Title: Hospital Management Web-App and Real-time Bed Availability in nearby hospitals
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Introduction:

This document is the Software Requirement Specification (SRS) report for the Hospital Management and real-time Bed Availability Web Applications.

Main Components are:

1. Users:

a. Admin (Hospital with some unique Hospital ID)
b. End-User (Patient who access the hospital data like bed availability, specialized doctors, number of ventilators, blood unit availability).

2. Admin will able to Admit the patient, allot bed and also generate bill at discharge time.

3. Open-World list of number of beds and blood units available in nearby hospitals in emergency conditions which is to be visible to every accessor without logging in.

Purpose:

The Purpose of this web application is to manage the hospital beds, blood units, and ventilators, admit the patient, specialized doctors, etc.

And the 2nd and main purpose of this web application is to provide an open world free list of number of beds available at nearby hospitals through which any person will see the beds availability and reach the hospital in emergency conditions.

Scope:

This system will allow Secure Registration and profile management of Admin (Hospital with unique ID).

Generate bill on discharge time.

Overview:

Online Hospital Management System which admit the patient and also manages the staff including doctors. And publish the list of available beds globally.

Functional Requirements:

This section provides functional requirement overview of the web application. Various functional requirements are as follows:

1. **Admin Authentication and Registration**
   It allows creating admin profile. Here admin is a Hospital with any unique ID i.e.; every hospital has its own unique ID.
   Admin can able to admit the patient on basis of which the number of beds will increase or decrease and publish that dynamic list globally for the end user.

2. **Search/View**
   System will provide total number of hospital bed availability as per the city chosen/search by end-user.
   End-User can able to see bed availability as per ICU, Non-ICU and General Ward.

3. **Generate Bill**
   Generate a bill at discharge date
   Net bill= (doctors fee + (bed charges per day).number of days admitted)

Hardware Interface:

Since the application is internet based, all the hardware shall require to connect internet only.

Software Interface:

1. As the system is on server, so require any scripting language like Java or Node js.
2. System will require capable Databases like MySQL or Oracle.
3. System will communicate with database for storing and retrieving hospital data.

Non-Functional Requirements:

This section provides non-functional requirements overview of the web application. Various non-functional requirements are as follows:

1. **Security**
   In this world of internet, security is the core issue that must be considered on the priority to save the hospitals data from viruses and to avoid hackers activity over the web application.

2. **Usability**
   Web-App should have to be easy to use by end-user i.e.; provide a neat and clean User Interface for smoothly accessing the website.

3. **Reliability**
   Backup is useful in recovering your data in case of any system failure and when after sometime system get stable just restore the data back to stable the web application.

4. **Maintainability**
   System will not shut down for more than once in 24 hours for maintenance period.

5. **Performance**
   Web application must be efficient and provide a better performance i.e.; system will not have to take more than 10 seconds to load the new page based upon the request generate.

6. **Integrity**
   Whenever is there any changes are made related to hospital data then it shall be reflected in database as well and also publish the same list of data dynamically over the client side for end-user.