

# SOFTWARE QUALITY ENGINEERING

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**Title: HOSPITAL MANAGEMENT SYSTEM**

# **HOSPITAL MANAGEMENT SYSTEM**

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# **SOFTWARE REQUIREMENT SPECIFICATION**

## **HOSPITAL MANAGEMENT SYSTEM**

### **1 INTRODUCTION:**

The hospital management system lets patients sign up and stores information about their diseases. My software can give each patient a unique ID and keep track of all of their information. You can use the Hospital Management System by putting in your username and password. Either an administrator or a receptionist can let you in. The only person who can add information to the database is that person. The information is easy to get. The interface makes it easy to use. The data are well protected, and the processing of the data is quick, accurate, and useful.

#### **1.1 PURPOSE:**

A hospital management system is a piece of software that helps run the medical, financial, and administrative parts of a hospital, as well as the services that go with them.

#### **1.2 PROJECT SCOPE:**

After hospital software is installed, it is easier and more accurate to do daily tasks like registering patients, managing admissions, and running all of the different departments as a whole. Hospital management software has modules that are easy to use and get to.

#### **1.3 DOCUMENT CONVENTIONS:**

The document was made with Microsoft Word 2010 and the "Times New Roman" font type. This document was typed with a fixed font size of 12pt and headings in 12pt with 1.5 line spacing. The headings of the document have been set using the bold property. Except for the cover page, all of the pages are numbered. The numbers are in the bottom right corner of each page. Every picture and data table is given a number, and the main text refers to it.

#### **1.4 INTENDED AUDIENCE:**

This document is meant for the client and certain hospital employees like the Manager and Receptionist, consultants, and System Operators.

#### **1.5 ADDITIONAL INFORMATION:**

You can use the Hospital Management System by putting in your username and password. Either an administrator or a receptionist can let you in. The only person who can add information to the database is that person. The information is easy to get. The interface makes it easy to use. The data are well protected, and the processing of the data is quick, accurate, and useful. A hospital management system is a piece of software that helps run the medical, financial, and administrative parts of a hospital, as well as the services that go with them.

## **2 OVERALL DESCRIPTION:**

A hospital management system is a piece of software that helps run all the different parts of a hospital, like the medical, administrative, and service-processing areas. Hospital management system is what HMS stands for. The hospital management system (HMS) is a set of software programs that work together to handle the different ways that a clinic works. It makes sure that administrative, medical, legal, and financial aspects of health care run smoothly. That is a key part of making sure the healthcare facility runs well.

### **2.1 PRODUCT PERSPECTIVE:**

This HPMS is a self-contained system that handles things like assigning beds, scheduling operations, managing staff, and handling administrative tasks. The hospital system involves a lot of different people.

### **2.2 PRODUCT FEATURES:**

#### **Doctor Module:**

- Add patients report
- Delete patients report
- Display reports
- Give prescriptions
- Search reports of patient

#### **Receptionist Module:**

- Add patient's data
- Delete patient's data
- Display records
- Refer to different doctors

#### **Patient Module:**

- Search report
- Search his record

### **2.3 USER CLASSES AND CHARACTERISTICS:**

The hospital will use the system. The main users will be the administrators and front-desk staff. Given that not all of the users know how to use computers. Some people may need to be taught how to use the system.

### **2.4 OPERATING ENVIRONMENT:**

The system is also made to be easy for people to use. The software will work with the hardware platform, operating system, and versions, as well as with any other software

components or applications that it needs to get along with.

### **3 POSITIONING:**

#### **3.1 IMPROVED PROCESSES:**

It helps to optimize the user experience. Medical specialists, patients, and hospital authorities can interact online.

#### **3.2 MARKET STRATEGY:**

Due to how competitive the market is, the medical industry is also open to new ideas that make it easier for patients, doctors, suppliers, and marketing services providers to talk to each other.

### **4 EXTERNAL INTERFACE REQUIREMENTS:**

#### **4.1 USER INTERFACES:**

It describes the relevant qualities of every interface between software product and the user. It includes sample screen images, GUI standards, screen format constraints, buttons, error message displays etc. It also defines the components of software for which the user interface is needed.

#### **4.2 HARDWARE INTERFACES:**

It describes the hardware and logical qualities between software product and hardware parts of the software. Supported devices types, data nature, controls interactions between hardware and software are included in this.

#### **4.3 SOFTWARE INTERFACES:**

It describes the connection between this system and other specific software parts that may include databases, tools, libraries etc. It recognizes each and every message or item with its specific purpose that come and go out of the system.

### **5 OTHER NON-FUNCTIONAL REQUIREMENTS:**

#### **5.1 PERFORMANCE REQUIREMENTS:**

<b>HMS010</b>	<b>Response Time:</b> The system will respond in 2.5 secs after checking the information of patient.
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<b>HMS011</b>	<b>Capacity:</b> About 150 people must be supported by the system.
<b>HMS012</b>	<b>User Interface:</b> The user interface that is screen will respond in 3.75 secs.
<b>HMS013</b>	<b>Conformity:</b> The system must confirm to the guidelines of Microsoft Accessibility.

## **5.2 SECURITY REQUIREMENTS:**

<b>HMS014</b>	<b>Identify Patient:</b> The patient will identify her/himself using PHN.
<b>HMS015</b>	<b>Login ID:</b> Any user who uses the system will have password and Login ID.
<b>HMS016</b>	<b>Modification:</b> Any change in database will be synchronized and done by the administrator in the ward.
<b>HMS017</b>	<b>Conformity:</b> The system must confirm to the guidelines of Microsoft Accessibility.
<b>HMS018</b>	<b>Administrator Rights:</b> Administrator will be able to view and modify all the information of patients and staff in HPMS.

## **5.3 MAINTAINABILITY:**

<b>HMS019</b>	<b>Backup:</b> The system will keep the backup of all data in the system.
<b>HMS020</b>	<b>Errors:</b>

	The system will keep the log of all the errors in the system.
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#### **5.4 RELIABILITY:**

<b>HMS021</b>	<b>Availability:</b> The system will be available every time.
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#### **6 APPENDIX I:**

<b>SRS</b>	Software Requirement Specification
<b>HMS</b>	Hospital Management System
<b>PHN</b>	Public Health Network
<b>HPMS</b>	Hospital Patient Management System