E-Healthcare Online Consultant and Medical Subscription Android Application

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Abstract

E-healthcare promises a big difference on the waves. Consulting a doctor is quite obvious in our day-to-day lives, but doctor availability is uncertain during the emergency period. To address this problem the android application proposal is made, this smart health application allows users to get instant feedback on their health issue through an online mobile application. Through this advanced technology an effort is made to communicate between a doctor and a patient. This made use of mobile application to improve the quality of care for patients. This system allows users to monitor their medical data in their phones so they can easily track their changes to their long-term health condition. Each time patient visits his/her personal physician data stored in their phones is transferred to the database of their health care providers, the physician gets a clear picture of the patient and is very easy to handle. When they consistently monitor all their health data if there is any difference in the recorded data, it will automatically send a short message explaining the patient's abnormality.

I. INTRODUCTION

Individuals are very concerned with tracking their individual health records and keeping it tracked. Diabetes mellitus and blood pressure are the most common chronic diseases, and are particularly common among the elderly. In a Department of Health and Human Services publication, it is stated that in order to keep blood glucose and blood pressure at a stable level, people with diabetes and blood pressure need to maintain a balance between three essential aspects: diet, exercise and everyday routine medicine. Thanks to the simple use options, the quality of the applications, smartphone use is increasing day by day. This is the one that will be very helpful and secure in helping users find suitable doctors for the particular issue. The aim is to allow the patient to obtain all the necessary details such as availability, about the doctors who are skilled in the problems.

II. EXISTING SYSTEM

In the existing system, consulting any doctor is very tiresome task for the patient. As people are now days more advanced they are expecting everything in their hand in seconds ,in that case medical too added .There are many cases where the patient is unable to find out appropriate doctor for his disease, this become even worse if there is an emergency especially when the patient is in an unknown rural area. This situation might make the patient in the critical time. Even knowing the contact details of the doctor for required disease has become a very tough task. Sometimes doctor's schedule may get change din that cases patient's appointment might be called off. In some cases not be known by the patient due to lack of communication between the patients and the doctor. A doctor can have many patients in a day which becomes even more critical and tough for the doctor to intimate his schedule for each and every patient.Because of this time of patient get wasted and in the case of emergency it

may cause severe condition to the patient.

III. PROPOSED SYSTEM

Objective:

In this system the patients has to register in the application. After registration user will get a unique ID name. Patient can use this ID and to get the required information. Patient can search the doctors based on the categories listed in the application database. Here goes with combination of three modules. First module patient like diabetics is not possible to carry a care taker always so here goes with advanced system of carrying a button if in emergency purpose just make a press which make the immediate communication to the near -by hospital and ambulance in the near -by area will get a detail about the address too.

Second module which consists of regular database detail about the health issues and to make the note of doctor appointment details and drug they are in-taking day to day. If any emergency purpose if unknown doctor are pushed to take care of them to know about person regular activities this make it possible to handle them.

Third module consists of alarm alerts which is very useful for the old age people. Because as aged it will make them to forget about the medicine in -take so, the alarm makes to remember about the in-take should be taken. Alarm continues to arise until and then they take medicines. So the combination of these three makes the e-healthcare project more valuable.

Advantages in Proposed System

In this proposes an emergency alert with a healthcare application, so users can easily send their location and emergency message with the help of mobile SMS services. This application can have the way to store and show options of medical data of the particular users such as regular doctor and hospital details and vaccination details etc.

With the help of this application, users can easily

send their current location coordinates on depressed situation and also having track my location in our application.

Scope of the Project

The projects main aim is to provide the better usability application to elder peoples in emergency situations, so with this help of application users can send emergency message with location coordinates to reach their regular hospital and family members.

Highlights of Project Features

Existed applications only sends message to the hospital or faculty members, but our applications sends emergency message with location coordinates to identify the current location of the people who suffer in injury.

