Efficient Doctor-Patient Web Portal

[1] ShankarBirajdar, [2] Snehal Dalvi, [3] Gaurav Kumavat [4] Kavita Devadiga, [5] Prachi Kshirsagar
[1][2][3][4] B.E. Student in IT, [5] Project guide

Abstract: - Doctor-patient portals are healthcare-related online portal that allow patients to interrelate and communicate with their Medical providers such as doctors and medical organization. These portal services 24/7 day and night as well as in case of any emergency. Nowadays many medical web portals are available, in common all these portals allows the patients to intermingle with their medical information via the internet. Patients have to first register on the portal to book a doctor's appointment, and to use other features of the website. Number of specialists are made available on the website like gastrosurgeon, neurologist, dermatologist, etc. According to the locations nearby to the user and the time for which the specialist will be available, he/she can book an appointment for a treatment. When patient book an appointment, his/her medical records are stored in the database, so that next time patient can view that details as well as doctors can use these earlier patient's record for further treatment and test report etc. Other than all these features, our system also includes organ donor and blood donor module. Patient have to register if he/she wants to donate blood or organ. Once registering on the portal, patient can also search for the availability of particular blood type or organ in a particular hospital.

Index Terms— Doctor-patient, Blood donor, Organ donor, Online, Online appointment booking, illegal activities, feedback.

I. INTRODUCTION

We are developing the portal which is beneficial to the patients as well as to the doctors. This portal particularly enables patients to : Access their medical records, plan the appointments ,pay the bills, refill prescription and it also helps the doctors to keep track of the patient's medical history. By providing these features as well as easy access to online resources, portal provides much more improving management of illness. The main feature that makes any Doctor-patient portal reliable is the ability to expose individual patient health information in an efficient manner through internet. All doctor-patient portals allow patients to interact in some way or the other with health care providers or doctors. Many death are occurring in India due to unavailability of blood and organs . Many a times user do not have proper information about which type of blood and organs are available in which hospitals and NGOs. So,we are adding some additional features such as- form for blood and organ donation for the users who wants to donate blood or organs, information about the amount of blood available in the hospitals which can be very useful for the users in case of any emergencies are included. As well as we provide a way to the users through which they can report any illegal activities occurring in the hospitals.

II. RELATED WORK

In the related work is the searching the research paper which was previously done the research on our proposed system.
In "Javed Akhtar Khan and M.R. Alony"A New Concept of Blood Bank Management System using Cloud Computing

for Rural Area[1] in this survey they collect some of information about the blood bank management system located in city and rural area we find some of the hospital have its own blood bank unit with each and all technical facilities in city but this conduction is poor in rural area.[1]
In "Chandrani Ray Chowdhury Assistant Professor, Dept. of MCA, SDET- Brainware Group of Institution, Barasat, West Bengal, India."[2] There are a number of research work have been done to integrate cloud computing, health sector and social media. Existing work can be classified as fusing of cloud computing with health care system and integration of social media with health sector. The health care is merge with cloud computing is further classified on public and private cloud integration[2] In "The Optimization of Blood Donor Information and Management System by Technopedia" by P. Priya and V. Saranya [3] they suggested an efficient and dependable blood donor information and management system based on GIS integrated via android mobile application. The service provided by the suggested system is needed and worth to health sector where a quality of the blood is considered for the safety of the patient life through a planned process by the blood management system. This is the best solution for the problems such as wrong information of donors, legal use by third parties and updating the donated blood by the donor which replaces the older systems. The proposed system is a web based android application helps us to reduce the human mistakes which are done in the existing system. The wireless internet technique allows to flow of data to work more quickly and conveniently.This is merging of framework which has a cloud-based application on smartphone devices. The future work of the system is to extend this application to process through SMS services. By

140

this the contact is hidden from other people. [3] In "MBB: A Life Saving Application" by Narendra Gupta,Ramakant Gawande and Nikhil thengadi [4] have proposed the system that will link all donors. The system will help control a blood transfusion service and create a database to hold data on stocks of blood in each area as data on donors in each city.the blood need by patients can be seen by people through application. . They will be able to register as donors and thus receive request from their local clients who needs blood to donate blood in cases of need[4] In "Arvind Sharma, P.C. Gupta,"Predicting the Number of Blood Donors through their Age and Blood Group by using Data Mining Tool"[5] with an easy-to-organize database of person contact detail send to their for acceptors.large amount of time is taken to analyse the data of donor in online is solved here [5]. The proposed system will overcome all this disadvantages in our website so that user does not have to go around on any other websites for different services. User can use all these services in one place i.e our website.

III. PROPOSED SYSTEM

In the proposed system different Modules are added for efficient doctor-patient communication.

Step1: Users login into portal and send a request through browser. Which is then processed by web server.

Step2: User request is accepted by web server by authenticating the user through the data available in the database.

Step3: According to the request type it identifies the request sender, example: Admin, Patient or Doctor.

Step4: The identified request is then further proceeds by Admin according to the modules, our system includes 3 modules that work on the basis of the of the request send to it.

