

The Hope Clinic: “Effective Healthcare System”

Madhuri G. Barot¹, Kajal B. Vaghela², Prof. Ajaykumar T. Shah³

^{1,2}Dept of Computer Engineering

³Hod, Dept of Computer Engineering

^{1,2,3}Alpha College of Engineering and Technology

Abstract- The HOPE CLINIC is a website includes Registration of Patients, Storing their details into the system. Also Patient can take online appointment and will get a message of his/ her appointment's date and time schedule. Patient can search availability of a doctor and the details of a patient using the id. If patient is not able to come to the hospital he/she can also ask for home visit. Admin will handle all contents of website. Doctor can view patient details, prescribe the medicines, view reports of patients and can manage appointments.

Keywords- Hospital, Clinic, Registration, Appointment, Report, Doctor, Patient, Medicine, Chemist, Prescription, Health, Check-up, Disease, Treatment, Diagnosis

I. INTRODUCTION

The proposed system is a web application which is built in JAVA. If patient wants to buy medicine online then he/she can also buy it online. Also medicines are available by home delivery. Registration is compulsory for patients to use features of this website. Admin has facility to add/update/delete contents. Doctors have facility to approve or cancel the appointments, can diagnosis the problem. Can view patient's disease information. Doctor can manage appointment and billing. Website will provide laboratory tests. Laboratory tests can help determine a diagnosis, plan treatment, Check to see if treatment is working or not. Drugs/ Medicines are the field of health and healing. THE HOPE CLINIC is an integrated website that handles different directions of clinic workflows. It manages the smooth healthcare performance along with administrative, medical control. That is a cornerstone for the successful operation of the healthcare facility. The Purposes are fast recovery, maintain records, Proper diagnosis and treatment, accurate prescription, consume less time and reduce human errors.

Project will provide following benefits to patients:

1. Schedule patients for various medical procedures- test,treatment
2. View daily,weekly,monthly patient schedule
3. Create Patient Records and Appointment reports

4. Helps to track Patient Flow based on arrival , visit and departure time
5. Avoid no-show,missing,over-booking patients and other conflicts

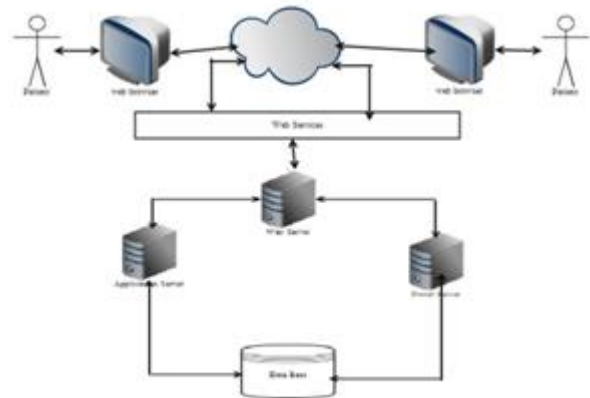


Figure 1: System Architecture

II. LITERATURE REVIEW

[1] The management of hospital to develop software which is easier to understand by the user and perform the simple and fast. It includes the collection of patient details and doctor details .The system stores all data and retrieves when required .The hospital management system can be entered by using user name and password which accessed by an administrator the data will be protected safely for any use .The hospital management system is necessary to store the patientdetails doctor details and staffs etc. Hence by these project the work become easy and saves lot time.

[2] If we want to visit a doctor for checkup we want to wait until the doctor available and get appointment as the technology is developing it is easy to get appointment from doctor. The application accepts appointments by saving the records of the appointments which is linked with calendar. The user gets notifications based on the preset specified time before the appointment .This application is easy and friendly with user purpose. Here the admin will manage the doctor and patient details.

[3] Online appointment fixing and scheduling system is by a patient can directly approach the website or web application and connect to the doctor by the online software system .The patient can book their appointment according to their convenient time. The patient can choose their favorable doctor and book appointment. Online appointment reservation and scheduling system can help the patients, the doctors, and the office staffs by reducing their time. It can be easily performed by using computers and making an appointment, rather than going to the hospital.

[4] The medical appointments were taken by visiting the hospital and waiting in the line up to our turn. Sometimes it gets irritation to the patients. The emergence of online appointment system offered timeless and efficient access to health care services. With this smart application we can get emergency doctor appointments .Here the people can choose doctors and in nearby hospitals. We can get this appointment easily through our mobiles and with this smart application we can save our time.

