

E-Clinic

Snehali Nandurkar¹, Dinesh Bandagar², Megharaj Hele³, Atul Gund⁴, Guruprasad Kalkeri⁵

¹ Assistant Professor, Department of Computer Science and Engineering
N. K. Orchid College of Engineering and Technology, Solapur-413002
nandurkarsnehali@gmail.com

² Department of Computer Science and Engineering
N. K. Orchid College of Engineering and Technology, Solapur-413002
Dineshbandgar7@gmail.com

³ Department of Computer Science and Engineering
N. K. Orchid College of Engineering and Technology, Solapur-413002
Rajhele2151@gmail.com

⁴ Department of Computer Science and Engineering
N. K. Orchid College of Engineering and Technology, Solapur-413002
Atulgund181@gmail.com

⁵ Department of Computer Science and Engineering
N. K. Orchid College of Engineering and Technology, Solapur-413002
gkalkeri@gmail.com

Abstract: Presently in the system patient need to contact a doctor and take an appointment is possible only if patient goes to that particular doctor's clinic. Even the people can't get the correct information about doctors, their details and different hospitals available in a particular city. The only way to get all these are through directly contacting particular persons personally and it's a very big problem for a person new to that city. Those who want to have some information in the medical field or wants to get appointment to particular doctor from his own place are not possible.

Nowadays in order to get correct information and right treatment for a patient has to go by him wherever needed. This is a lengthy process, which takes a lot of time to design manually, and also costs more and even limited to certain extent. It's not possible to get all the information or details as well as we can't satisfy the user through this process.

So, this "E-Clinic" website will provide all the information regarding different types of therapy available in clinic and patient can easily book the appointment.

Keywords: PHP, MYSQL, BOOTSTRAP, CSS.

1. Introduction

Presently, our system for a patient to contact a doctor and take an appointment is possible only if patient goes to that particular doctor's clinic. Even the people can't get the correct information about doctors, their details and different hospitals available in a particular city. The only way to get all these are through directly contacting particular persons personally and it's a very big problem for a person new to that city. Those who want to have some information in the medical field or want to get Appointment to particular doctor from his own place are not possible.

Hence it's a very big problem for those who don't have any idea of the medical field. A person

suffering with some problem cannot get correct and immediate prescription or treatment until he meets the right doctor. This may cause or severe problems too. Now a days in order to get correct information and right treatment for a patient has to go by him wherever needed. This is a lengthy process, which takes a lot of time to design manually, and also costs more and even limited to certain extent. It's not possible to get all the information or details as well as we can't satisfy the user through this process. The system has been facing problems due to its paper-based appointment system. With the increase in the number of patients visiting, it has become difficult to manage the appointment system manually. Recording of appointments and creating registers

by pen and paper has become a tedious task. And also it's difficult to manage huge number of patient database.

“E-clinic” is an online web site which is specially developed for weight loss. There are 3 users in this site as Admin (Doctor), patient & Staff. Though it is specially developed for weight loss but patient can take concern of various diseases. The doctor will give an online concern about particular disease. There are different task is allocated to doctor, patient & staff.

The task of patient is he can login to our site & can register himself if he/she is not registered or if he/she is a new user to site. If he/she is a new user then he first fill the register form of our site & then he can proceed further. When he register to our site then he/she gets a mail from site which contains some health tips. He/she can also get an online concern about a disease but it must require that he first fall make a payment after that only he can get a concern. The doctor can give also appointment to a patient. He/she can also upload the testimonials of himself in the site.

The task of doctor is he can login to our site & he can upload videos, images related to site. He/ She can also give an online appointment & can check history of appointment also. He/ She can also upload the schedule time & can organize the events as well. He/ She can also provide the job vacancies.

The task of a staff is to upload the prescription given by the doctor into the database & also can send a bulk messages if any event is getting to be occur. He/she can also upload the information about offline patients.

2. System Architecture

The fig.2.1 shows the system architecture which contains patient, vendor (“domainz.in”) which provide web services and clinic (Doctor).The patient will chat to doctor through network and uses vendor’s web services. The patient will communicate to clinic using hand held devices such as mobile, Laptop etc.