Architecture Diagram

Patient Prespective
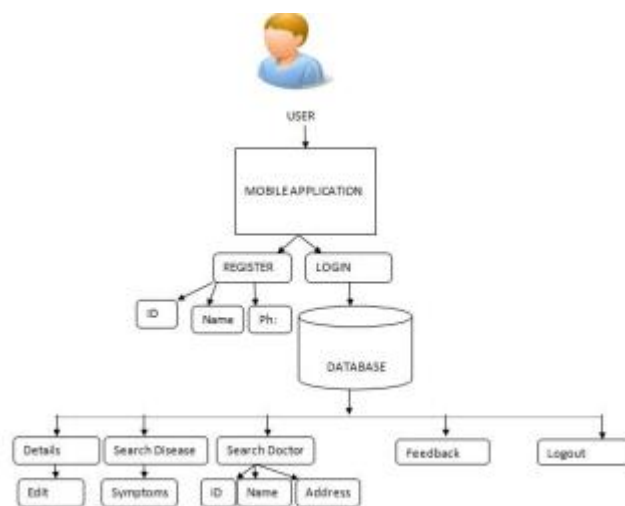
In patient perspective patient should make this possible by logging using user id and password. And to enter all the basic patient details if they are undergoing if before.

And if there is any medical issues or operation undergone patient should enter in the database and keep updating database so that it will help in the case of the emergency purpose. And most important personal details should be mainly updated and make
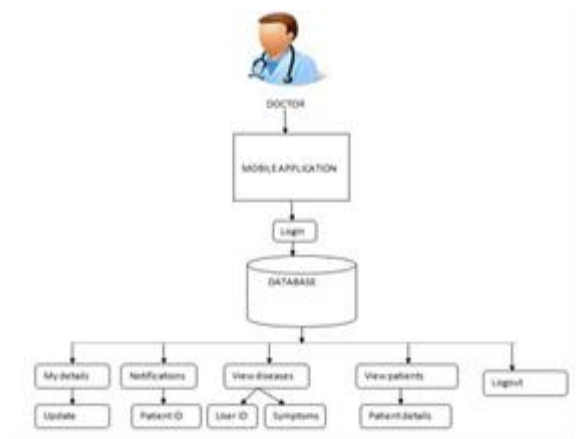
sure.

Admin Perspective
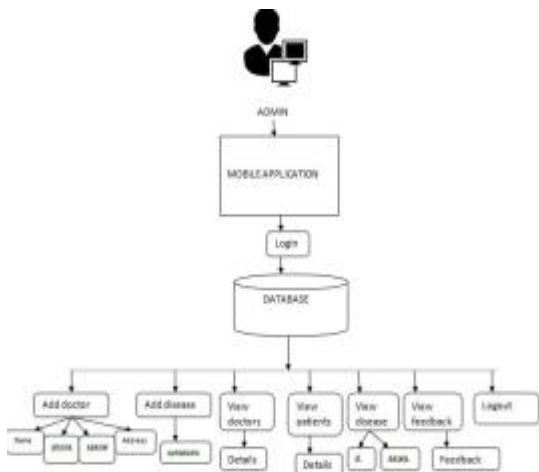
Admin is the one who handles the information about both doctors and patient. Admin's main work is to update details about daily availability for appointment doctor and to satisfy the needy of the patient's issues.

Admin is the one who add doctor and satisfy the needy of the patients.

Doctor Perspective

Notificaton enables doctor to make available to the patient who needs help. And doctor checks the patient's id so that particular speciality doctor are enable to engage. If any emergency purpose if doctor is in another emergency case the notified doctor will enable another doctor to attend the particular case immediately. This is most important part of the doctor's perspective.

E-Health Care Techniques

Privacy preservation in e-healthcare environment: review of techniques:

Pseudonymization:

The aim was to change the data to delete any details that would identify a particular patient. The sanitization of patient information enables patient trust in e-Healthcare organizations while also allowing the exchange of healthcare data without violating privacy for analysis.

