

# Software Requirements Specification for Hospital Management System

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## I. INTRODUCTION

### A. Purpose

The purpose of this document is to specify the requirements for the development of the Hospital Management System (HMS).

### B. Scope

The HMS will be a comprehensive solution for managing various aspects of hospital operations, including patient information, appointment scheduling, billing, and medical records.

### C. Definitions, Acronyms, and Abbreviations

- HMS: Hospital Management System
- EMR: Electronic Medical Records
- PIS: Patient Information System
- API: Application Programming Interface

## II. OVERALL DESCRIPTION

### A. Product Perspective

The HMS will be a standalone system interacting with hospital databases and external systems for data exchange.

### B. Product Features

#### 1) Patient Information System (PIS):

a) *Feature 1: Registration:* The system should allow the registration of new patients, capturing basic demographic information.

b) *Feature 2: EMR Management:* The system should provide a platform for managing Electronic Medical Records (EMRs), including patient history, diagnoses, and treatments.

#### 2) Appointment Scheduling:

a) *Feature 3: Appointment Booking:* The system should support the scheduling of appointments for patients with doctors.

b) *Feature 4: Calendar Management:* The system should include a calendar for doctors to manage their availability and appointments.

#### 3) Billing System:

a) *Feature 5: Invoicing:* The system should generate invoices for services provided to patients, including consultations, tests, and treatments.

b) *Feature 6: Payment Tracking:* The system should allow staff to track and manage payments from patients and insurance providers.

## III. FUNCTIONAL REQUIREMENTS

### A. PIS Module

1) *Requirement 1::* The system should capture and store patient demographic information, including name, date of birth, and contact details.

2) *Requirement 2::* The system should allow authorized users to update patient records as needed.

### B. Appointment Scheduling Module

1) *Requirement 3::* The system should provide a user-friendly interface for booking and managing appointments.

2) *Requirement 4::* The system should send notifications to patients and doctors for upcoming appointments.

### C. Billing System Module

1) *Requirement 5::* The system should calculate and generate accurate invoices based on the services provided.

2) *Requirement 6::* The system should track payment status and send reminders for overdue payments.

## IV. NON-FUNCTIONAL REQUIREMENTS

### A. Performance Requirements

1) *Performance Requirement 1::* The system should handle a minimum of 100 concurrent users without significant performance degradation.

### B. Security Requirements

1) *Security Requirement 1::* Access to patient records should be restricted to authorized medical personnel.

2) *Security Requirement 2::* The system should encrypt sensitive data, such as patient records, during transmission.

### C. Usability Requirements

1) *Usability Requirement 1::* The system should have an intuitive and user-friendly interface to facilitate easy adoption by hospital staff.

## V. CONSTRAINTS

### A. Regulatory Compliance

The system should comply with all relevant healthcare regulations and standards, including [specify regulations and standards].

### B. Technology Constraints

The system should be developed using [specified programming languages and technologies].

## VI. APPENDIX A: GLOSSARY

- EMR: Electronic Medical Records
- PIS: Patient Information System
- API: Application Programming Interface