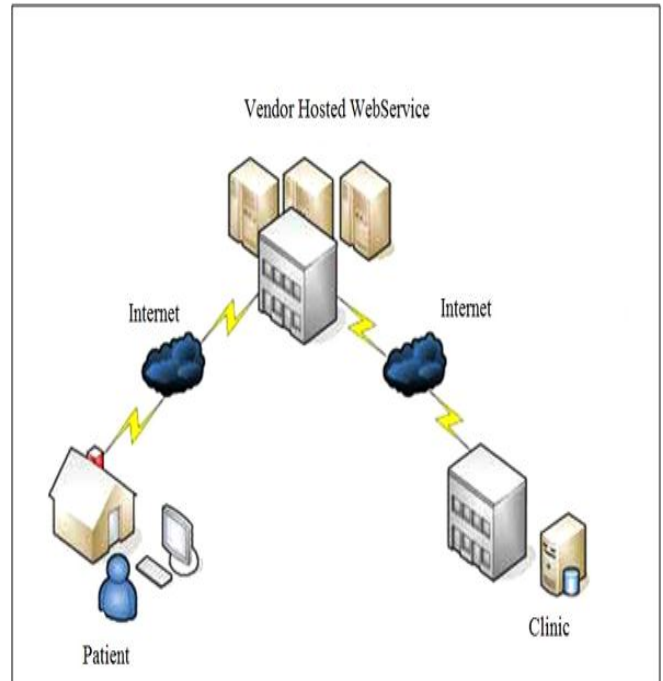


Fig 2.1:-System Architecture

The Patient will request for appointment through the network to clinic. The administrator of clinic will check the patient information and depend on that information and her/his time i.e. (whether the doctor is available for that particular day or not) depend on that will decide whether to accept or reject the appointment.

By using this the patient can chat with doctor at anytime and anywhere through vendor’s services. The vendor will manage all the network related issues such as error control, flow control etc. So that the patient and doctor will communicate with each other.

3. Data Flow Diagram

The Data Flow Diagrams are a diagrammatic representation of the system, which has inputs, process and outputs. It is one of the best ways of documenting the entire functionality of the system, which will have some data flow in and have some processing inside and then some data flows out from the system can be documented or represented effectively by means of data flow diagrams. The fig. 3.1 shows the level 0 data flow diagram for the system. The fig. 3.2 shows the level 1 data flow diagram at server side. The fig. 3.3 shows the level 1 data flow diagram at client side.

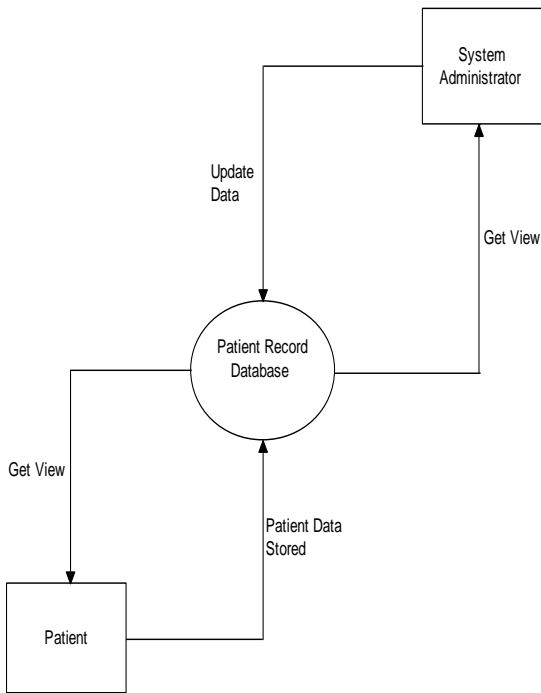


Fig 3.1 Level 0 DFD

The above figure contains 2 users as patient & system administration & contains the patient record database. The patient will store his/her personal information in patient record database & can also get the view of his data using patient record database.

The administrator will also have the authority to update & get view of data in patient data record database.

