Software Requirements Specification

for

Hospital Management System

Version 1.0 approved

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Revision History

Name	Date	Reason For Changes	Version

1. Introduction

1.1 Purpose

The purpose of this documentation is to present a detailed description of the Hospital Management System website. It will explain the purpose and features and functionalities of the website and how it operates. This document is intended for users of the software and also potential developers and also for those who want to extend their reach to the public.

1.2 Document Conventions

Convention for Main Title
i) Font face: Times New Roman
ii) Font style: Bold iii) Font size: 18

Convention for Sub Title
i) Font face: Times New Roman
ii) Font style: Bold iii) Font size: 14

Convention for Body
i) Font face: Arial ii)
Font style: Italic iii)
Font size: 11

Entire document must be justified

1.3 Intended Audience and Reading Suggestions

- *Typical user Receptionist who want to use the website for organising and managing data.*
- *Developers who wish to improve the responsiveness of the website making it more robust.*
- *Programmers who are interested in working on the project by further developing it or fix existing bugs.*

1.4 Product Scope

Hospital Management System is a website which allows the receptionist, doctors to manage and organise patient data. Room allotment for patients can be done if required. Website contains information of all the employees working in the hospital. Medical report will be generated for the patients using this. This provides an easy and convenient way for managing the hospital data.

1.5 References

- *SRS IEEE Format*
  Source: https://www.google.co.in

2. Overall Description

2.1 Product Perspective

This website was designed by keeping the lateral development in the field of Web Technologies and the vast application of the same. It is a self-contained system that manages activities of the hospital as Patient Information. It is easy to understand and user-friendly website which can be further developed to its optimal state to benefit for the collective good of the common people who are in need of a hassle free interface. The website should be easy to operate and at the same time should house the industry leading cutting edge technologies.

2.2 Product Functions

- Patient Information
- Employee Information
- Medical Report

2.3 User Classes and Characteristics

- Typical user Receptionist who want to use the website for organising and managing data.
- Developers who wish to improve the responsiveness of the website making it more robust.
- Programmers who are interested in working on the project by further developing it or fix existing bugs

2.4 Operating Environment

- Windows 2000
- Windows XP
- Windows Vista
- Windows 7
- Windows 8
- Windows 10

- Mac OS X
- Linux

2.5 Design and Implementation Constraints

The website is built using the tried and tested Web Tech tools such as HTML, CSS, JavaScript, Bootstrap, PHP and MySQL for the database management built on top of Netbeans 8.2 platform.

2.6 User Documentation

On-line quick start guide – HTML Webpage
User manual – Portable Document Format

2.7 Assumptions and Dependencies

This website is developed by using modern Web Technology tools such as Java, PHP, HTML, CSS, Bootstrap and therefore it requires Java and PHP to be installed on the user's system. The user will have to update the Bootstrap to the latest version in order to experience the responsiveness of the website. It's compatible with all kind of platforms and is Desktop as well as a mobile friendly application. It is assumed that the Hospital will have enough trained staff to take care of the system.

3. External Interface Requirements

3.1 User Interfaces

The Interface will be in the form of a Webapp. It is designed to be functional and minimal in its styling. All options will be displayed in a menu based format. HTML and CSS will be used to setup the page layout and add minimal styling to make the interface user friendly.

3.2 Hardware Interfaces

The minimum hardware requirements for this website are a 500 MegaHertz CPU and 2 GigaBytes of RAM.

3.3 Software Interfaces

Our website requires xampp to be installed on the system. The website uses MySql for database connection, modification, updation and retrieval of database information.

3.4 Communications Interfaces

This section is left unattended as we have not yet programmed the interface yet.

4. System Features

HOME

- My account: To view the account details of the user who has logged in.
- Logout: To logout from the current user.

PATIENTS

- View Details: To search patient details using Name or Patient ID and an advanced search option can also be used to search via Age,Blood Group, Gender or Accompanies' Name.
- Accompanies: To search Accompanying person of a patient using Patient Name or Patient ID.
- Modify Details: To modify Patient Details using Patient ID.
- Delete Details: To delete Patient Details using Patient ID.
- Add new Details: To Add Details of a new Patient. Patient ID will be automatically generated starting from "P".
- Add Accompanies: To Add Details of Accompanying Person of a Patient.
- Allot Doctor to a Patient: To Assign Doctor to a Patient entering Patient ID, Doctor ID and Date.

EMPLOYEE

- Doctors: To view details of all the Doctors in the Hospital.
- Medical Staff: To view details of entire Medical Staff of the Hospital.
- Administration: To view details of Administrative Staff of the Hospital.
- Modify Details: To modify Employee Details using Employee ID.
- Delete Details: To modify Employee Details using Employee ID.
- Add New Details: To Add Details of new Employee.Department-wise new Employee IDs will be generated.

MEDICAL REPORT (Billing)

- Create Report: Create a new Medical Report of Patient of a particular Department. New Report ID will be generated starting from "R".
- View Report: To search Report using Report ID.
- Modify Report: To Modify existing Report using Report ID.
- Add Closing Date: To Add Closing date of a Report using Report ID.
- Delete Report: To delete an existing Report using Report ID or Patient Name.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

Webserver will be required so that the students and the mess admin can connect to it to exchange information. The server have a database to store all the data entries.

5.2 Safety Requirements

It should not allow multiple people from the same credentials to log in.

5.3 Security Requirements

An automatic logout system will log out a student after 10 minutes.

5.4 Software Quality Attributes

The server will be hosted using Apache Tomcat Webserver (Version 8.0.14). It will also have a MySQL relational database. The main backend processing will be done using Java Server Pages (JSP) including connecting to and accessing the database and processing requests.

5.5 Business Rules

Development has not reached this stage yet due to which details have not been mentioned.

6. Other Requirements

Database must possess ACID properties and be able to handle concurrent operations on it with out affecting the consistency of the stored data.

Appendix A: Glossary

CMS – Course Management System
GUI – Graphical User Interfaces
HTTP – Hyper Text Transfer Protocol
ACID – Atomic, Consistent, Isolated, Durable
SRS – Software Requirement Specification

Appendix B: Analysis Models

Development has not reached this stage yet due to which details have not been mentioned.

Appendix C: To Be Determined List

[1] Communication Interface
[2] Performance Requirements
[3] Safety Requirements
[4] Security Requirements
[5] Software Quality Requirements
[6] Business Rules
[7] User Interfaces