Health Inspection And Monitoring Application

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***Abstract*—**

The establishment and improvement of doctor-patient interaction system is a very important requirement, especially now when the communication technology is developing rapidly. The advantages of web can be made full use of to make up the time and distance gap between doctors and patients and to provide fast and adequate medical services. Through the connection between user terminals and specific service, both doctors and patients can obtain required data to achieve a better interaction. The platform, Web services, and database technology are all gradually advancing so that we can develop a doctor- patient interaction system to meet the needs of the patient and to provide Communication with patients by the doctor's more efficient and convenient means of communication with patients.

Keywords: Health Inspection, monitoring, convenient communication, medical services

I. INTRODUCTION

Healthcare is an environment that has been experiencing dramatic progress in computing technology in order to process and distribute all relevant patient information electronically and overall to improve the quality of care. In particular, mobile e-health involves a spectrum of information and telecommunication technologies to provide healthcare services to patients who are at some distance from the provider and also provide supporting tools for the mobile healthcare professional. The benefits of such applications are numerous with the main one being improvements in access to medical resources and care.

Mobile healthcare has huge potential to improve efficiency, improve healthcare quality, enable doctors to monitor their patient's health, enable patients to manage their heath more comfortably out of the hospital, allow home care providers to provide better healthcare quality to seniors, and reduce the cost of care by allowing patients to make fewer unnecessary visits to their doctor.

The main motive of this work is to develop an application that provides optimal communication among patients and doctors for better healthcare services and delivery. It will help them to communicate with each other for appointment, prescription management and patient data management at any time using mobile with internet connection

The establishment and improvement of doctor-patient interaction system is now an important requirement for medical services informationalization. Especially now when the mobile communication technology develops rapidly, whether the advantages of mobile web can be made full use of to make up the time and distance gap between doctors and patients to provide fast and adequate medical services or not becomes an important factor to measure hospitals' competitive ability. Through the connection between mobile terminals and specific service, both physicians and patients are able to obtain required data to achieve a better interaction. Android is a Linux based open source operating system which is mainly used in portal devices with excellent performance that make its market share growing. The platform, Web services and database technology are all gradually maturing, so that we can develop a set of doctor-patient interaction system on Android platform to meet the needs of patients to be treated as soon as possible and provide doctors more efficient and convenient means of communication with patients.

II. OBJECTIVES

The objectives of the systems development and event management are:

1. To create an application that will be easy for use without learning any additional skills.

2. To develop an application that focuses on how to enhance users' awareness and knowledge about medication and its management.

3. To create the framework that will enable more citizens to receive healthcare services whenever needed.

4. To provide platform that will deliver services that are cost-effective and meet certain pre-established standards of quality.

III. HEALTH INSPECTION AND MONITORING APPLICATION

The proposed system is an application that can accommodate the communication needs between doctors and patients. The application must be able to handle processes ranging from the doctor's search process, check registration, queue number settings and notifications, easy-to-access medical records, and chats between doctors and patients. This,

therefore, helps in making critical information more readily available for review on an individual basis.

These changes will be more than automated and more efficient versions of what we already do. There will be new ways to support and even provide healthcare: replacements and refinements for existing processes, procedures, and work habits that will improve outcomes. This system healthcare by making readily available instructions for patients. The greater part of what doctors tell patients is forgotten by the time they leave the hospital and half of what they remember is incorrect. Better communication can also take place the app before patients enter their physician's office. Mobile technology can be used to send patient reminders and decrease the number of missed appointments, which leads to a reduction in costs. The patient's healthcare experience does not stop once they leave the hospital. Today's healthcare providers face a growing number of readmissions, with so many patients coming back to them within a short while of care. The availability of healthcare apps on the internet helps patients quickly access reliable information when they feel sick. This speaks to the growing desire for healthcare content. By offering this content, a healthcare system could gain the attention of a user early in his life, thus increasing the likelihood that he would choose that system for future healthcare needs.

Advantages of Proposed System:

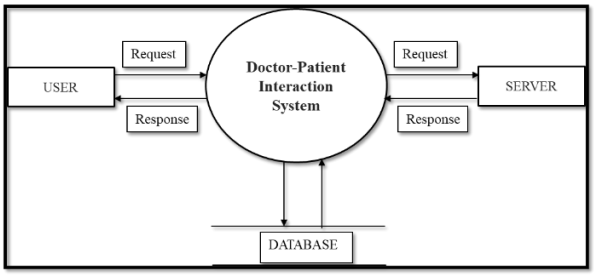
1. It will helpful for both doctor and patient.
2. This system will help to patient, to save their time.
3. User friendly.

