

**Specification**

For

# Hospital Management System

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**1. Introduction**

**1.1 Purpose**

**This document outlines the Software Requirements Specification (SRS) for the Hospital Management System. It aims to develop a platform to manage hospital operations efficiently, including patient data, appointments, medical records, and billing.**

**1.2 Target Audience and Usage**

**- Developers: Understand requirements and guide development.**

**- Hospital Admins: Oversee operations.**

**- Medical Staff: Manage patient records and appointments.**

**- Patients: Book appointments and view records.**

**1.3 Scope of the Product**

**The system provides a digital platform for hospital management, covering patient registration, doctor scheduling, data management, and billing.**

**2. System Overview**

**2.1 System Perspective**

**The system is a web-based, mobile-compatible application integrated with hospital databases.**

**2.2 Key Functions**

**- Secure Login**

**- Patient Information Management**

**- Appointment Coordination**

**- Medical Data Management**

**- Billing and Invoicing**

**2.3 User Categories**

**- Patients: Access records and appointments.**

**- Doctors: Manage schedules and update data.**

**- Staff: Oversee patient info and billing.**

**- Admins: Manage system usage.**

**2.4 Technical Environment**

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

**- Backend: Node.js, MongoDB**

**- Compatibility: Chrome, Firefox, Edge, iOS, Android**

**2.5 Constraints and Assumptions**

**- Compliance with data privacy standards**

**- Encrypted data storage and communication**

**- Consistent internet connectivity**

**3. Interface Requirements**

**3.1 User Interface**

**- Dashboard for data management**

**- Login and profile screens**

**3.2 Software and Hardware Interfaces**

**- No specialized hardware needed**

**- Integration with hospital databases**

**3.3 Communication Interface**

**- RESTful APIs for frontend-backend interaction**

**4. Core System Features**

**4.1 Secure Authentication**

**- Role-based secure access**

**- Inputs: Username, password**

**4.2 Patient Management**

**- Register and monitor patient data**

**- Inputs: Patient demographics, history**

**4.3 Appointment Scheduling**

**- Book and manage appointments**

**- Inputs: Date, time, details**

**4.4 Medical Records Management**

**- Maintain patient records**

**- Inputs: Diagnoses, treatments**

**4.5 Billing and Invoicing**

**- Manage billing and payments**

**- Inputs: Service details, patient data**

**5. Nonfunctional Specifications**

**5.1 Performance and Security**

**- Real-time updates, fast response**

**- Support for many users**

**5.2 Safety and Quality Attributes**

**- Secure data transfer**

**- Regular backups**

**5.3 Business Policies**

**- Compliance with IT standards**

**- Cross-platform compatibility**

**6. Additional Requirements**

**- Compatibility with modern browsers and devices**