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## Global Hospitalization

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**Abstract**— Nowadays we come across various scenarios where the person facing accidents don't get proper medication and treatment at the required time. So we are introducing a system that can efficiently cope up with the situation, by reducing the time taken. This can be done by using our mobile devices and a cloud system. Mobile devices are common and mobile internet access is increasingly possible everywhere in daily life of modern people. Commonly used mobile operating systems are Android, iOS and Windows. Android stands out with its open source nature and working capabilities on inexpensive mobile devices. Real-time location tracking is for example, continuously monitoring a vehicle or a person by using obtained coordinates with GPS, Wi-Fi or Cell-Id. To demonstrate our own cloud created on a virtual machine. This cloud system can be accessed by another machine to store and retrieve the stored files at any time. To demonstrate a Centralized Medical Locker System this is Secure. It contains personal medical document of each person. The locker has an authentication which is link up with its unique identification number. A SOS system which consists of Real Time Tracking System and Real Time Data Transfer System. And an Anti-Lock System (for default Android Lock system) that can bypass the android lock without compromising the overall security.

**Keywords**— sos, IaaS, Gps, PaaS, ATM

### I. INTRODUCTION

Nowadays Accidents are the major cause of deaths which include a major share where the person does not get Proper treatment in Time, such as lack of test reports. So there should be proper time management for all the causalities. To avoid repetition of tests a centralized system was required. In this project we would like to demonstrate a centralized Medical Locker System which can hold confidential data (Medical History) Securely. The Centralized Locker System can be viewed using a Web Page or an Android Application.

The SOS system which uses a Real Time GPS Location Tracker which is optimized and can correlate the Location Of a user with respective to nearby Hospitals for emergency situation, that to at a rapid pace. The proposed SOS system will also deploy the Saved data from the Centralized Locker to the nearby hospitals for them to be ready with the requirements specified from his history (such as Blood group, Allergies, etc.). So that it can reduce the overall time of the procedures.

### II. LITERATURE SUREVY

In recent years growth of accidents are increased and the victims are not getting proper treatment in emergencies. In such a situation to get a proper help in time and reduce time delay so that a patient gets adequate treatment in time we propose this system called Global Hospitalization.

#### [1] Location Based Services using Android mobile Operating System, year 2011, IJAET

The motivation for every location based information system is: "To assist with the exact information, at right place in real time with customized setup and location sensitiveness". In this era we are dealing with palmtops and iPhones, which are going to replace the huge desktops even for computational purposes. We have vast number of applications and consumption where a person sitting in a roadside café needs to get relevant data and information. Such needs can only be serve with the help of LBS. These applications include security related jobs, general survey regarding traffic ornaments, decision based on vehicular information for validity of registration and license numbers etc. A very appealing application includes monitoring where instant information is needed to decide if the people being monitored are any real risk or an erroneous target. We have been able to create a number of different applications where we give the user with information regarding a place he or she wants to visit. But these applications are limited to desktops only. We need to bring in them on mobile devices. We must ensure that a person when visiting places need not carry the travel adviser with him. All the information must be available in his mobile device and also in user customized format.

A location-based service (LBS) is a software application for a IP-capable mobile device that requires knowledge about where the mobile device is placed. Location-based services can be query-based and provide the end user with useful information such as "Where is the nearest ATM?" or they can be push-based and deliver coupons or other marketing information to customers who are in a specific earthly area.

An LBS requires five basic components: the service provider's software application, a mobile network to channel data and requests for service, a content provider to supply the end user with geo-specific information, a locate component (see GPS) and the end user's mobile device. By law, location-based services must be permission-based. That means that the end user must opt-in to the service in order to use it. In most cases, this means installing the LBS application and receive a request to allow the service to know the device's location.

**[2] OpenStack and CloudStack: Open Source Solutions for Building Public and Private Clouds ,year:2014,IEEE**

Cloud computing is a new computing model that bear together all disciplines, technologies and business models to deliver Information Technology (IT) resources on-demand Infrastructure as a Service (IaaS), where the equipments are provided in the form of virtual machines.The client keep the applications, runtime, integration SOA(Service Oriented Architecture), databases, server software while the supplier keeps the virtualization layer, server, storage, and network hardware. Among the main actors of IaaS, we find Amazon EC2, Rackspace, GoGrid.Platform as a Service (PaaS), user can develop his own applications using the facility provided. The client maintains only his applications, while the supplier maintains all the cloud stack from hardware up to application repository. We have among the key players: Google Apps Engine, Windows Azure.