[5]The appointment scheduling system is a mobile application that includes the time saving for There will be no loss of time if the mobile based application is used. The mobile based application allows for 24 hours for convenient scheduling of patients. The patient can be arrived in specific time for seeing the doctor rather waiting for a longer time.

[6] Many patients will lose the doctor appointments and it waste patient time. Now in this modern and driven society we can get doctor appointment through online booking system. With this application you can choose doctor yourself in this application you can get details about doctor and hospitals. With this patient can manage their own appointments. They will be reminded by a SMS/E-MAIL before their appointment date. This type of functions will reduce the wastage of appointments. In emergency cases we can book appointments easily. It saves time of patient and doctor.

III. TECHNOLOGY

NetBeans:

NetBeans IDE lets you quickly and easily develop JAVA desktop, mobile and web applications as well as HTML5 applications with HTML, Javascript and CSS. It is free and open source and has a large community of users and developers around the world.

Oracle:

Oracle Database allows you to quickly and safely store and retrieve data. Here are the integration benefits of the Oracle Database:

- Oracle Database is cross-platform. It can run on various hardware across operating systems including Windows Server, Unix, and various distributions of GNU/Linux.
- Oracle Database has its networking stack that allows application from a different platform to communicate with the Oracle Database smoothly. For example, applications running on Windows can connect to the Oracle Database running on Unix.
- ACID-compliant – Oracle is ACID-compliant Database that helps maintain data integrity and reliability.

IV. DESIGN AND DEVELOPMENT

Our main goal is to improve patients' health care and for this we have basic innovations for this system:

- Regular updates
- Online appointments
- Patient Can view Online reports
- Apply for home visit
- Better user interface

Here, we presented a basic flowchart and E-R diagram for our system to get clear idea about what and how we have implemented our project functions.

