Software Requirements Specification
for
Hospital Management System

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Chapter 1

Introduction

1.1 Purpose

Hospital Management System is a software that offers online clinical types of assistance to everybody scarcely matters whether the individuals live in metro or a distantly found town. Clients can associate through their home web or approach any nearby booth to get these administrations. Our motivate to build this system are, no doctors at remote locations, limited hour services and lack of sophisticated equipment's and no patients/lab data management.

The main function of the system is that it very well may be utilized by the patients to to take online appointments of doctors, view their previous health records, lab reports etc. The clients can enlist and store their subtleties and recover these subtleties as and when required, and furthermore to control these subtleties seriously.

1.2 Intended Audience

This document is intended for anyone in the development, managing and working for This software.

1.3 Intended Use

The SRS contains this software's description, requirements ans other functional and non-functional requirements. Readers are requested to read SRS documents in the given sequence.

1.4 Product Scope

This hospital management system has good potential to grow since it provides specialty health care to the remote hospitals. The growth could be the connectivity between

- District hospitals/ health centers and super-specialty hospitals in the cities.
- Community Health Centers at block level and district hospital and
- Primary Health Centre at village level and community health centers for health care and delivery of medical advice.

Further, there could be a network of super-specialty hospitals providing telemedicine consultation to any of the regions.

1.5 Risk Definition

We are creating a software that will try to help the patients to to take online appointments of doctors, view their previous health records, lab reports etc but as this is developing by our knowledge based system so it has some risk through all the case scenario ans advise false direction.

Chapter 2

Overall Description

2.1 User Classes and Characteristics

In Hospital Management System there shall have two types of users in the system: System owner and System user. Here the system admin, doctors and patient are the system users. Admin has full privilege on the system's functions. They also have control and knowledge of the entire system and the Public can view the system and use the system as they needed.

2.2 User Needs

1. Provide a means for the hospital to publicize and advertise health programs
2. Provide synchronized and centralized stock databases. To provide immediate storage and retrieval of data and information.
3. Provides online medical services to all people whether they are in metro or remotely located areas
4. Users can connect through their home internet or mobile data to get the services.
5. Patients can make online appointments; look their previous health records, doctor's prescriptions, lab reports and medical expenses.
6. Doctor's can give online appointments, e-prescriptions, and view patient's history.
7. Admin can see/adjust appointments, perform day open and close activities.
8. In case of any medical error patient can register a complaint. Patient's grievance and feedback goes to admin and he can forward to specific doctor to answer.
9. Since all the hospital data management is automated, it reduces the paper work and the users' data can be stored and retrieved at faster speed and accuracy.

2.3 Operating Environment

2.3.1 Software Requirements:

Operating System:

Windows 7/8/10.

Technologies used :

1. UML
2. Bootstrap
3. HTML, CSS
4. jinja
5. Django
6. python3
7. postgresql

2.3.2 Hardware Requirements:

Processor:

core i3

Hard Disk:

80 GB

Memory:

1GB RAM

2.3.3 Constraints

- This system will work on our existing technical infrastructure. In future new technologies may introduce.
- The system shall be available for 99.99% of the time.

2.3.4 Assumption

- User has good command over English.
- User has a device capable of accessing the portal.
- User must reliable internet connection.
- User knows how to operate web application.

Chapter 3

External Interface Requirements

3.1 Functional Requirements

1. As a user i want to have log in/out function for Hospital users(doctor and patients) Only.
   So that I can access the portal.

   Confirmation/Acceptance:

- User needs to register in order to log in.
- User will be able to log in and log out of the system.
- Upon giving correct information, user will be redirected to the home page.
- User will remain in the login page and see "incorrect credentials, please try again" for providing wrong credentials.

2. As a user I want the system to make appointments.
   So that I can consult with a doctor.

   Confirmation/Acceptance:

- User must have to fill the necessary fields.
- User will be able to see the meeting appointment.
- User can update the appointment schedule.

3. As a user I want the system to make E-prescriptions.

   Confirmation/Acceptance:

- User will get E-prescription from the consulting doctors.
- User will be able to see the E-prescription.
- User can download the E-prescription.

4. As a user I want to see the lab reports and medical expenses.

   Confirmation/Acceptance:

- User have to put lab reports for checking his/her health condition.

- After getting lab reports user will check medicine list
- If everything is okay, user will click medical expenses button to check his expenses.

5. As a user I want to give my feedback.

   Confirmation/Acceptance:

- User will give a recommendation if user feel better from the treatment.
- If user find any clinical mistake (wrong drug or lab report) user have to click for the enrollment of an objection and input goes to Admin so that he can advance it to our specialist to reply.

6. As a user I want to check the patient's history if the patient has one.

   Confirmation/Acceptance:

- User will be able to see their profile page history
- User can check their prescriptions from a list where prescriptions will appear by date, they were assigned to them.
- Doctors will be able to check the patient's old prescriptions or new prescriptions whenever he/she like to do that in order to tackle any disaster and disease.

7. As a user I want to have an emergency section.

   Confirmation/Acceptance:

- User can book it through online and save their time and life.
- User can book an ambulance.
- If the patient had any past records doctors can easily find it through checking the patient's history.

8. As a user I want to backup my previous information of prescriptions, medicine names and details medical history etc.

   Confirmation/Acceptance:

- User have to give his patient id and other necessary information.
- User will be able to know his all kind of medical history.

9. As a user I want to order medicines online through this system

   Confirmation/Acceptance:

- User will be able to order medicines using hisvalid patient id.
- User will get home delivery within 48 hours.
- User will get the option “Cash on delivery”.

3.2 Non Functional Requirements

3.2.1 Performance Requirement

Availability:

The system should be available at all times, meaning the user can access it using application. In case of a hardware failure or database corruption, a replacement page will be shown. Also, in case of a hardware failure or database corruption, backups of the database should be retrieved from the application data folder and saved by the administrator. It means 24 x 7 availability.

Reliability:

Better component design for getting better performance at peak time. Flexible service-based architecture will be highly desirable for future extension.

3.2.2 Safety Requirements

The necessary data will be stored in a secondary/backup database in case of emergency. If there is a loss/-damage/harm to the web application, the important data can be found in the secondary/backup database.

3.2.3 Security Requirement

The system uses SSL (secured socket layer) in all transactions that include any confidential customer information. Securing access of confidential data (user's details).

Appendices

Appendix A

Glossary

Emergency: Sudden illness or injury can occur without any warning, and while no one typically plans a trip to the Emergency Department so booking it through online will save time and lives both together.

Health Records: The management software digitally stores the health records of a patient and his/her family members. This makes it easier for a doctor and caregiver to maintain and manage a patient's health taking account of the family's heritable health conditions.

Django: Django is web development framework in python.

E-Prescription: E-prescription is a digital prescription which will e provided by the doctor after patient consults the doctor and the doctor gives his/her advises into the E-Prescription.