III. Survey

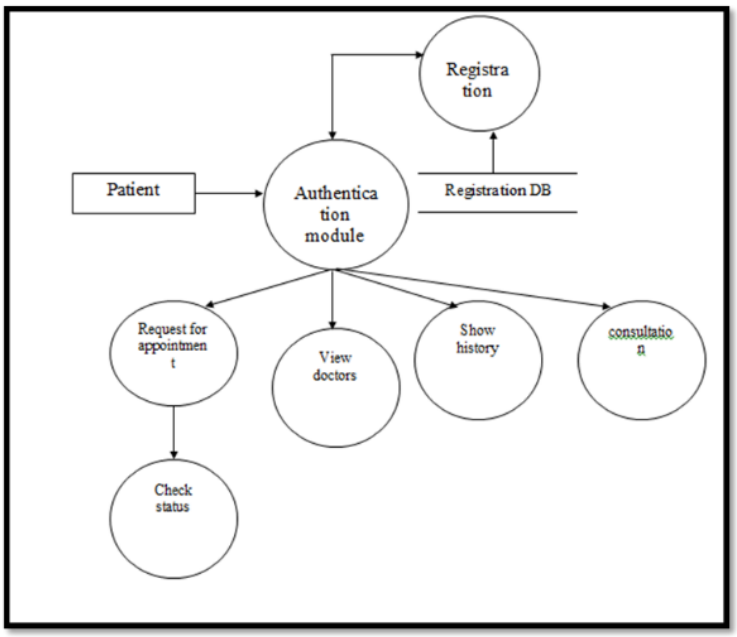
Title	Authors	Problem	Solution	Result
Mr. Doc: A Doctor Appointment Application System	Shafaq Malik, Nargis Bibi, Sehrish Khan, Razia Sultana, Sadaf Abdul Rauf	The patient also waits in a queue while getting appointment. If the doctor cancels the appointment for some emergency reasons then the patient is not able to know about the cancelation of the appointment unless or until he or she visits the hospital	This system will provide service to the patient. Patient register in application and take appointment online on available dates. If in emergency appointment will be cancelled patient will get an reminder for cancelled appointment.	The proposed system provide services to patient efficiently. Patient will save lot of time using this system.
Patient Treatment Time Prediction for out Patient Department OPD	M. Ajay Kumar, S. Mahesh, T. Kamalraj, M. Azhagiri	The waiting time for consultation and further checkups and tests in hospitals are one of the main reasons behind patients to un-avail the services of that particular hospital.	In this system created the time prediction in order to accurately calculate the patient's waiting time and also implementing another secure method for viewing the prescription information on individual patient's mobile application.	The time prediction algorithm is implemented on the classified patient history (treatment time) and accurate waiting time is predicted for the current patient in Outpatient Department.

