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### **System Monitoring For Medical Assistance Using Android Application**

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**Abstract :** In the last decade, many useful applications for mobile devices are designed to deal with health care issues under Android platform. In propose system, an emergency service for mobile devices will be designed. In this, the position function of Global Position System (GPS) and a user friendly interface which will track the location of ambulance is provided. The application is capable for sending emergency notification or phone calls are also included. Nearest hospitals which provides ambulance service are also enlisted with their respective contact details. We would be able to connect people with this provided service for emergency service and we can also provide basic information about blood request send to blood donor and get blood for user easily.

Keywords: GPS, Hospital, QR code, capable, enlisted, track.

### I. INTRODUCTION

Android phones helps user to provide solutions to many problems related to their day to day life. Now-a-days there are many application of android which helps user to provide solutions to many problems related to their day to day life. A QR code is a type of barcode that can hold more information than the familiar kind scanned at checkouts around the country. The QR stands for quick response, a reference to the speed at which the large amounts of information they contain can be decoded by scanners. They were invented in 1994 in Japan and initially used for tracking shipping. As the code can be easily decoded by the camera of smartphone, this technology is increasingly accessible to the average person. Instead of tracking car parts and packages, the codes can be used to store information of user. A QR code acts as a link embedded in the real world, integrating it with the virtual computer world. In critical or emergency situations where accident occurs or during on-going treatments and surgeries etc there is urgent need for specific blood group. It requires lot of time to make the blood available and it is inconvenient during emergency situation, some rare blood groups are time consuming and difficult to arrange which are O-, AB- etc. In our country there is less awareness of blood donation, near about 20.In propose system, we have proposed an efficient way to overcome problems in existing system. We are using Global Positioning System (GPS) for tracking of nearest blood donors to blood banks. It requires GPS supported android device with application installed on it for the user. Emergency medical response in India is lagging behind other countries. This is partially because of lack of technology implementation at ground zero. To address the issue, we are introducing smart ambulance system. It would take India to competitive position in emergency services around the globe. Over the last few years there is a revolutionary development in the field of Information Technology (IT). It can be used seamlessly widely in large number of end system where subset of a large amount of data can be accessed and processed easily and powerfully. IT and smartphone technologies helps in building a platform which serves every smartphone user. The application collects location information from Global Positing System (GPS). System uses Google Map Application Programming Interface (API) to plot details of the ambulances on the Google Map Client of the Smartphone App.

### II. LITERATURE SURVEY

Paper Name: A SMAERT PHONE-BASED POCKET FALL ACCIDENT DETECTION, POSITIONING AND

RESCUE SYSTEM

Author: Lih-Jen Kau, Member, IEEE, and Chih-Sheng chen

**Description**: we have a tendency to propose during this paper a novel formula as well as architecture for the fall accident detection and corresponding wide area rescue system based on a smart phone and also the third generation (3G) networks. to realize the autumn detection algorithm, the angles acquired by the electronic compass (ecompass) and the waveform sequence of the tri axial accelerometer on the smart phone are used as the system inputs. The acquired signals are then used to generate an ordered feature sequence so examined in a sequent manner by the proposed cascade classifier for recognition purpose. Once the corresponding feature is verified by the classifier at current state, it will proceed to next state; otherwise, the system will reset to the initial state and expect the looks of another feature sequence. Once a fall accident event is detected, the user's position will be acquired by the global positioning system (GPS) or the assisted GPS (A-GPS), and sent to the rescue center via the 3G communication network so that the user will get medical help immediately. With the planned cascaded classification architecture, the computational burden and power consumption issue on the sensible telephone system will be eased. Moreover, as we will see in the experiment that a

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distinguished fall accident detection accuracy up to ninety two on the sensitivity and ninety nine.75% on the specificity will be obtained once a group of 450 check actions in 9 different sorts of activities area unit estimated by using the proposed cascaded classifier, that justifies the prevalence of the proposed algorithm.

### Paper Name: Vehicle Positioning using GSM and Cascade-Connected ANN Structures Author: Milos Borenovic, Aleksandar Neskovic, and Natasa Neskovic, Member, IEEE:

**Description:** Procuring location info for intelligent transportation systems is a popular topic among researchers. This paper investigates the vehicle location algorithm based on the received signal strength (RSS) from available global System for Mobile Communications (GSM) networks. The performances of positioning models, that consisted of cascade-connected (C-C) artificial neural network (ANN) multilayer feedforward structures employing the space-partitioning principle, area unit compared with the single-ANN multilayer feedforward model in terms of accuracy, the number of subspaces, and other positioning relevant parameters.

C-C ANN structures build use of the fact that a vehicle can be found solely in a subspace of the entire environment (roads) to improve the positioning accuracy. The best-performing C-C ANN structure achieved an average error of twenty six m and a medical error of but five m, that is correct enough for many of the vehicle location services. using the same RSS info obtained by measurements, it was shown that the planned model outperforms

kNN and extended Kalman filter (EKF)-trained ANN positioning algorithms. Moreover, the presented ANN structures replace not only the positioning algorithms however the overloaded map-matching process as well.

