SOFTWARE REQUIREMENT SPECIFICATIONS

ONLINE CLINIC MANAGEMENT SYSTEM

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Date : 11-Nov-2018

Table of contents

1. Introduction to study------------------------------------------------------------3

1.1 Purpose-------------------------------------------------------------------------------------------------------------------3

1.2 Background--------------------------------------------------------------------------------------------------------------3

1.3 Objectives----------------------------------------------------------------------------------------------------------------3

1.4 Scope----------------------------------------------------------------------------------------------------------------------4

1.5 References---------------------------------------------------------------------------------------------------------------4

2. Description---------------------------------------------------------------------------------------------------------5

2.1 Introduction--------------------------------------------------------------------------------------------------------------5

2.2 Functions------------------------------------------------------------------------------------------------------------------5

2.3 Data Flow Diagram (DFD) --------------------------------------------------------------------------------------------9

2.4 Advantages---------------------------------------------------------------------------------------------------------------11

2.5 Disadvantages-----------------------------------------------------------------------------------------------------------12

2.6 Review of related system---------------------------------------------------------------------------------------------13

3. Non-Functional requirements----------------------------------------------------------------------------13

3.1 Limitations---------------------------------------------------------------------------------------------------------------13

3.2 Reliability-----------------------------------------------------------------------------------------------------------------13

3.3 Security-------------------------------------------------------------------------------------------------------------------14

4 Model to be followed------------------------------------------------------------------------------------------14

4.1 Planning------------------------------------------------------------------------------------------------------------------15

4.2 Design--------------------------------------------------------------------------------------------------------------------15

4.3 Coding--------------------------------------------------------------------------------------------------------------------15

4.4 Testing--------------------------------------------------------------------------------------------------------------------15

4.5 Software Increment---------------------------------------------------------------------------------------------------16

4.6 Assumptions and Dependencies-------------------------------------------------------------------------------------16

4.6 Constraints----------------------------------------------------------------------------------------------------------------16

**1. Introduction to study**

* 1. Purpose:

The purpose of this document is to describe online clinic software system. It establish an understanding between customer and supplier that how the software should be functioned. Software requirements specification (SRS) includes functional and non-functional requirements about requested software. SRS may be “Deliverable Data item Description”.

* 1. Background:

In this era of technology, people are seeking for convenient way to reserve their appointment. So, Online Clinic System is good way to ease on difficulty and save time consumption. It is centralized web portal where patient book an appointment with a doctor/specialist. The system is synchronized with clinic’s staff, patients and doctors through database and save time and from any confusion of repetition of customer with friendly environment to patients.



* 1. Objectives:
* Provide convenient way to patient to reserve appointment at their houses through reliable system.
* It keeps the record of patient for future.
* Allows user to reserve appointment any time he wants and also cancel appointment.
* To give clinic’s staff an easy way to maintain and update the record of any patient.
  1. Scope:



The online clinic system has following scope:

* Online scheduler website provide doctor’s available time of appointment.
* To give account to patient through which they reserve appointment and to see displayed information related to their reservation safely.
* For clinic’s staff, information of both doctor and patient can be reviewed and maintained easily through system’s centralization.
* Information can be updated, maintained and reviewed.
  1. References:

<https://www.slideshare.net/mayannmas/online-clinic-reservation>

**2. Description**

* 1. Introduction:

Online clinic management system is design with high flexibility and ease of usage for patient to reserve their appointment whenever they want and also cancel via web browser. The clinic staff get patient appointment request and manage it and patient will receive confirmation message about their appointment request, delay in appointment and about doctor.

Through this system, it is easy for clinic staff to manage patients and patient get time of appointment at their houses instead of going to hospital and wait to get appointment. It saves time and maintains everything exactly. This is centralized and synchronized approach to anyone.

* 1. Function Of System:
     1. **Online website**

It will provide online access to clinic.

Anyone who wants to use it can go to website and take information about clinic.

* + 1. **Online scheduler**

It will provide online information about opening and closing time of clinic. Holidays on which clinic will be close, doctors who treat patient in that clinic, doctor’s qualification and name for patient in order to know to whom patient should go according to disease , doctor’s available time on clinic, one can receive all these information through internet access easily.

* + 1. **Account**

Anyone who wants to use this system according to requirement then one must have an account to access that system. To make an account, system requires accountant’s name, ID and password. Doctor, patient and clinic staff must have their accounts separately.

Whenever patient

Patient Form

open his/her account,

ID:

along with scheduler he get

Name:

form to get appointment to

Disease:

that clinic. He gives his

Receptionist Inform you about:

information on that form

Doctor:

and submit it. This information

Approved:

dj

ttime:

go to receptionist of clinic and

Patient No:

he/she will assign number

Submit

and timing to patient.

Patient gets the information onto their form again.

Receptionist maintains information about doctor and patient and set appointment time based on the doctor’s available time. He sent all these information to doctor and patient too. Which patient will be treated by doctor at which time, this is information of doctor. Patient is check by which doctor at which time, is the information of patient.