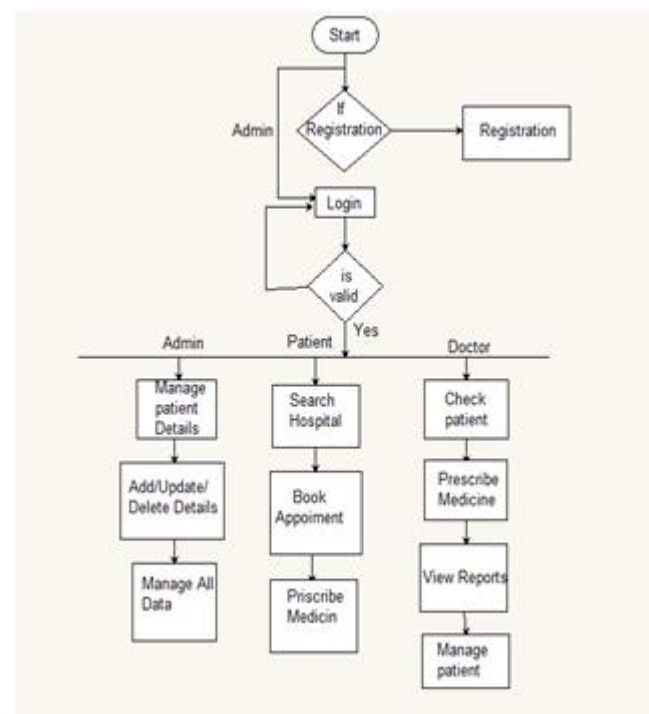


Figure 1: Flowchart

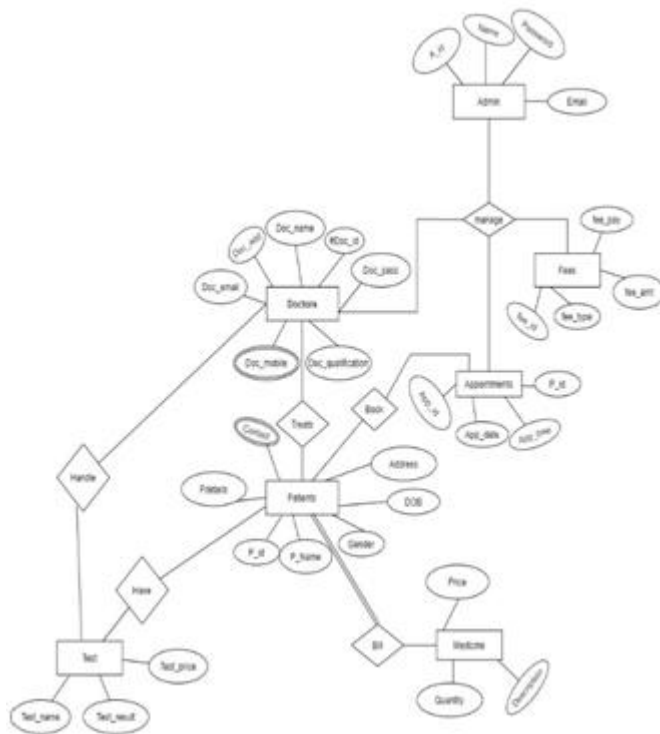


Figure 2: E-R diagram

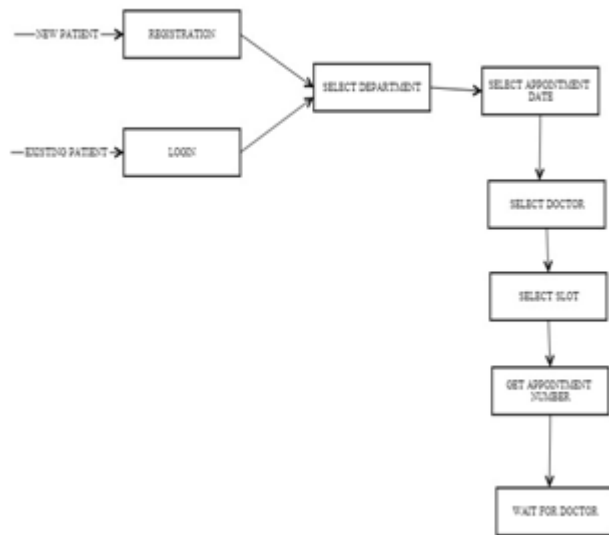


Figure 3: Operational Flowchart for Appointment

V. CONCLUSION

We will develop “THE HOPE CLINIC” System with great concern and will try our best to implement as many as features to make it usable. This system is a powerful and easy-to-use for the patients in their illness. This System provide online appointment option. This is the easiest way for the patients and doctors. It is the website with the latest platform that fulfils the required needs of patients. Nowadays, technology is increasing day by day for making

the works of human being easier. It is the platform for the doctors to provide prescription online and can interact with patient online. In these system admin can manage and view all contents.

VI. ACKNOWLEDGMENT

Greater the challenges were the effort to overcome it. It has been rightly said that we are build on shoulders of others. For everything we have achieved the credit goes to all those who really helped us in completing this project successfully.

We would like to thank our Project Leader **Prof. Ajaykumar T. Shah** for providing a vision about the system. We have been greatly benefited from their regular critical reviews and inspiration throughout our work.

REFERENCES

- [1] Digvijay H. Gadhari, Yadnyesh P. Kadam, Prof. Parineeta Suman, "Hospital Management System" ,IJREAM, Vol-01, Issue 11, FEB 2016.
- [2] Shafaq Malik, Nargis Bibi, Sehrish Khan, Razia Sultana, Sadaf Abdul Rauf, "Mr.Doc: A Doctor Appointment Application System". International Journal of Computer Science and Information Security, 14(12):452-460 • December 2016
- [3] Nazia S, Ekta Sarda, " Online Appointment Scheduling System for Hospitals–An Analytical Study" ,IJIET, Vol. 4 Issue 1 August 2014.
- [4] Akinode, John Lekan , Olorunto S.A , " Design and Implementation of a Patient Appointment and Scheduling System", IARJSET, Vol. 4, Issue 12, December 2017.
- [5] Maryam Tufail , "Online Polyclinic Appointment and Database Management System" ,Master's thesis 43 pages, appendices 1 page ,August 2018.
- [6] Youtube tutorials
- [7] [Tutorials List - Javatpoint](#)
- [8] [35+ Java Projects with Source Code | Code with C](#)
- [9] Lucille Keir, Barbara A. Wise, Connie Krebs, Medical Assisting: Essentials of Administrative and Clinical Competencies, Cengage Learning pp.131-133
- [10] Arthur Hylton III, Suresh Sankaranarayanan, “Application of Intelligent Agents in Hospital Appointment Scheduling System”, International Journal of Computer Theory and Engineering, Vol. 4(4) (2012)
- [11] <http://www.weberp4.com/industry-solutions/hospital-management/doctors-appointment-management.htm>