IV. Design

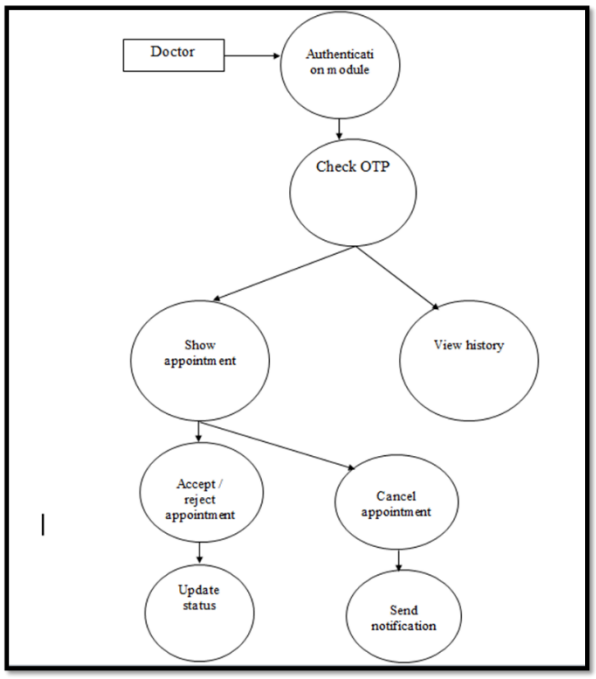
- Data Flow Diagram of the application



- Data flow diagram for patient side application



- Data flow diagram for doctor side application

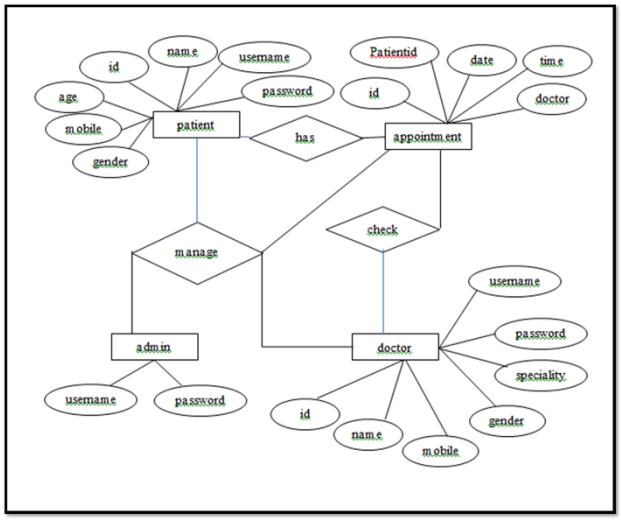


V. Scope Of The application:

Patients and doctors will access the records for viewing and entering real time data anytime and anywhere. It will provide them easy access for real time communications, information sharing, collaboration and consultation. the app will facilitate the availbility of "interpreted" information using clinical documentation, test results, image data and communication for more efficient collaboration between patients and other stakeholders making faster, more accurate judgments and decisions. This system reduces time spent "managing" records, improves data capture, reduces errors, and enables health care providers to have higher quality interactions with patients

. Mobile technology can be used to send patient reminders and decrease the number of missed appointments, which leads to a reduction in costs. The patient's healthcare experience does not stop once they leave the hospital. Today's healthcare providers face a growing number of readmissions, with so many patients coming back to them within a short while of care. The availability of healthcare apps on the internet helps patients quickly access reliable information when they feel sick. This speaks to the growing desire for healthcare content. By offering this content, a healthcare system could gain the attention of a user early in his life, thus increasing the likelihood that he would choose that system for future healthcare needs.

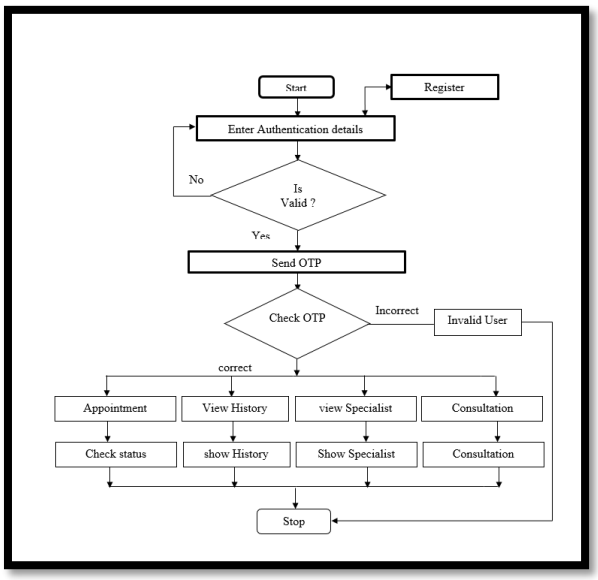
V. ER Diagram:



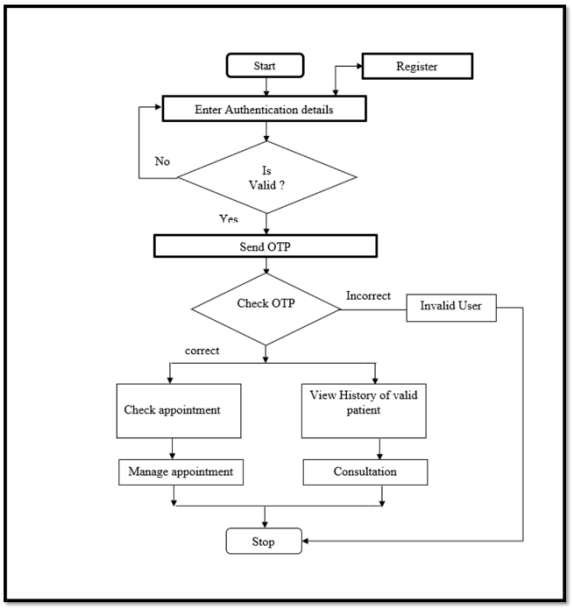
VI. Methodology

The application will be developed using java and android. For frontend we will use android interface and backend we will use MySQL for Database. Here patient is request for appointment and he also check the status. The doctor is looking for daily appointment and as per his availability he accept or reject the appointment. After accept or reject appointment patient will get an status on his registered mobile no. and he will also checks on his application. Patient will view the doctors/specialist, looking for consultant etc.

