

# **1.INTRODUCTION**

## **1. 1 Purpose**

The purpose of this Software Requirements Specifications (SRS) is to document the specifications and requirements for the Hospital Management System (HMS).The purpose of this HMS software is to develop a Web-application to optimize and digitalize allsort of operations from patient registration to appointment scheduling, document management,consultation management, prescription generation, staff management etc.

## **1.2 Intended Audience**

This document is intended for clients, developers, project managers, marketing staff, users, testers,and documentation writers.

## **1.3 Product Scope**

Small- to medium-sized hospitals with an outpatient department can use this programme. The purpose of this software is to provide an electronic system for managing hospital operations. The hospital process is currently managed by a manual system. The procedure involves documenting the patient's doctor appointment, prior visits and prescription information, symptoms that have been diagnosed, medications that have been prescribed, and information on hospital staff who are now employed.

## 2. Overall Description

### 2.1 Product Perspective

This type of systems are really useful when it comes to real life application or use. The fully functional hospital management system will eliminate the drawbacks of the manual system by improving the reliability, efficiency, security and performance. The usage of a database to store details will accommodate easy access, retrieval, search and manipulation of data. The system's security will be improved by the access restrictions offered by the login feature. Concurrent access and convenience for doctors, patients, and receptionists will be made possible by the system.

### 2.2 Product Functions

- Secure sign-in.
- Manage appointments.
- Schedule and reschedule appointments
- Store and retrieve patients and employee details.
- Generate prescriptions.
- Generate Bills.

### 2.3 User Classes and Characteristics

- **Administrator:** Admin can add, edit and remove employees.
- **Doctor-** He/She can access patients previous visits history, generate prescriptions and it will be automatically sent to the receptionist.
- **Receptionist:** He/She can add new patients, search existing patients, modify patient's details, take printouts of prescriptions and generate bill.
- **Patient:** They can request an appointment, view prescriptions, cancel appointments.

## 2.4 Operating Environment

### 2.4.1 Software requirements (Minimum)

- Windows 7
- Mongodb server

### 2.4.2 Hardware Requirements (Minimum)

- Core i5 processor
- 4GB Ram
- 10GB of hard disk space

## 2.5 Design and Implementation Constraints

- Should use less RAM and processing power.
- Each user should have a unique ID and password to login.
- Software is accessible through the internet.

## 3. External Interface Requirements

### 3.1 User Interfaces

To enable users to log into their individual accounts, the system will offer a Sign In page. Users will be able to access various system capabilities based on their role and assigned permissions through an intuitive dashboard interface after logging in successfully.

### 3.2 Hardware Interfaces

There are no special hardware interface requirements.

### **3.4 Communications Interfaces**

- Web Browser: Microsoft Edge, Chrome or Firefox

## 4. System Features

### 4.1 User Sign In

#### 4.1.1 Description and Priority

The employees that are working in the hospital and the patient should be able to login and access their dashboard.

**Priority: High**

#### 4.1.2 Response Sequences

This is the first page of the software which is presented to the user.

#### 4.1.3 Functional Requirements

**Success:**

When the user selects a valid role, enters correct login credential i.e. username and password, he/she must be able to login into their account and access the dashboard.

**Failure:**

When the user selects incorrect role or provides invalid login credentials he/she should not be able to login into the system as well as an error should be displayed 'No such account exists Please insert valid credentials'.

### 4.2 Dashboard

#### 4.2.1 Description and Priority

The employees and the patients should be able to access different functionalities of the system as per their role and assigned permissions.

**Priority: High**

#### **4.2.2 Stimulus/Response Sequences**

The user has to first login using login form. Then if login is successful, user can access his dashboard.

#### **4.2.3 Functional Requirements**

The user should be able to access different functionalities of the system as per their role and assigned permissions.