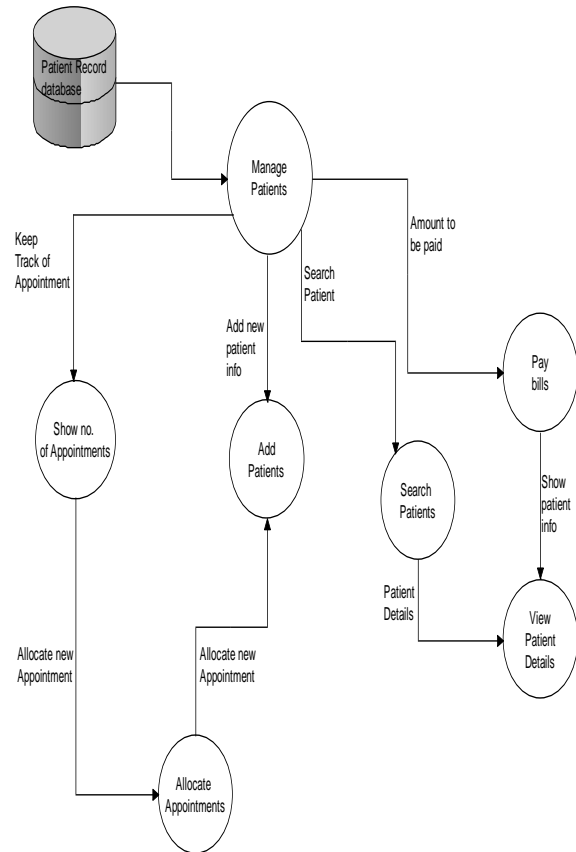


Fig 3.3 Level 2 DFD

The above figure contains the no. of process which will store or access the patient record from database. The processes are Manage Patients, Show No. Patients, Add patients, Search Patient, Pay Bills, View Patient Details, Allocate Appointments.

The manage patient process will manage or keep the track of appointments using show no. of process will add new patient information through add patient process. Each patient using search patient process and finally will pay the amount of clinic using pay bills process. The allocate appointment process will allocate new appointment.

4. Conclusion

“E-clinic” is designed & developed as a powerful, flexible and easy to use web application to deliver real conceivable benefits to clinics, assisting user to administrator a huge data in clinic and it can be accessed via pc, laptop, iPad, iPhone or other smart phones. On the client point of view, this is faster & useful way to link to the healthcare service by using the system.

The main use of this site is that any patient can get appointment to a doctor on any day & at any time. This site also provides the testimonials of

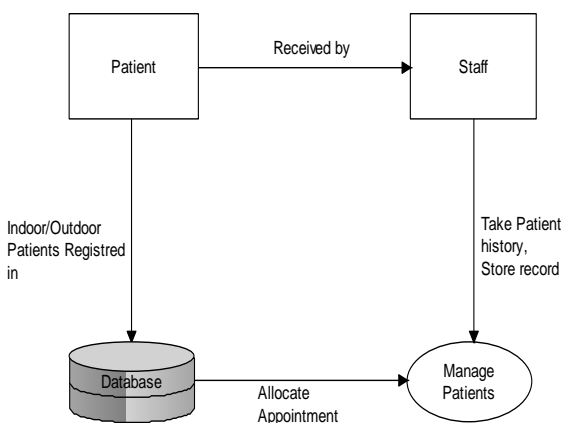


Fig 3.2 Level 1 DFD

The figure contains patient, staff & contains one process i.e manage patients. The database will store indoor/outdoor patient registration.

The staff will take the patient entry in the system. The staff will also take the patient history & store record & as well as allocate appointments.

visited patients through which other patient can get an experience that how he/she can get solution to a disease.

department of Computer Science and Engineering .

References

[1] Chitra P S, Dr. Girijamma H A, “Hybrid Approach for Location Based Customized POI Travel Recommendation System”.

[2]“An Integrated Approach to Software Engineering”, by Pankaj Jalote, Third Edition.

[3]“php_mysql_javascript_html5_all-in-one_for_dummies” by Steven Suehring, Janet Valade.

[4]“Software Engineering” by Rogers pressman, 6th edition.

[5]The “E-Learning” concept referred from: <http://en.wikipedia.org/wiki/E-learning>.

[6]The “PHP guide” referred from: http://www.w3schools.com/php/php_intro.asp.

[7]The “PHP & MySQL” referred from: Workshop conducted by IIT Bombay.

1. Bandagar D.R. is pursuing B.E in Computer Science and Engineering from N. K. Orchid College of Engineering and Technology, Solapur under Solapur University, India.

2. Hele M.P. is pursuing B.E in Computer Science and Engineering from N. K. Orchid College of Engineering and Technology, Solapur under Solapur University, India.

3. Gund A.M. is pursuing B.E in Computer Science and Engineering from N. K. Orchid College of Engineering and Technology, Solapur under Solapur University, India.

4. Kalkeri G.B. is pursuing B.E in Computer Science and Engineering from N. K. Orchid College of Engineering and Technology, Solapur under Solapur University, India.

Author Profile

1. Prof. Nandurkar S.K.is currently working in N.K. Orchid College of Engineering and Technology ,Solapura as a Assistant Professor in