Doctor receive message from receptionist about patient’s name, disease

And then after checkup doctor prescribe medicine onto form of patient and all other tests and information which patient should take mention onto patient form by doctor and send to clinic staff for further processing. All information about patient tests or medicine received by clinical member who will take test of patient for example, blood test, X-ray .After test, they sent report to doctor through system or prescription sent to clinic’s store member who will give medicine to patient according to prescription if patient wants to buy. At the end, Patient pay cashier as whole expenses of patient receive at cashier interface.

* + 1. **Database:**

Database implementation is important for information storage. Sharing of information between Doctor, Patient and Clinic staff possible through database otherwise there is no use of this system because centralized and synchronized (changing at one side, information changes everywhere) approach cannot only be done by database/server system.



**2.2.5 Security Features:**

Online clinic system provides us security features as accounts of user must have password without giving password and name account cannot be accomplished. Every user have unique password which cannot be accessed by others.

If accidently password leak or someone other uses one’s account through another device, system inform user by notification on his /her device. System also provides opportunity to user to change password in any doubtful situation.

* + 1. **Web Application:**

This system requires web because it is web base.so, web development is important for that through which anyone can get easily this system.

* + 1. **User-Interface:**

User interface is essential for that any system for security and ease of use of any user.

For security,

Every user has only relevant information on their interface.

We hide extra information from user through interface and database.

In online clinic management system,

Patient only can see its own information and only doctor name on its interface and other specific information about doctor and clinic as clinic name, doctor’s available time, timings of clinic but patient cannot access extra information about doctor and clinic as doctor’s id, clinical staff information. Same as at doctor and clinical staff’s interface, they only get relevant information about patient.

For easiness,

Because of relevant information everyone can do its work on time and manage their tasks.

So, to design a best interface is very important which is flexible and easy to use.



* 1. Advantages:
* **Availability of doctor:**

Through this system patient can check the presence of doctor in clinic.

* **Database interaction:**

Patient can upload his/her medical report on database and can prevent from losing it. Other hand, doctor can easily check what is the actual problem with upcoming patient and what is the medical history of that patient.

* **Paperless consultation:**

Electronic records of anything which can be access by anywhere through technology like internet, mobiles, tablets, laptops.

* **Electronical communication:**

There is electronical communication between doctor patient and clinic staff through E-mails and SMS.

* **Rescheduling of appointments:**

Patient can update appointment date whenever he wants.

* Finding location:

If patient don’t know about hospital location then location map and address of clinic help him to find.

* **Provide services:**

It provides services to large number of patients at home as old patients cannot go to clinic so they consult to doctor at home.

* **Save time :**

One of the most important benefits of this system is to save time of both patient and doctor.

Before this, patient first go to clinic wait for getting number and then wait for priority number to be called ,go to doctor and talk him all medical history and showing reports ,all this process took too much time of doctor and patient too.

But now, patient has no need to go to clinic .He easily verified appointment from anywhere and send his medical report to doctor, doctor read that medical report and read it and know about medical history of his upcoming patient.

* 1. Disadvantages :

Every system has two phases. There are disadvantages of this system as followed:

* **Unfamiliar with technology:**

People who are not familiar with technology might be found it very difficult and would go to old way of booking appointment as go to clinic.

* **No use in emergency:**

Online clinic system has no use during any emergency or when availability of doctor is needed in any case as accident, wound, cut, burns etc.

* **Occurrence of virus:**

There might be chances of virus occurrence in system and all data of patient or medical history and important records of doctor will be vanished.

* **Insecure:**

Patient’s medical history and information should be secured but Professional hackers might be able to hack your system despite of weak security.

* **Expensive:**

The increasing health technology is definitely not cheap. As increasing in health technology in the world, number of patients reduces but expenses on health are increases. So, anyone could not afford it.

* 1. Review of Related System:

We have a study on existing system and we conclude that these systems have many mismanagement.

As one patient sent appointment request and no verification message appears on patient side for confirmation of appointment. If patient’s priority number passed by then there is no management of his number at any other time, for this, patient again reserve appointment so this is not good approach to any system.

These systems also have no proper security precautions.

So, we should provide such online clinic system in which patient reserve appointment at home, update appointment, check availability of doctor, medical report and expenses, priority number, and a system in which data should be secured.

**3. Non- Functional Requirements:**

3.1 Limitations:

* Generation of bills after appointment done and patient don’t know the expenses of all things as test, medicine,

Check-up separately.

* All data and medical history of patient records and patient could not delete it.
* Patient do not knows the expertise of doctor without consult him.
  1. Reliability:
* There must be reliable interface of good quality which allows any open activity at proper location.
* Describe the use of system at website in proper way so that anyone can access and use it easily.
* There must be a map on website so that if anyone would be found location of clinic can access it easily.
  1. Security:
* At input error red line appear at the bottom of input with appropriate message.
* More than three attempts at sign in with wrong password, a red flag appear to system administrator.
* Everyone shouldn’t able to use system without entering their name and verified password.
* The login password should be greater than 6 digits or symbols/alphabet.

Diagrams :

Use Case Diagram:

Online clinic

Receptionist

<extend>

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admin

<include>

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Patient

**Assumptions and Dependencies:**

>Our system must be connected to Blood Bank Management System in case of blood requirements.  
>User must have internet/server connection.

**Constraints:**  
>Our system will give 7% discount to Army Personnel.  
>It will also give 5% discount to Students.