Step 5: According to the request send by the user data is fetched from database.

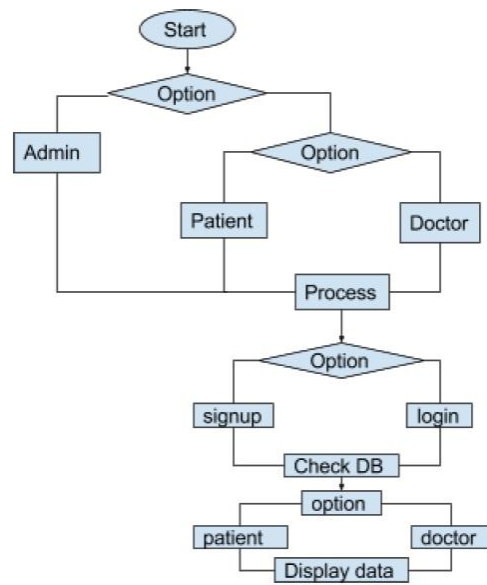Step 6: After that response is send to the browser through which the request is coming.

Fig.1-FLOW CHART

IV. SYSTEM MODULES

4.1 Admin Login: - :- The system is under supervision of admin who manages the bookings made.

4.2 User login/Registration: - Users have to first register themselves to login into the system.

4.3 Medical History: - System allows to update and view patient medical history.

4.4 Doctor search: - System allows for doctor search through categories, name and location.

4.5 Appointment availability check: - :-User can click on spaces to view the availability. Users also book appointment for their required date and time.

4.6 Booking cancelation: - User may even cancel their bookings by login into the system anytime.

4.7   Email on appointment booking:- When user is successful in appointment confirmation and 'thank you' email regarding the slot booked.

4.8 Feedback:- The system has a feedback form, where user can provide feedback into the system. It is a type of normal feedback.If user have to fill complaint he can also send a special feedback which will directly send to admin and police and it is not display on feedback page.

4.9 Organ Donor registration :- User who is going to donate organ has to register himself by filling the details.

4.10 Organ Donor search:- User can search donor based on type of organ.

4.11 Blood Donor registration: - User who is going to donate blood has to register himself by filling the details.

4.12 Blood Donor search: - User can search donor based on type of blood.

V. FLOW OF DOCTOR PATIENT WEBSITE DEVELOPMENT

As we are done with the survey for portals then we are supposed to know what are the main content should be in portal. Now in our proposed system we are going to develop the patient portal which doses the following thing: Patient portals allow providers to: Send/receive messages to/from doctor's office.

5.1 Communicate with patients through secure messages.

5.2 Post lab and imaging results.

5.3 Post patient consent forms.

5.4 Make billing information available

5.5 With patient portal patients can: View and enter medical history.

5.6 Update demographic information. Request appointments   and prescription refills.

5.7 View account statements and pay medical bills.

5.8 Complete registration forms.

5.9 Can view the future predicted disease according.

5.10 View and update allergies and medication lists

6.OBJECTIVE

6.1. Allows patients to view online, download their health information.

6.2 Reduces the workload as appointment procedure will be done online.

6.3 It is not mandatory for the patient to carry their medical report every time they visit hospital, as doctor can view and update the medical details online.

6.4 .Feedback can be given by the patients as well patients can also report about illegal activities with the help of feedback.

VII. CONCLUSION

The websites which recognize which doctor fits in criteria or which hospitols is best for information which you register in their respective portals.Now our proposed system gives a easy way to find out the best doctor and best treatment, as well as we also provide the information about the availability of the amount of blood and the organs available in their hospital. We also provide a way to stop the illegal activities occurring in the hospitals by allowing the users to report it to the authority.

REFERENCE

[1] Javed Akhtar Khan and M.R. Alony"A New Concept of Blood Bank Management System using Cloud Computing for Rural Area (INDIA)" International Journal of Electrical,Electronics ISSN No. (Online): 2277-2626 and Computer Engineering 4(1): 20-26(2015).

[2] Chandrani Ray Chowdhury Assistant Professor, Dept. of MCA, SDET- Brainware Group of Institution, Barasat, West Bengal, India." A Survey of Cloud Based Health Care System" International Journal of Innovative Research in computer and communication Engineering (AO ISO 3297:2007 Certified Organisation)Vol 2,Issue 8,Augest 2014.

[3]The Optimization of Blood Donor Information and Management System by Technopedia P. Priya 1, V. Saranya 2, S. Shabana 3, Kavitha Subramani 4 Department of Computer Science and Engineering, Panimalar Engineering College, Chennai, India1, 2, 3,4

[4]MBB: A Life Saving Application Narendra Gupta1, Ramakant Gawande 2 and Nikhil then gadi 3 1, 2, 3 Final Year, CSE Dept.,JDIET, Yavatmal, India.

[5]P.c Gupta Arvind Sharma,,"Predicting the Number of Blood Donors through their Age and Blood Group by using Data Mining Tool "International journal of Communication and computer technologies" 02 September 2012