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# **Software Requirements Specification**

**for**

# **Hospital Management System**

**Version 1.0 approved**

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# **1. Introduction**

## **1.1 Purpose**

The ultimate goal of 'MEDONYNE' is to fully computerize the administration of medical organizations such as hospitals, clinics, medical stores etc. The objectives is to check manual process which requires laborious effort make easier such as invoice generation, proper storing of medicines, incoming and outgoing of staff members, patient profile management.

## **1.2 Document Conventions**

FONT NAME: Arial  
FONT SIZE: 14 for sub headings  
FONT SIZE: 34 for main subject title  
FONT SIZE: 11 for description

## **1.3 Intended Audience and Reading Suggestions**

This document manual and agreement for particular hospitals and Authorized user.

## **1.4 Product Scope**

The MEDODYNE is equipped with some unique facilities like online appointment generation and current patient number check in system which will be quite useful for patient as the waiting time for one's appointment will be considerably low. Plus on the administration side, facilities like staff management will include recording in and out timing of staff, their profile and their pay scale. The MEDODYNE is show availability of the doctors, the consulting timing too.

## **1.5 References**

1. Pressman, Roger (2010) Software Engineering: A Practitioner's Approach: McGraw Hill. p.123 ISBN 9780073375956
2. IEEE. IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.

# **2. Overall Description**

## **2.1 Product Perspective**

The hospital management system is self contained system that handles activities such as doctor and staff information, operation details, user friendly GUI, Appointment

generation & infrastructure information ,patient tracking,shopping of medicine and Invoice generation.

## **2.2 Product Functions**

- 1.The system provide online appointment generation.
- 2.The system tracks current patients.
- 3.System will provide tracking and timing of staff.
- 4.The system provides records of different operations.
- 5.The system provides record of different fields.
- 6.System gives availability of beds information.
- 7.System generates computer based invoice.

## **2.3 User Classes and Characteristics**

- Hospital Administrators
- End Users

## **2.4 Operating Environment**

System software will run on all types of OS which accesses internet.  
(Mostly Microsoft windows 7 and later versions and Linux based OS. )

## **2.5 Design and Implementation Constraints**

Hosting the system requires .NET framework which is a software framework which developed by Microsoft. Which runs primarily on windows OS.

## **2.6 User Documentation**

The clients will be provided page manual help for software basic information and provide manual for how to familiar with software.

# **3. External Interface Requirements**

## **3.1 User Interfaces**

System will provide home page for credential checking and software menus.

## **3.2 Hardware Interfaces**

The system runs on personal computers as well as mobile or tablet devices.

## **3.3 Communications Interfaces**

Hyper Text Transfer Protocol(HTTP-stateless) will be used for communication purposes.

## 4. System Features

System gives following features.

### 4.1 The system provides log in and security for different types of log in

#### 4.1.1 The system takes username and password for authentication

Input: Username and Password

Output: Valid or not

Description: If username and password are valid then system will allow to enter into software.

#### 4.1.2 The system checks user is blend or admin

Input: Username and Password

Output: User or admin

Description: If entered username is for admin then system allows to log in as admin.

#### 4.1.3 System allows to sign up for new user

Input: All required credentials: name, password, address, number etc.

Output: Successfully registered or not

Description: The system takes all information for user and information valid then registered user successfully

#### 4.1.4 System provides user to update their registered information

Input: Update value

Output: Updated successfully or not

Description: System takes updated values from user if valid then update.

### 4.2 The system provides appointment generation to user

#### 4.2.1 System will take information date, time for appointment

Input: Info, date, time, place

Output: appointment\_flag

Description: System set appointment\_flag true if all data are valid.

#### 4.2.2 System will notify time and reply to user

Input: Checking information

Output: appointment\_answer\_flag

Description: The system will set appointment\_answer\_flag true, if appointment possible and it will notify to come for appointment.

#### 4.2.2.1 System also allow to user to cancel appointment

Input : Reason,appointment\_id  
output :appointment\_cancel\_answer\_flag  
description: System takes info for cancellation if possible and set appointment\_cancel\_answer\_flag equals to true.

### 4.3 The system provides user to show current scenario of hospital

#### 4.3.1 System checks and gives current scenario by hospital management

Input: scenario\_name  
Output: scenario\_details  
Description: System gives appropriate scenario and user will be showed it easily

##### 4.3.1.1 The System gives current Doctor Details

Input: doctor\_id,name  
Output: doctor\_details  
Description: system gives information about doctor

##### 4.3.1.2 The system gives current staff details

Input: staff\_id,name  
Output: staff\_details  
Description: system takes input as asked for and provide details about staff for their current working status

### 4.4 The system allows user to medicine shopping

#### 4.4.1 The system allows user to choose any specific medicine for shopping to user

Input: medicine\_name,medicine\_id  
Output: medicine\_availability\_flag  
Description: system checks availability and gives response true by medicine\_shopping flag

#### 4.4.2 The system allows user to check quantity of medicines

Input: medicine\_name,medicine\_id  
Output: medicine\_quantity\_no  
Description: system gives maximum no. of quantity that can be available to you from store

#### 4.4.3 The system allows user to check quality of medicines

Input: medicine\_name,medicine\_id  
Output: medicine\_quality  
Description: system will get and give details about expiry dates and ingredients and another all with inputs

## **4.5 The system tracks in and out staff and laboratory data.**

4.5.1 The System checks available staff and track them.

Input: staff\_name,staff\_id

Output: staff\_details

Description:system can allow to share tracking details of staff to management

4.5.2 The system free or occupied bed details

Input: Room\_no

Output: free\_bed\_no

Description:system gets count from management entries and provide details to naive or and user(including reception)

## **4.6 The system generates invoice using user's profile,and shopping details**

Input: User\_information,Item\_information

Output: Total\_amount,Invoice\_file

Description: System takes User\_information and prescription\_id or item\_details and generates invoice in particular format