

# **SOFTWARE REQUIREMENT SPECIFICATION**

## **1. Introduction**

The SRS is produced at the culmination of the analysis task. The function and performance allocated to software as part of the system engineering and refined by establishing a complete information description, a detailed functional description, a representation of system behavior, indication of performance requirements and design constraints, appropriate validation criteria and the other information related to requirements.

The SRS is technical specification of requirement of Hospital Management system. This specification describes what the proposed system should do without describing how it will do it. It also describes complete external behavior of proposed system.

### **1.1. Purpose:-**

The main purpose of our system is to make hospital task easy and is to develop software that replaces the manual hospital system into automated hospital management system. This document serves as the unambiguous guide for the developers of this software system.

### **1.2. Scope:-**

The document only covers the requirement specification for the hospital management system. This document does not provide any references to the other component of the hospital management system. All the external interfaces and the dependencies are also identified in this document.

### **1.3. Feasibility Study:-**

The overall scope of the feasibility study was to provide sufficient information to allow a decision to be made as to whether the hospital management system project should proceed and so, its relative priority in the context of the other existing hospital management system.

The feasibility study of this project had undergone through various steps which as describe as under:

- a) Identify the origin of the information at different level.
- b) Identify the expectation of user from computerized system.
- c) Analyze the drawback of existing system.

#### **1.4. Definition,Acronyms,Abbreviations:-**

CFD: - Context Flow Diagram

DFD: - Data Flow Diagram

IDE: - Integrated Development Environment

Java:-PlatformIndependent,Object\_orientedprogramming language

SQL: - Structured Query Language

SRS: - Software Requirement Specification.

#### **1.5. Reference:-**

- 1) An integrated approach to software engineering, Third edition by Pankaj jalote
- 2) Java – Balaguruswamy
- 3) SQL server 2005 – JosephL Jordan

#### **1.6. Overview:-**

Hospital Management System is a process of implementing all the activities of the hospital in a computerized automated way to fasten the performance.

This project is to maintain the patient details, lab reports and to calculate the bill of the patient. You can also manually edit any patient details and issue bill receipt to patient within few seconds.

## **2. OVERALL DESCRIPTION**

### **2.1. Product perspectives:-**

This project gives the procedural approach how a patient gets treatment, details about date of treatment and finally depending on different criteria like room allocated, lab reports, treatment and medicine taken.....etc,how billing is calculated. During billing health card facility is also considered.

### **2.2. Product Function:-**

The data represented in hospital management application will perform the following major function:-

- ➔ Patient Details: - It includes inpatient and outpatient details.
- ➔ Lab reports
- ➔ Billing Details

This software will help to calculate the bill much quicker and simpler way. This enables the organization to keep the information in efficient and systematic way.

### **2.3. User Characteristics:-**

This software is developed such that total appearance of the product to make it more user friendly. The operator will be provided with loginid and password. General users with basic computer skills can use this software.

#### **2.4. General Constraints:-**

Any update regarding the patients information from the hospital are to be recorded to have updated and correct values.

#### **2.5. Assumption and Dependencies:-**

All the data entered will be correct and up\_to\_date. This software package is developed using java as front end which is supported by sun micro system, MS SQL server 2005 as the back end which is supported by Microsoft windows xp.

### **3. SPECIFIC REQUIREMENTS**

It describes all the details that the software developer need to know for designing and developing the system. This is typically the largest and most important part of the document.

#### **3.1. External Interface Requirements:-**

##### **3.1.1. User Interface:-**

User interface is designed in a user friendly manner and the user, in another end he has to give the order, for that he will interface with keyboard and mouse.

##### **3.1.2. Hardware Interface:-**

- 1) OS – windows XP
- 2) Hard disk – 80 GB

- 3) RAM – 1 GB
- 4) Keyboard – Standard QWERTY keyboard for interface
- 5) Mouse – Standard mouse with 2 buttons

### **3.1.3. Software Interface:-**

- 1) Front end – Java language
- 2) OS – Net Beans IDE 6.9.1
- 3) Back end – SQL Server 2005

### **3.1.4. Communication Interface:-**

Windows

## **3.2. Functional Requirements:-**

### **3.2.1. Administration module:-**

This module enables the user to insert, update, view and delete the patient information.

### **3.2.2. Patient module:-**

PatientId, Name, Age, Sex, Address, Phone Number, Weight

This module has following 2 sub modules:-

#### **3.2.2.1. Inpatient module:-**

This sub module is used to store information about patients who were admitted in the hospital on doctors advice.

➔ PatientId, Dept depending on disease, Doctor, Room no, Date of admitted, Advance, Date of discharge.

→ Updation like deletion and modification is done.

#### **3.2.2.2. Outpatient module:-**

→ PatientId, New\_Case, Old\_Case, Date, Dept depending on disease, Doctor .

→ Updation like deletion and modification is done

#### **3.2.3. Lab module:-**

This module used to store or produce the laboratory reports.

→ PatientId, Weight, Category, Doctor, Inpatient/Outpatient, Date.

→ Updation like deletion and modification is done.

#### **3.2.4. Billing module:-**

##### **3.2.4.1. Inpatient module:-**

PatientId, doctors charge, health card amount, room bill, medicine bill, total amount, No of days, Service charge, Operation theatre, Nursing care, Lab bill .

#### **3.3. Performance Requirements:-**

The capability of the computer depends on the performance of the software. The software can take any number of input provided the database size is large enough. This would depend on the available memory space.

#### **3.4. Design Constraints:-**

This will help the doctors or users to view the records of the patients immediately whenever necessary. They can also calculate the bill of the particular patients. This software also has the ability to add, update and delete the record whenever needed. This project will help to smoothen the process of the hospital activities.