Pseudonymisation was one of the earliest solutions to addressing privacy issues related to the identity of a person. The U.S. and EU are demanding the implementation of stringent controls for the use of these healthcare systems for privacy protection. Or put it simply, instead of using one's real identity for different tasks in the e-Healthcare system, a pseudo-identity is created or replace the real identity of a patient and other specific attributes. This persona is used to perform all consumer activities (i.e., sharing EHR with physicians and nurses, and prescription medicine). This identity cannot be tracked back to the user unless all the information, along with the reply to a pre-programmed secret question and details about encryption, is provided.

Privacy preserving access control:

Strict access control policies have long been seen as the best means of controlling access to information. Strict control of access to private information will help to safeguard privacy. Nevertheless, any single access control policy alone can not safeguard privacy for the whole e-Healthcare business.

The solution in this regard is hybrid access control (i.e., the use of two or more access control policies to help establish a safe and managed access mechanism). Access control is important for maintaining privacy, since it enables a user to decide who has access to their information and to what degree anyone can use it.

In principle, access control, when combined with data anonymisation, solves the privacy issue by hiding the identity of the user while also controlling the flow of their information. This resolved all of a patient's main concerns about PHI/EHR (i.e., preventing unauthorized access to PHI, storing and managing data anonymously, and exchanging data with outside third parties without violating the privacy of patients).
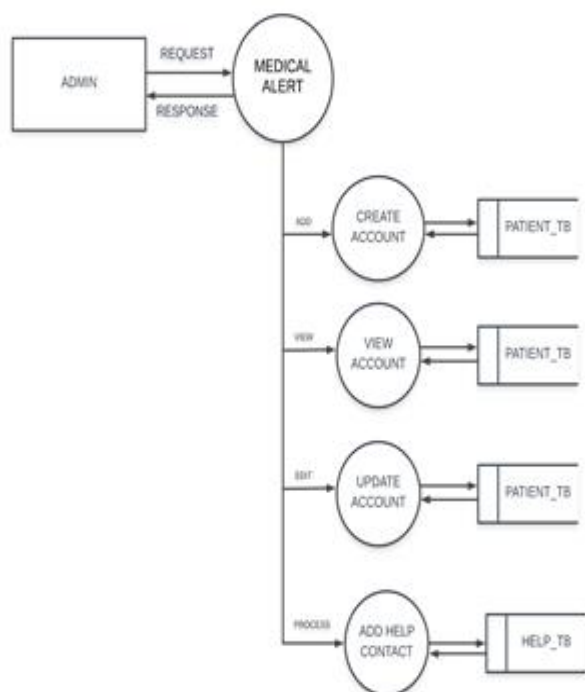
IV. METHODOLOGY

There may be various methodology :

i). Improvise application

ii).Sqlite Database

Experimental Results

V. IMPLEMENTATION

1. Registration Module

Every application need to create account to access their data so our application also having the registration form and users can registers their details so these details are stored into our application database.

2. Basic Module

User can click on your database detail name credentials into our application then this activity gives access whether you can update or edit info.
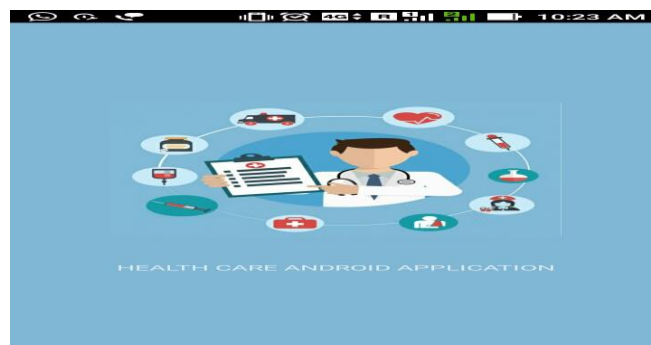
3. Upload Medical Report

