Ambulance Alerting with Location Tracking and SMS Alerting Through GSM Network

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Abstract— The era of Information technology has become a crucial part of our dynamic life for every human being in the world and usage of smart phones is rising exponentially. Elderly peoples who are unable to provide accurate information and utilize the emergency phone calls, users whom find themselves in an unknown location that can't be described or provide an accurate address when emergency occurs, casualties which caused by the late arrival of ambulance and searching for an available nearby ambulance have been some of the hustling factor that faced by current fast pace community. With more congested roads and insufficient information, the search and rescue operation become nearly impossible. This Android based mobile application project will totally change the native way of calling an ambulance and it will be more efficient and reliable for the emergency medical services (EMS). This app will help the user to get any available ambulance without calling the hospitals to check for the ambulance availability. The app reacts with just one tab on the button and it will send the notification of user's details and location via GPRS to nearby ambulance control centre. Then it's the authority's hand to approve the requested notification. Once the request is accepted, the GPS location will be sent to the ambulance driver which will lead to the user location.

Keywords: Vehicle, Live Location Alert, Location Identification, Tracking, GPS

I. INTRODUCTION

There is a steep rise in the number of accidents and deaths due to accident because of drastic increase in the number of vehicles in last few years. There are also major deceases like heart attacks, strokes, such things happens suddenly and can target anyone. According to W.H.O. (World Health Organization) every year around 1.25 million people loss their priceless lives due to car accident. India alone has 1% of the total roads in the world. But the accidents recorded on Indian road are 16% of the world's road accident. There are many possible reasons for these such as drastic increase in the number of vehicles without any increase in the road quality and facilities that is essentially required for it.

The safety of people lives is a major concern nowadays, there are ambulances and fire brigades which helps us in such situation, but are they really helpful? are their services are utilized, do they come on time ? there are such various questions , for all such things there can be only one answer which can solve this problem and can save lives of millions of people. We need to have GPS enabled vehicle tracking system for ambulances to ensure their safety as well as their live location sharing, so that people near by the emergency can contact the ambulance driver and can see the live location of the ambulance. This system can be found in various places like consumers vehicles as a theft prevention and retrieval device. People can follow the signal emitted by the tracking system to locate their vehicles. Generally this system is meant to be installed for all the ambulances of private and public ownership so that no lives can be forced to death by human errors like reaching late or unable to find the correct location.

A. *Features*

Ambulance can AUTOMATICALLY receive:

1) A text message
2) Exact time of the alert triggered
3) Your location (with map link)
4) The battery level of your phone

And the receiver will get the live location of the ambulance and can track it by maps.

II. PROPOSED SYSTEM

To enhance and avoid these problems, an Android app with built in GPS technology will be utilized by the patient to send coordinate and user details to the ambulance driver's device, Which will be installed to all the ambulance's device hence able them to locate and reach the user in no time.

Fig. 1: System Architecture

A. *System Requirements Hardware Requirements:*

System: Intel I3 Processor or Above
Hard Disk: 20 GB.
Ram: 4 GB

B. *Software Requirements:*

Operating system : Windows 7 and above.
: JAVA, ANDROID
Database: MYSQL

C. *Advantages:*

App will help needed person so that they can get help by reaching to them on time at earliest. Govt. Department can work efficiently by using this app. Cost of GPS devices are reduced significantly now a days. Easy Installation with no setup fee will motivate users to use this app, and simple user interface is built so that people from villages as well as cities can access the app more efficiently and easily.

III. CONCLUSION

With this kind of app we can access to needy people on time with live location tracking of the ambulance so that millions of people lives can be saved, simple to use app with great functionality for great cause will lead this app to get instant success, as human behavior is to promote things and products that are useful for them, hence we can save millions of lives daily by reaching to the accidental area and can rescue people lives by great extent.

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