

Medi-Connect Smart HealthCare System Using Cloud Storage

¹ P. Velvizhi, ² M.Vaishnavi, ³ N.M.S.Vinitaa

¹. Assistant Professor, Department of CSE, K.L.N.

College of Engineering, Pottapalayam, Madurai (India)

^{2,3} UG Students, Department of CSE, K.L.N.

College of Engineering, Pottapalayam, Madurai (India)

ABSTRACT

In recent years, the Smart City concept has become popular for its promise to improve the quality of life of urban citizens. Most services in Smart Cities, especially in the Smart healthcare domain, require the real-time sharing, processing, and analyzing of large amount of data for intelligent decision making. Storing data in Cloud allows data accessing easily in the internet instead of storing it in your hard disk. Using the data storage algorithm the large amounts of data are stored in efficient way. With this method of storing data being less time consuming which increases the security of the data and helps in easy ace Pervasiveness of smart phones and m-Health, extends better monitoring on health. Using this method we develop a medical application which stores and secures all the data in the cloud. This application helps the user to connect easily with the medical world. The information of the users are fully protected.

Keywords: Cloud storage, Data protection, security, Smart Healthcare

INTRODUCTION

Access through the application helps a user-friendly way of communication. A strong infrastructure is necessary to connect and access smart-health care services. The cloud service support the user to access Internet, Storage and can offload tasks like sharing, analysis from mobile app to cloud resources. Mobile cloud storage is a form of cloud storage that is accessible on mobile devices such as laptops, tablets and smart phones.

Currently, the scenario is such that the patient who's suffering from any disease has to go to the doctor's clinic in order to book an appointment. There is no such software that can tell the patient what disease he/she is suffering from based on the symptoms given. Through this, the system will make all the empty slots visibly available to the patients, which are booked by the name of any particular patient. Maintains a database history of all the patients. Additionally the application also locates the location of the hospitals which are located nearest to the users. The cloud storage providers are responsible for keeping the data available and accessible, and the physical environment protected and running. Storage availability and data protection is intrinsic to object storage architecture, so depending on the application, the additional technology, and effort and cost to add availability and protection can be eliminated.

II. LITERATURE SURVEY

2.1 Title: Mobile Cloud Based Big HealthCare Data Processing in Smart Cities

This paper collects a large amount of data and processes it in Cloud so as to make it easy for its access from anywhere at anytime. Ant Colony Optimization algorithm helps in efficient processing of data and reduces the execution time.

Disadvantages: The task execution time can still be reduced using a better optimizing algorithm.

2.2. Title: Online Prescription Portal for Patients Assisted by Doctors

This paper helps in storing the prescriptions mentioned by the doctors. All the prescriptions of the users are stored for the purpose of reference in the future. The prescriptions can be viewed even if the user is offline.

Disadvantages: Only prescriptions can be viewed no further queries can be discussed with the doctors.

2.3. Title: Medication Remainder and Healthcare-An Android Application

This android application helps the user in reminding them about their medications regularly every day. It reminds until the user takes their medicines. It also reminds them about their next appointments with the doctors.

Disadvantages: It shows only remainders rather than providing any notification.

III. METHODOLOGY

3.1. User Perspective

Register and Login:

Users will have to register into the application on their first use. All the details of the users are collected and stored in the database. After the registration, they will have an individual username and password to easily login to the app during the time of usage. All the information provided is kept secured.

Location Identification:

The application helps to locate the hospitals nearest to the users. With the help of GPS the current location of the user is located with which the nearby hospitals are located. Users can select one of these hospitals and find appointments to that hospital according to their convenience.

Appointments:

After finding the best suitable hospital the appointment for those hospitals can be booked. The application form of the hospital is filled. The appointment form consists of user information, time and date of appointment. After the details are filled the appointment is fixed. The notifications of the appointments fixed are viewed.

3.2. Third Party Perspective (TPA):

The TPA coordinates both the users and the doctor's details by providing the necessary information for both of them. Only TPA has the rights to add and remove the doctors depending on the requirement. New diseases can

also be added which enables the user to find out the doctors specialized to treat that particular disease. It maintains all the user details and hospital records.

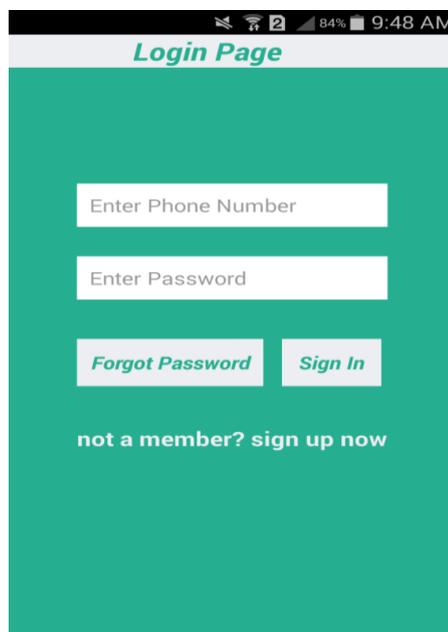
3.3. Cloud Storage Processing:

Ant Colony Optimization is a meta-heuristic algorithm that uses behavior of virtual ants to build a heuristic solution. It greatly decreases the selection of probability of poor solutions. By using Google Cloud Messaging we upload the data in form of Application and process it. It helps to decrease the task execution time.

