

# **Software Requirement Specification (SRS) Document**

## **COVID TEST AND BED MANAGEMENT SYSTEM FOR HOSPITAL**

**For Course : SOFTWARE ENGINEERING LAB**

**BY GROUP 7**

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## **1. INTRODUCTION :**

### **1.1 Purpose**

The purpose of this document is to present a detailed description of the Covid testing and Bed allotment Manager application for hospitals. SRS will explain the purpose and features of the application, what the application will do, the constraints under which it must operate, and how the application will react to external stimuli. To make management of Bed allotment and Covid Testing easier and convenient to the hospitals.

### **1.2 Intended Audience**

The staff who are intended to take the details and allot the beds in a hospital are the end users.

### **1.3 Scope of Project**

This is a covid testing and bed allotment management application for hospitals. It will be designed to minimize the efforts required to keep track of beds, and covid testing samples while remaining easy to understand and use. More specifically, this application will store the patient details, allot beds to their need, and also store covid sample details and their results.

## **2. DESCRIPTION :**

To help the staff of the hospital to maintain data of COVID patients efficiently, such as, sorting/allocation of beds, to update the status of a patient test samples, etc. Our interactive software will provide the hospital staff to manage these data more easily.

## **3. FUNCTIONAL REQUIREMENTS :**

### **R 1 AUTHENTICATION**

#### **R 1.1 Create New Account**

- **Input :** User information
- **Output :** Validation Message
- **Description :** User creates a account by using his details and displays account creation message

#### **R 1.2 Login**

- **Input :** User Credentials
- **Output :** Displays login status
- **Description :** User will enter his/her credentials then verified then will be provided access to the data.

#### **R 1.3 Update password**

##### **R 1.3.1 Send OTP**

- **Input :** email
- **Output :** OTP will be sent to email
- **Description :** User will enter the email ID and an OTP will be sent to that email ID.

##### **R 1.3.2 Set new password**

- **Input :** OTP, new password
- **Output :** Confirmation new password

- **Description :** User will enter the OTP and sets the new password.

## **R 1.4 Forgot Password**

### **R 1.4.1 Send OTP**

- **Input :** Email ID
- **Output :** Message confirming OTP sent
- **Description :** The OTP will be sent to the corresponding email ID.

### **R 1.4.2 Setting New Password**

- **Input :** OTP, new password
- **Output :** Confirmation Message
- **Description :** The user will be entering the OTP and will set his/her new password.

## **R 1.5 Logout**

- **Input :** User Credentials.
- **Output :** Message confirming you're logged out.
- **Description :** User will be selecting logout option to log out of the system.

## **R 2 MANAGEMENT OF DETAILS**

### **R 2.1 Enter new patient details**

- **Input :** Patients name, age, sex, past medical history etc.
- **Output :** Displays the entered details on the screen
- **Description :** Users will be entering the details of the patients and they will get displayed on screen.

### **R 2.2 Edit Patient details**

- **Input :** Patient's name, address, past medical history, etc.
- **Output :** Message confirming modification of details.
- **Description :** The modified details of the patient will be displayed.

### **R 2.3 Open a certain patient details(read-only)**

- **Input :** The name of the patient.
- **Output :** Displays the patient details stored in the computer.
- **Description :** Users can able to see the patient details upon entering the name of a patient.

### **R 2.4 Add Relatives Details**

- **Input :** Patient's relative's name, age, address, phone number, etc.
- **Output :** Displays the entered details.
- **Description :** Users would be adding the details of the patients relative's details for any emergency contact.

## **R 2.5 List the total number of patients**

- **Input :** Date (or) Certain Time Period
- **Output :** The list of patients and a number.
- **Description :** It gives a total list and number of patients that visited hospital on that day/Time period.

## **R 2.6 Delete the patient details**

- **Input :** Patient name, name of column(you want to delete).
- **Output :** Displays all the details of the patient with deleted contents.
- **Description :** It deletes the certain detail columns of the patient details.

## **R 2.7 Bed Details**

### **R 2.7.1 COVID Patients**

#### **R 2.7.1.1 Vacancy Beds**

- **Input :** Enter room number.
- **Output :** Displays a number.
- **Description :** Displays the number of beds that are vacant.

#### **R 2.7.1.2 Allocated Beds**

- **Input :** Enter room number.
- **Output :** Displays a number.
- **Description :** Displays the number of beds that are allocated to the COVID patients.

### **R 2.7.2 NON-COVID Patients**

#### **R 2.7.2.1 Vacancy Beds**

- **Input :** Enter room number.
- **Output :** Displays a number.
- **Description :** Displays the number of beds that are vacant.

#### **R 2.7.2.2 Allocated Beds**

- **Input :** Enter room number.
- **Output :** Displays a number.
- **Description :** Displays the number of beds that are allocated to the NON-COVID patients.

### **R 2.7.3 EMERGENCY**

#### **R 2.7.3.1 Vacancy Beds**

- **Input :** Enter room number.
- **Output :** Displays a number.
- **Description :** Displays the number of beds that are vacant.

#### **R 2.7.3.2 Allocated Beds**

- **Input :** Enter room number.
- **Output :** Displays a number.

- **Description :** Displays the number of beds that are allocated to the emergency ward patients.

## R 3 SEARCH

### R 3.1 Search by name

- **Input :** Patient full name
- **Output :** Displays list of patients.
- **Description :** It displays the lists of patients matching the patient full name given.

### R 3.2 Search by Date

- **Input :** Date
- **Output :** Displays list of patients.
- **Description :** It displays the lists of patients that admitted matching the date given.

### R 3.3 Search by Place

- **Input :** Place name
- **Output :** Displays the list of patients.
- **Description :** Upon entering the place name, the system will show the list of patients whose place details matched.

## R 4 COVID PORTAL

### R 4.1 COVID Sample's Portal

#### R 4.1.1 Sample ID

- **Input :** A number
- **Output :** Confirmation message confirming the sample number
- **Description :** User will enter the sample ID and he/she will receive a acknowledgment of registering the Sample ID

#### R 4.1.2 Patient details

- **Input :** Patient's name, age, sex, address, etc.
- **Output : Message** Confirming the details.
- **Description :** Here, user separately registers the patient details upon confirming he tested positive for COVID.

#### R 4.1.3 Expected date

- **Input :** Date
- **Output :** Date
- **Description :** User enters the date of sample collection and the system will display the expected date of the result.