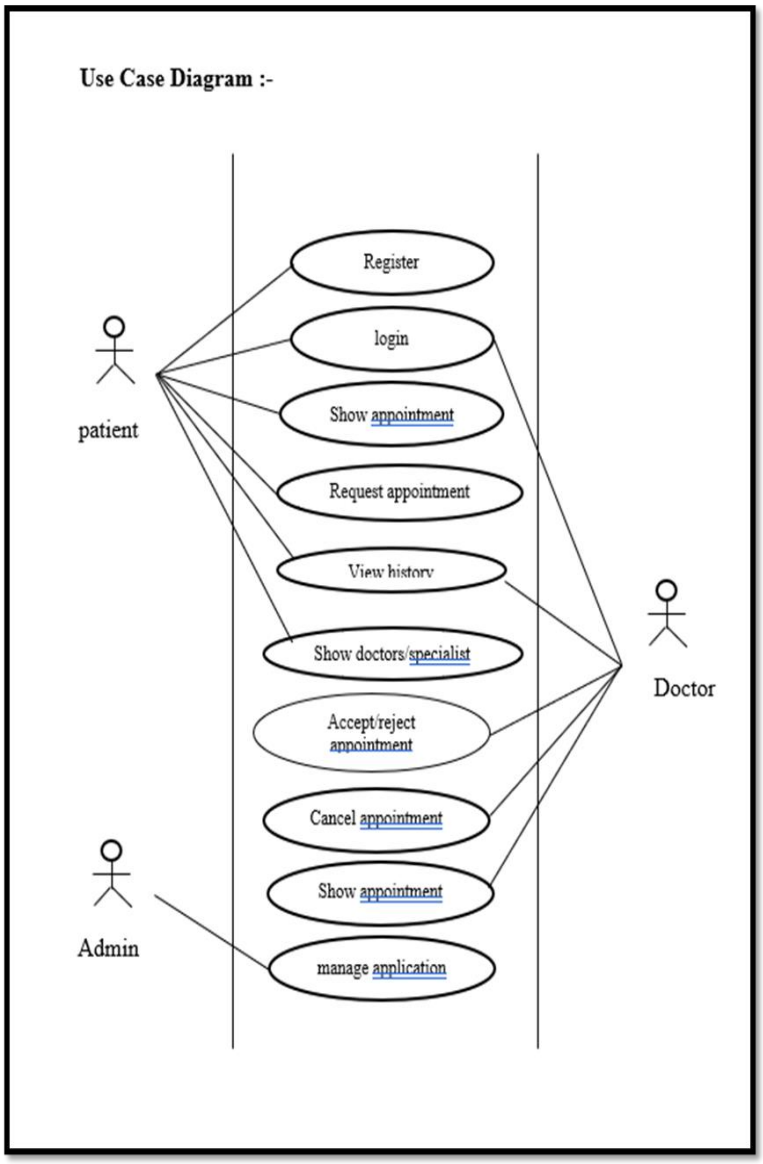
VII. Flow Chart for Patients application:



Flow Chart for doctor application:



VIII. USE CASE DIAGRAM



IX. Conclusion

The application works for the benefits of the society and provides an interactive interface between the patient and the doctor. This paper proposed a healthcare application that provides both healthcare providers and patients access to accurate and up-to-date information with less time and effort as well as improved efficiency of the information flow. The main advantage of this application is that doctors will be provided with full history of their patients' health status and patients will hold their data wherever they go. The proposed system will also help Medical Doctors to speed up diagnosis and treatment of patients through the advice and interaction with the patient.

The use of this system can result in a reduction in number of hours spent searching for doctors and contacting them at the time of need. It also provides an interface that is easy to understand by the users and greatly helps in adapting to this system.

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