### Paper Name: Automatic Accident Detection and Ambulance Rescue With Intelligent Traffic Light System Author: R Jeevana Jyothi, VVGS Rajendra Prasad, N Anuradha

**Description**: today the road accidents in trendy urban area unitas are exaggerated to unsure level. The loss of human life thanks to accident is to be avoided. holdup and current area unit major facts that cause delay to auto. To bar loss of human life thanks to accidents we have a tendency to introduce a theme known as ITLS (Intelligent stoplight system). the most theme behind this theme is to produce a sleek flow for the emergency vehicles like auto to achieve the hospitals in time and therefore minimizing the delay caused by holdup, the concept behind this theme is to implement ITLS which might management automatically the traffic lights within the path of the auto. The auto is managed by the control unit that furnishes adequate route to the ambulance and conjointly controls the stoplight in keeping with the auto location and therefore reaching the hospital safely. The controller identifies the placement of the accident spot through the sensing element systems within the vehicle that determined the accident and therefore the controller walks through the auto to the spot. This theme is absolutely machine-driven, therefore it finds the accident spot, controls the traffic lights, serving to to achieve the hospital in time

## Paper Name: Impact of auto Dispatch Policies on Performance of Emergency Medical Services Author: Cheng Siong Lim,, Rosbi Mamat, Thomas Bräunl

**Description**: In auto location models, fleet size and auto location sites area unit 2 important factors that emergency medical service (EMS) managers will management to make sure economical delivery of the system. The ambulance relocation and dispatch policies that area unit studied in dynamic ambulance relocation models conjointly considerably contribute to rising the time interval of EMS. during this paper, we have a tendency to review dynamic auto relocation models from the attitude of dispatch policies. The affiliation between the reviewed auto dispatch policies and real-life policies is highlighted. Our auto model relies on the changed outside covering location downside (MCLP). it's accustomed examine the ordinarily used dispatch policy and also the planned methodology of free-ambulance exploitation to further improve pressing decision time interval. Simulation results show that the proposed methodology will scale back the time interval of pressing calls, especially during low-ambulance-supply amount. we have a tendency to conjointly compared the performance of EMS with and while not reroute-enabled dispatch.

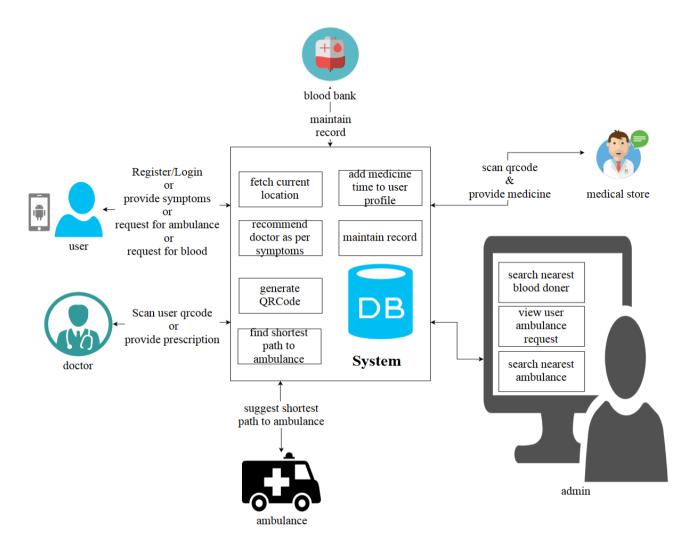
#### III SYSTEM OVERVIEW

In propose system contain different users they are as follows: (1) User/Patient (2) Doctor (3) Medical Store Owner (4) Blood Bank / Admin (5) Ambulance Driver.

In propose system user register into system with personal information. System encrypt user information by using AES algorithm, and generate QRcode of encrypted information. User provide symptoms and search doctor. System suggest doctor on the basis of symptoms and current location. User request doctor for appointment. User share his personal QRCode with doctor, doctor scan patient QRcode. System decryptQRcode information. Patient information will show to doctor. Doctor provide prescription, this prescription encrypted with AES and generate QRCode; send to new generated QRCode to user register mail id. User showQRCode to medical store. Medical store owner scan new QRCode, and provide medicine as per prescription. System add time table into user profile. System provide reminder of medicine. Admin or blood bank search nearest blood donor in emergency situation. Admin call nearest user for blood donation.

User request for ambulance. Ambulance request goes to admin. Admin search nearest ambulance and inform to driver about user location. Ambulance driver view allocated request and get navigation as per user location

#### IV.PROPOSED SYSTEM



#### **V.CONCLUSION**

Propose system is useful to searching nearest doctor as per symptoms and location. Most of time doctor handwriting is hard to read. Wrong medicine can be dangerous to patient so doctor prescription converted to QRCode. Medical store owner provide medicine as per prescription. System also helpful into emergency situation such as blood collection and ambulance requesting.

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