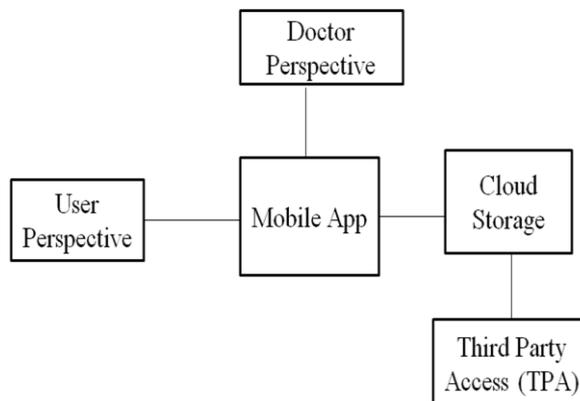
3.4. Doctor Perspective:

List of all the diseases are disease it will preview the particular disease. If further the nearest hospitals will be

viewed. On selecting any one of symptoms and remedy of that treatment is required appointment to provided.



IV. BLOCK DIAGRAM



V. SCREEN SHOT

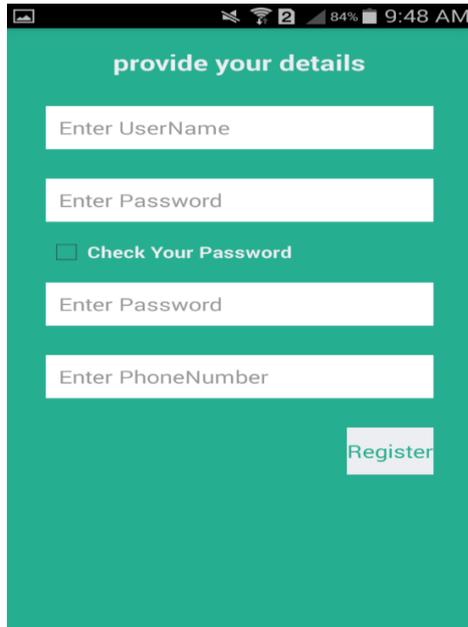


Fig: 1 Registration

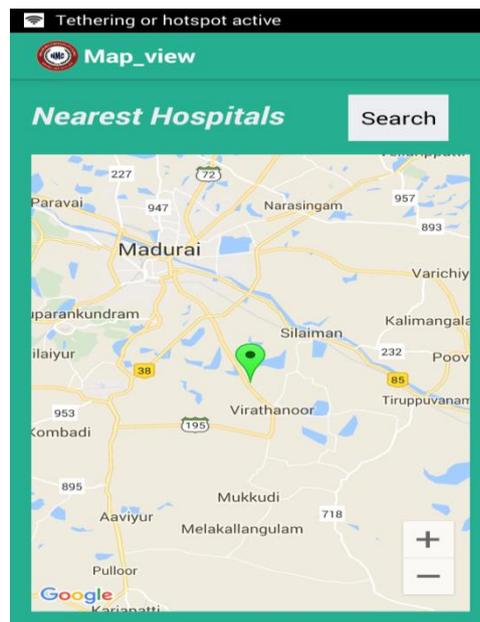


Fig: 2 Login Detail



Fig: 3 Location

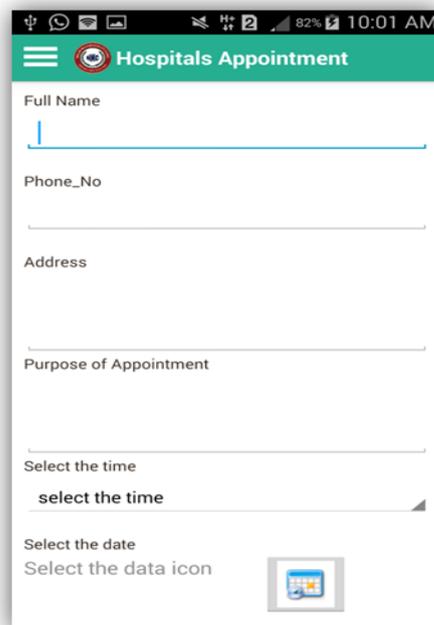


Fig 4: List Of Hospitals

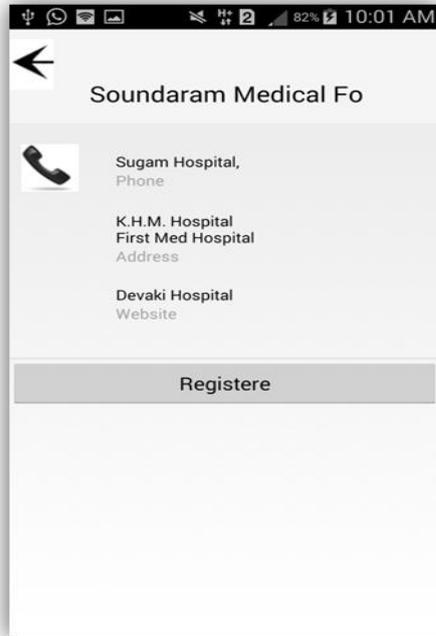


Fig 5: Hospital Details



Fig: 6 Appointment Form



Fig: 7 TPA

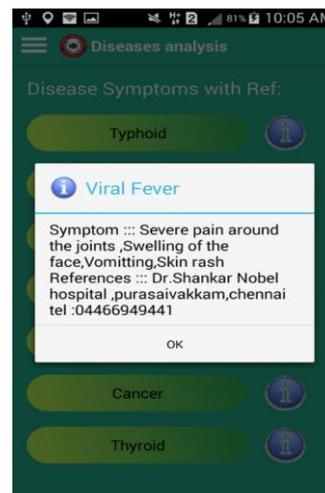


Fig : 8 Disease Analysis

VI. CONCLUSION

This system is very useful for the doctors as well as the patients. The doctor can manage his appointments as well as his time and can take care of the patient's history. The patients do not have to go to the doctor's clinic for treatment. Patients can now find the nearest hospitals instead for travelling a long way to the hospitals. The details stored in the cloud are secured and protected.

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