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Emergency Response Application

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Abstract: ***The usages of smartphones are rising exponentially and it proved to be the world's leading solution for every problem. Traditionally, peoples are not accurate enough to utilize the emergency phone calls, as they can't provide an accurate location when emergency occurs due to which the search and rescue operations become nearly impossible, causalities which caused by the late arrival of ambulance become the husting factor that faced by current enthusiastic community. This Android based mobile application will totally change the perception of calling an ambulance and it becomes more accurate and the main advantage is that it saves a lot of time as it overcomes the drawback of the previous system and inherits the advantages of them.***
Keywords: Adequate, Cut of time, Husting, GPS, Reliable.

I. INTRODUCTION

The actions and responses taken in the initial hour of an emergency are extremely critical so, it must be quick and efficient. But unfortunately it takes a lot of time, almost two to three hours. The reasons are many such as firstly, ambulance driver finds difficulty in locating the victim address; secondly, no one intelligent enough to stabilize the victims life before ambulance arrive; thirdly, in most number of emergency cases the victims are taken to those hospitals which adequate lack of facilities; lastly but not the least, in most of the road accidents patient need blood to survive so, blood need to be find quickly. To overcome this all drawbacks our application works in a different way. The application will help the needy to get any available ambulances without calling the hospitals to check for the availability. The application is easier to use and reacts with just one tab on the helping button. Using GPS technology application will send the accurate location to Hospitals, once hospital accepted the request location will be sent to driver which will lead to the needy location. The main aim and objective of the developing the application is to overcome the drawbacks of the native telephone calling and to make use of smartphones to ensure the persons safety.

II. CURRENT SYSTEM

In India, most probably current emergency medical response system is been managed by traditional way which is engaged by calling. Most of the communication takes place between the user and hospitals rely on calls to exchange the information about any kind of emergency. Most human operators used native way of dispatching system to send an ambulance. During communication system might record wrong information from the user or wrong data might be entered into the system. Even it's become difficult for the caller to report the accurate location. In the current scenario, user's has to report all the important information to the Hospitals. This information will consist of caller's name, location and emergency type[1].

A. Advantages

1) Users no need to have a smartphone system
2) Conversation is recorded to avoid mischiefs.

B. Disadvantages

1) User might accidentally provide wrong information
2) User can't provide the accurate location.
3) Ambulance driver find difficulty in locating address.
4) Will receive many fraud calls from and leads to misusing of the resources.

III. PROPOSED SYSTEM

To ensure the persons safety, an application with built in GPS technology will be used by the victim to send location's coordinate and user's personal information such as previous health records to the application used by the hospital end.

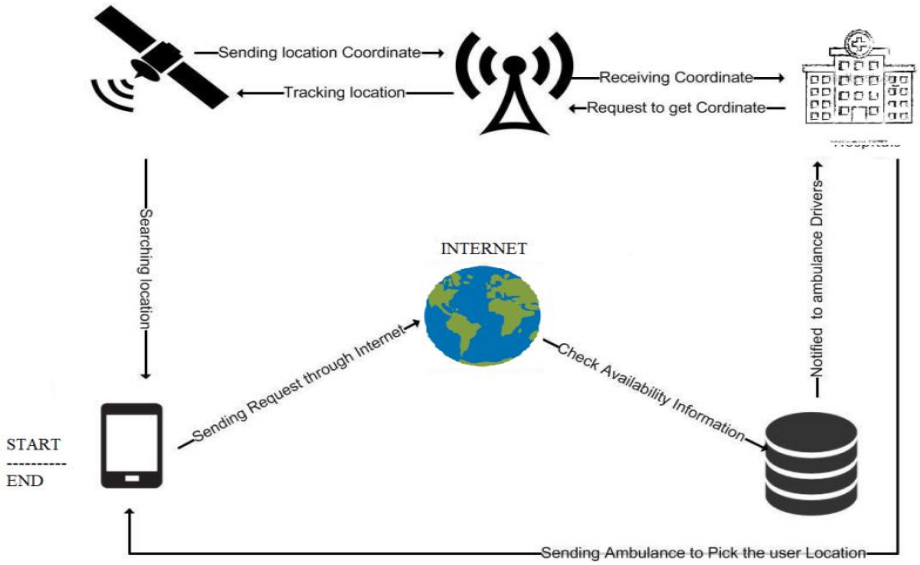


Fig: 1 System Block Diagram

After assigning the task admin will send the ambulance and its driver details to the user so that the user will get to know about the situation. For this Android system will be used for the development[2].

A. Features of the Proposed System

1) *It sends notification to hospital admin system:* By just taping a help button the notification will be sent to the nearest hospitals admin.
2) *Cut off time:* The user doesn't have to call and check for the availability of the ambulance driver.
3) *Use of GPS technology:* when you seek an ambulance using an application, your location will be shared via GPS technology.
4) *Safe and Reliable:* It allows you to store your health record and personal information with the application, so that the doctor at the destination hospital will be better prepared before you reach the hospital. As preparedness of great value in emergency cases!
5) *Cheaper*: As android application will be used so, user and hospital just have to install the application for the use and it only cost the internet charges.

IV. IMPLEMENTATION

The System mainly consists of the two modules User End and the Hospital End. To use the application the user has to first sign up. For sign up user has to choices using Gmail or using Phone Number. After user get sign up user has to feed the personal information such as Name, Age, Gender, Contact Number and the Aadhar Card for the validating the user.

