

# Software Requirements Specification

For  
Hospital Management System

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**Project Guide**

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# 1.INTRODUCTION

## 1.1) Purpose

- The Software is for the automation of Hospital Management.
- It maintains two levels of users (Administrator Level, User Level )
- The Software includes Maintaining Patient details.
- Providing Prescription, Precautions and Diet advice.
- Providing and maintaining all kinds of tests for a patient.
- Billing and Report generation

## 1.2) Scope

- The proposed software product is the Hospital Management System (HMS). The system will be used to get the information from the patients and the storing that data for future usage.
- The current system in use is a paper-based system. It is too slow and cannot provide updated lists of patients within a reasonable timeframe.
- The intentions of the system are to reduce over-time pay and increase the number of patients that can be treated accurately.

## 1.3) Target Beneficiary

The Hospital Management System benefits healthcare professionals, patients, administrators, and overall hospital operations by optimizing workflows, ensuring data accuracy, and enhancing communication and decision-making processes.

# 2. PROJECT DESCRIPTION

## 2.1) SWOT Analysis

### 2.1.1) Strengths:

- Efficiency Boost: Streamlines hospital operations.
- Data Integrity: Ensures secure and accurate patient data.
- Patient-Centric: Enhances care through improved access.

### 2.1.2) Weaknesses:

- Complex Implementation: Initial setup challenges.
- User Resistance: Potential resistance to change.
- Technological Dependencies: Vulnerable to failures.

### 2.1.3) Opportunities:

- Technological Advancements: Integration with AI and IoT.
- Telemedicine Growth: Support for remote consultations.
- Interoperability: Collaboration with other systems.
- Market Expansion: Growing demand for digital solutions.

### 2.1.4) Threats:

- Cybersecurity Risks: Vulnerability to data breaches.
- Regulatory Changes: Updates for compliance.

- Competition: Entry of new healthcare IT players.
- Budget Constraints: Economic challenges may impact investment.

## 2.2) Project Features

The Hospital Management System (HMS) streamlines patient management, appointments, and operational workflows. With a focus on data security, it efficiently organizes medical records, enhances staff management, and ensures compliance, providing a robust solution for effective healthcare administration.

## 2.3) Project Design

2.3.1) Login Page: In this page we have to fields username and password. When we enter incorrect username and password it will show a popup message Incorrect Username or Password. If we enter correct username or password we will move to next page. It having one more button for exit this application.

2.3.2) Home Page: After login this one is first page. In this page we have seven button and each button having different functionality. In this page there is an arrow button which is used to change position of other buttons.

2.3.3) Add New Patient Page :In this page we have multiple fields to get details of patient or we can say add new patient in our database and having two buttons first one is used to save details and second one is used close this page.

## 3.SYSTEM REQUIREMENTS

3.1) User Interface:- The user interface of the Hospital Management System (HMS) is intuitively designed, featuring a user-friendly dashboard for quick access to patient records, appointment scheduling, and administrative functions. It prioritizes simplicity, ensuring efficient navigation for healthcare professionals and staff while facilitating seamless interactions with patient data and system functionalities.

### 3.2) Hardware interface:-

- Operating system : window
- Hard disk :40 GB
- RAM : 256 MB
- Processor : 11th Gen Intel(R) Core(TM) i5

### 3.3) Software interface :-

- Java language
- Net beans IDE 7.0.1
- MY SQL server 2005

## 4.Non functional Requirements

### 4.1) Performance Requirements:-

- Response Time :- The system shall give responses in 1 second after checking the patients information.
- Capacity :- The System must support 1000 people at a time.
- User- interface :- The user-interface screen shall respond within 5 seconds.
- Conformity :- The systems must conform to the Microsoft Accessibility

#### 4.2) Security Requirements:-

- Login ID :- Any user who uses the system shall have a Username and Password.
- Modification:-Any modification (insert, delete, update) for the Database shall be synchronized and only by the administrator in the ward.
- Front Desk staff Rights:- Front Desk staff shall be able to view all information in HPIMS, add new patients to HPIMS but shall not be able to modify any information in it.
- Administrators' Rights:- Administrators shall be able to view and modify all information in application.

#### 4.3) Software Quality Attributes:-

A Hospital Management System (HMS) prioritizes software quality attributes such as reliability, ensuring consistent and accurate data handling. It emphasizes usability with an intuitive interface for efficient navigation. Security measures are robust, safeguarding sensitive patient information, while scalability ensures adaptability to evolving healthcare needs.

