Mahakoshal Hospital
Quality care with human touch at affordable price

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1. Introduction

1.1 Purpose

The purpose of this document is to provide a detailed Software Requirements Specification (SRS) for the development of a Hospital Website with an Admin Dashboard. This document aims to define the functionality, features, and requirements of the system to ensure that all stakeholders have a clear understanding of what the system will deliver.

1.2 Scope

The Hospital Website will function as an online platform enabling patients and staff to access hospital services. It will offer features such as appointment booking, access to doctor profiles, and patient records. The Admin Dashboard will display data related to appointment applications and inquiries from the "Contact Us" form. It will also include functionalities for admin staff to log in and out of the system.

1.3 Definitions, Acronyms, and Abbreviations

- **Admin**: Administrator
- **SRS**: Software Requirements Specification
- **UI**: User Interface
- **UX**: User Experience

1.4 References

- IEEE SRS Template
- Hospital Website Documentation
- Web Development Best Practices

2. Overall Description

2.1 Product Perspective

The Hospital Website with Admin Dashboard is a standalone system designed to facilitate hospital services and management. It integrates various functionalities to support patients, doctors, and administrative staff.

2.2 Product Functions

The website will include the following pages:

- **Home Page**: Overview of the hospital, mission statement, and latest news.
- **About Us**: Information about the hospital's history, mission, and team.
- **Contact Us**: A form for inquiries and contact information.
- **Gallery**: Visual representation of the hospital's facilities and events.
- **Departments**: Details about different departments within the hospital.
- **Facilities**: Information about the hospital's infrastructure and services.
- **Consultants**: Profiles of doctors and consultants available at the hospital.

2.3 User Classes and Characteristics

- **Patients**: Individuals seeking medical services.
- **Doctors**: Medical professionals providing healthcare services.
- **Admin Staff**: Personnel managing hospital operations.

2.4 Operating Environment

- Web-based application accessible via modern web browsers.
- Compatible with desktop, tablet, and mobile devices.

2.5 Design and Implementation Constraints

- Secure handling of patient data.

● Responsive design for various screen sizes.

2.6 Assumptions and Dependencies

● Reliable internet connection.
● Users have basic computer literacy.

3. Specific Requirements

3.1 Functional Requirements

3.1.1 Appointment Booking

● Patients can schedule appointments by filling out the online form with their required personal details.
● Patients can view and reschedule appointments through the confirmation email link.

3.1.2 Doctor Profiles

● Doctors can update their profiles with specialisation and availability.
● Patients can view doctor profiles on the website.

3.1.3 Notifications and Reminders

● Hospital receive email notifications for appointment applications and inquiries made through the contact us form.

3.2 Non-functional Requirements

3.2.1 Performance

● The system should handle up to 500 concurrent users.
● The response time for any action should not exceed 3 seconds.

3.2.2 Security

● Data encryption for sensitive information.
● User authentication and authorization.

3.2.3 Usability

● Intuitive and user-friendly interface.
● Accessible design following WCAG guidelines.

3.2.4 Reliability

● 99.9% uptime requirement.
● Regular backups of critical data.

3.3 System Features

3.3.1 Admin Dashboard

- Overview of hospital operations.
- View of user management details.
- System settings configuration.

3.4.2 Reporting

- Generate reports on patient demographics, appointment statistics, and billing.

4. Use Cases

4.1 Use Case: Apply for an Appointment

Actors: Patient
Description: A patient applies for an appointment with a doctor through the hospital website.
Preconditions: The patient has access to the hospital website and the required information (such as personal details and desired appointment time).
Postconditions: The appointment application is submitted.

5. Data Requirements

- Doctor data (name, specialisation, availability)
- Staff data (name, availability)
- Appointment data (doctor ID, date/time)

6. System Architecture

- **Frontend**: HTML, CSS, JavaScript, Bootstrap, Tailwind, React.js, Next.js
- **Backend**: Node.js, Express.js
- **Database**: Mysql
- **Hosting**: A2 Hosting