# Software Requirements Specification (SRS)

# Hospital Management System (HMS)

## 1. Introduction

### *1.1 Purpose*

The purpose of this Software Requirements Specification (SRS) is to detail the functional and non-functional requirements for the Hospital Management System (HMS). This document serves as a guide for development, testing, and deployment, ensuring all stakeholders have a clear understanding of the system's capabilities and constraints.

### *1.2 Scope*

The HMS aims to streamline hospital operations including patient management, doctor management, appointment scheduling, billing, and reporting. It will support multiple roles including Admin, Doctor, and Patient.

### *1.3 Definitions, Acronyms, and Abbreviations*

HMS: Hospital Management System  
SRS: Software Requirement Specification  
MVC: Model-View-Controller  
API: Application Programming Interface

### *1.4 References*

References to technical documentation, standards, or research papers can be added here.

### *1.5 Overview*

This document is structured to provide system description, functionalities, and detailed requirements under respective modules.

## 2. Overall Description

### 2.1 Product Perspective

#### 2.1.1 System Interfaces

The HMS will interact with MySQL Database and external APIs if integrated.

#### 2.1.2 User Interfaces

The system will provide a responsive web interface using ASP.NET MVC, Bootstrap, CSS, and Razor views.

#### 2.1.3 Hardware Interfaces

The HMS will require standard hardware infrastructure: server, workstations, and internet connectivity.

#### 2.1.4 Software Interfaces

Back-end: ASP.NET Core Web API, Database: MySQL, Front-end: ASP.NET MVC, jQuery, Bootstrap.

#### 2.1.5 Communications Interfaces

Secure communication using HTTPS protocols between server and client.

#### 2.1.6 Memory

The system should run on servers with a minimum of 8GB RAM and 100GB storage.

### 2.2 System Functions

#### 2.2.1 Admin Role

Admin has full access to all modules including user management, doctor management, and system configurations.

#### 2.2.2 Doctor Role

Doctors can view patient records, manage prescriptions, update availability, and check appointment bookings.

#### 2.2.3 Patient Role

Patients can register, book appointments, view records, and check visit history.

## 3. Specific Requirements

### 3.1 Functional Requirements

#### 3.1.1 User class – Admin

Manage users, doctors, patients, system configuration, and reporting.

#### 3.1.2 User class – Doctor

Provide prescriptions, manage appointment slots, update patient status.

#### 3.1.3 User class – Patient

Register/login, book appointments, view history, and make payments.