**[3] Android Application Developed to Extend Health Monitoring Device Range and Real-time Patient Tracking,year:2013,IEEE**

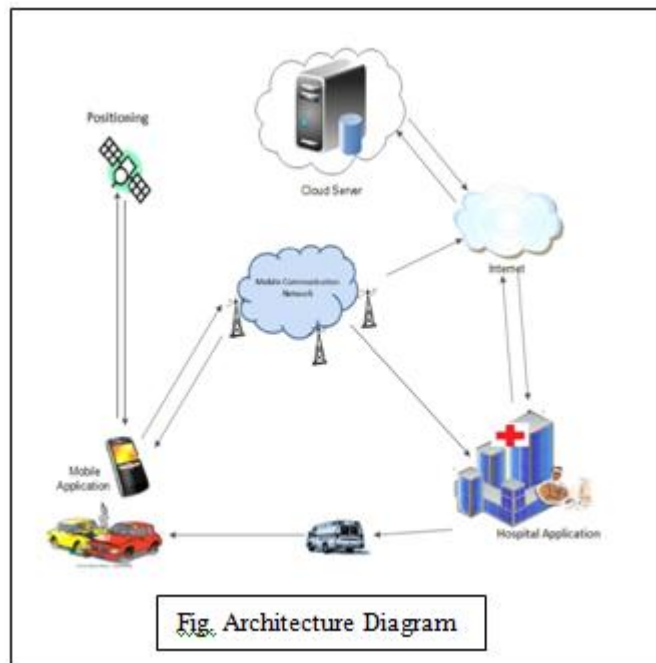
For development, Google Maps API provides a number of services for adding individual content to the Google map. A-GPS is acquire by mobile operation companies as the highest accurate positioning way in mobile location based services.We have successfully completed our monitoring system with Android software necessary to transfer data, track the patient and send text message alerts using mobile phone. This feature is important for this project because we can real-time monitor people at risk even outside of their home.

**III. EXISTING METHODOLOGY**

In this existing system, It observed that people in unknown area are in severe danger if they don't able to find hospital speedily. In emergency case a single minute counts so it is very important to develop an automated system.

**IV. PRAPOSED METHODOLOGY**

A description of the program architecture is presented. Subsystem design or Block diagram, Package Diagram, Deployment diagram with description is to be presented.



There are 6 components in the architecture of Global Hospitalization.

**Cloud Server:**

The cloud Server is a remotely placed storage system that stores all the information of users in a secure format. It needs to save the data in encrypted format respective to its users and providing access to it 24/7.

**Internet:**

The Internet plays as a bridge between the Cloud Server and the other components. The users use internet to gain access to cloud and for the location based services. The hospital also uses internet to gain access to the services using internet.

**Hospital Application:**

The hospital Application provides access of each of the user's data to the hospital whenever a distress signal is made by the users. The data can be retrieved by the hospital contains all of the patients medical history and related data.

**Mobile Application:**

The mobile application is the interface for users to send and receive data to the Cloud server using internet. The device uses Location Based Services to track down the current location of user as well as the nearest available hospital in case of distress signal processing.

The Mobile application provides the user to view his data at any time for any time. It is an essential part of the overall system as it is directly being used by the user.

**Positioning:**

The positioning system is used to locate the user's location as well as nearby hospitals very quickly. It uses satellite tracking system to find geological distances between the source and destination. It can play a major role while protecting someone's life in case of emergency situations.

**Mobile Communication Network:**

The mobile communication network plays an important role to process data between all other systems. It also allows a user to send a call request for help if he does not have internet access in emergencies.

This overall makes a structure that allows for a feasible network of communication for fast access as well as a secure and reliable way to provide necessary actions and quick pace work to all users and the doctors to operate on the provided case.

**A. Client Side**

1. Graphics User Interface of Global Hospitalization for filling personal and medical information on cloud.
2. Graphics User Interface of Global Hospitalization for editing the information and updating it on server.
3. Emergency will be selected that is accidents, heart attack ,burn case and so on and send it to server.
4. Also contains some user useful services like Tracking Blood Bank and Clinic Module

**B. Server Side**

1. Then client accepting request, server gets activated and searches out nearest hospital.
2. It tracks out location of patient.
3. It fetches the coordinates and type of emergency from client.
4. Search Nearest hospital depending upon variables.
5. Add the all hospital information into database which is present on cloud and update it regularly.
6. Generate record of patient by pressing the emergency button of phone in case of emergency and send it to selected hospital for pre-medical treatments.

**Database description-**

For implementing the application or for the back end process of the application

MYSQL as the DBMS is used. The application is based on Data mining concept.

Dataset required for implementation is from student information dataset about academic.

For creating the database or dataset MYSQL is installed. SQL is a special purpose programming language designed for managing data held in a relational database management system (RDBMS).

**V. ADVANTAGES**

1. High level of security.
2. Protect confidential and private information.
3. Time Saving in emergency cases.
4. Quick Access to centralized data storage.
5. Easy to manage locker.
6. User Friendly

**VI. APPLICATIONS**

1. In Historical Data saving.  
The cloud is used to stored document of patient,so stored document can be access anytime.
2. Useful for Society in Emergency situation.  
If society people having any kind of emergency situation they can take help of this application.
3. A place to store Document online with privacy.  
All document stored on cloud are secure because of strong authentication.

**VII. CONCLUSION**

Global Hospitalization is a key factor playing an important role towards the successful adoption of mobile healthcare systems. GH serves the chronic patients withmore convenience and safety by providing medical details of patient for

premedical treatments. GH can be also used by people to keep and maintain their health record on cloud for convenience and safety and fortune work is Implement Nearest Distance Tracking Algorithm, Tracking Different Parameter like Blood module, health centre Module. Hospital Information Maintenance and database update, Deployment on Cloud Improve the Graphics User Interface.

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