This activity shows the patient's health report in our single application, in some emergency cases user medical report is needed to provide the quick response to the patient. In this module we used to upload the user medical reports in digital manner.
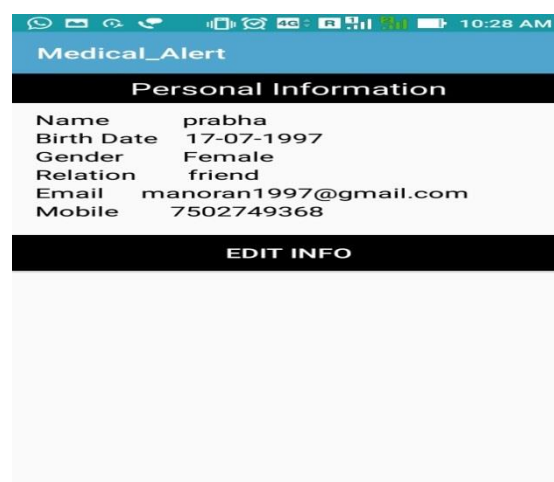

4. Pills Remainder

Pills remainder is our proposed activity to remained Pills details at the time of the need, so it's avoid the users to forget the tablet at the time.

5. Emergency Alert

Emergency alert is our another one proposal in our application, elder peoples are need this emergency alert because in our modern life style no one is here to monitor elder peoples, in case our application is helps these kind of peoples to contact their family members and hospital immediately in emergency situation with emergency alert message then it will helps users relatives to identify the location at the time of users emergency.
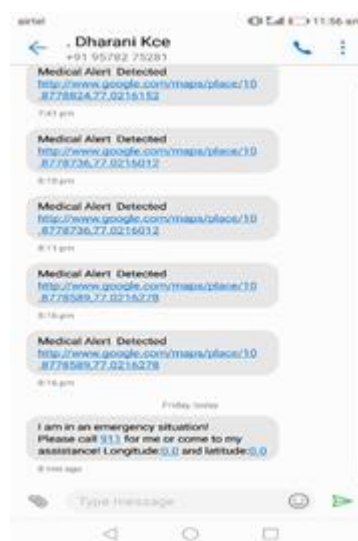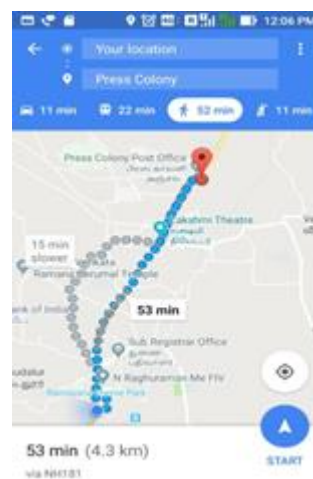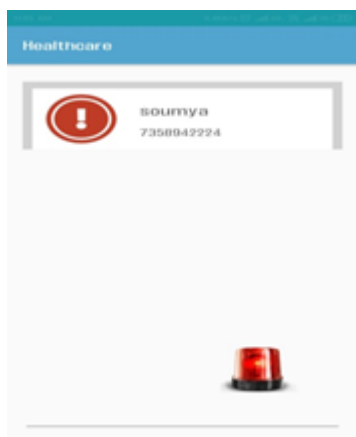
VI. CONCLUSION

Understanding the unique aspects of e-health care is key to strengthening the security of privacy. Privacy needs to be described in such a way as to take into account the particular e-Healthcare environment and the conditions of its patients. Time and time again, the lack of clear definition and understanding of privacy, regulation, inter-agency cooperation and conflicting priorities among partners have been the underlying issues in surveys conducted in various regions of the world. Most importantly, restrictions on privacy will ensure patients are the ones with access control over their PHI/HER.

The solution is to split the PHI / EHR patients into components based on criteria for privacy and access. Such compartmentalization allows better management as different protocols can be

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implemented for different sections of PHI / EHR. Lower-level components envisaged are patient profile (PP) for family members, patient health record (PHR) for hospital staff and treatment, medical insurance ticket (PIT) for healthcare insurance and financial management, and anonymized research data (RD) for healthcare analysis. In this way, a stable and privacy-preserving e-Healthcare organization can be built that enables the use of various protocols based on the security and privacy criteria of that information at different components of PHI / EHR.   This project was built on platform Android. In addition, numerous attributes have been applied to the project which will prove useful for the system's real-time use. Any store managers should implement this program and distribute it to their customers, who can use android. The product would be successful to all.

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