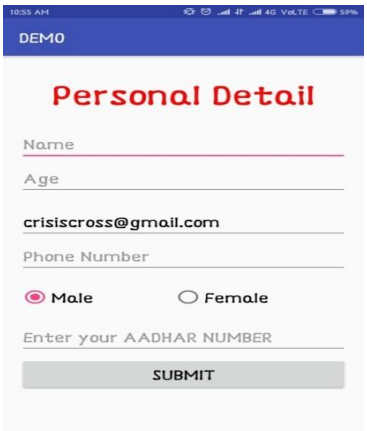


Fig. 2: User Details

A. User End Mainly Consists of The Five Segments:

1) *Front Page:* This part of an application consists of the Help button, user location details, hospital list, emergency contact, Health record etc.
2) *Help Button :* whenever the user is in distress situation user just have to tap the button after taping the button the user will navigate to the next page which consist of the Emergency type such as road accidents, electric current, fracture, etc. User will get 10 sec to press the button if user is unable to select the emergency type the application will automatically take the emergency type as extreme type.
3) *Hospitals List:* In this segment, the user will be able to see the active hospitals nearby them. All the hospitals will be viewed in a list view.
4) *Emergency Contact:* In this page user will create the network of emergency contacts. So one who cares enough about you to act immediately is your friends and family so they are the one who can step up for you. So, whenever there will be an emergency or if you don't have an internet this part of an application will help you to notify the family members in case of emergency.
5) *Health Record:* This segment of an application store the heath history of the users such as date of birth, Family doctors name, if user have any type of disease etc.

Fig. 3: Front Page

Fig. 4Emergency type

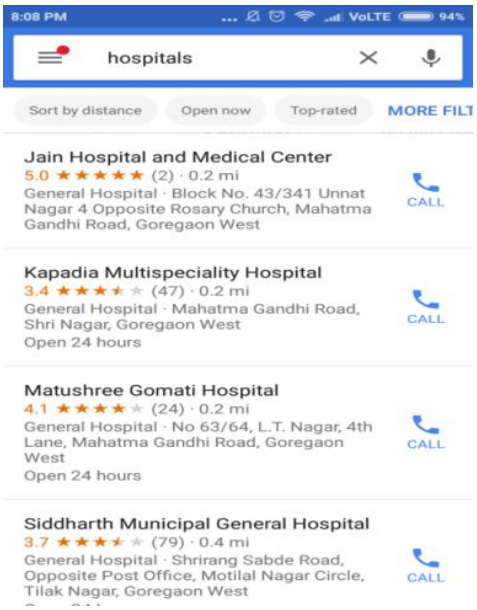


Fig. 5: Nearest hospitals

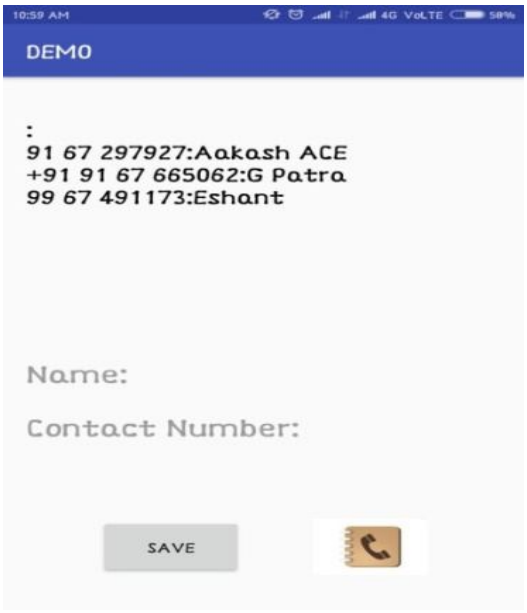


Fig. 6: Emergency Contacts

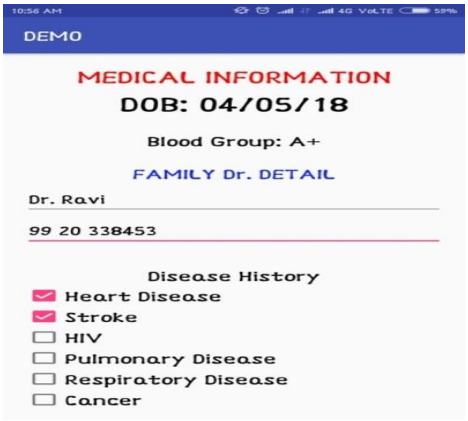


Fig. 7: Health records

Hospital End application will be installed by the hospital admin. To use the application the admin has to sign up. For sign up user has to choices using Gmail or using Phone Number. After getting Sign up admin has to write the Hospital Name and the Mail Id. Location will be feed automatically using GPS.

Fig. 8: Hospital Page

B. Hospital End Consist of One Segment

1) *Victim Details:* This segment will be displayed after the admin get signed up. All the request that we get from the victim will flashed on the screen. Admin can see the users detail by touching the name of the victim. After that it will navigate you to the screen where admin can view the user's details. It consists of Name, Age, Emergency type and Location. Admin has the button call Accept request. Admin can accept the request if ambulance is available. Even admin can press the spot icon to see the distance between the victim and the Hospital.

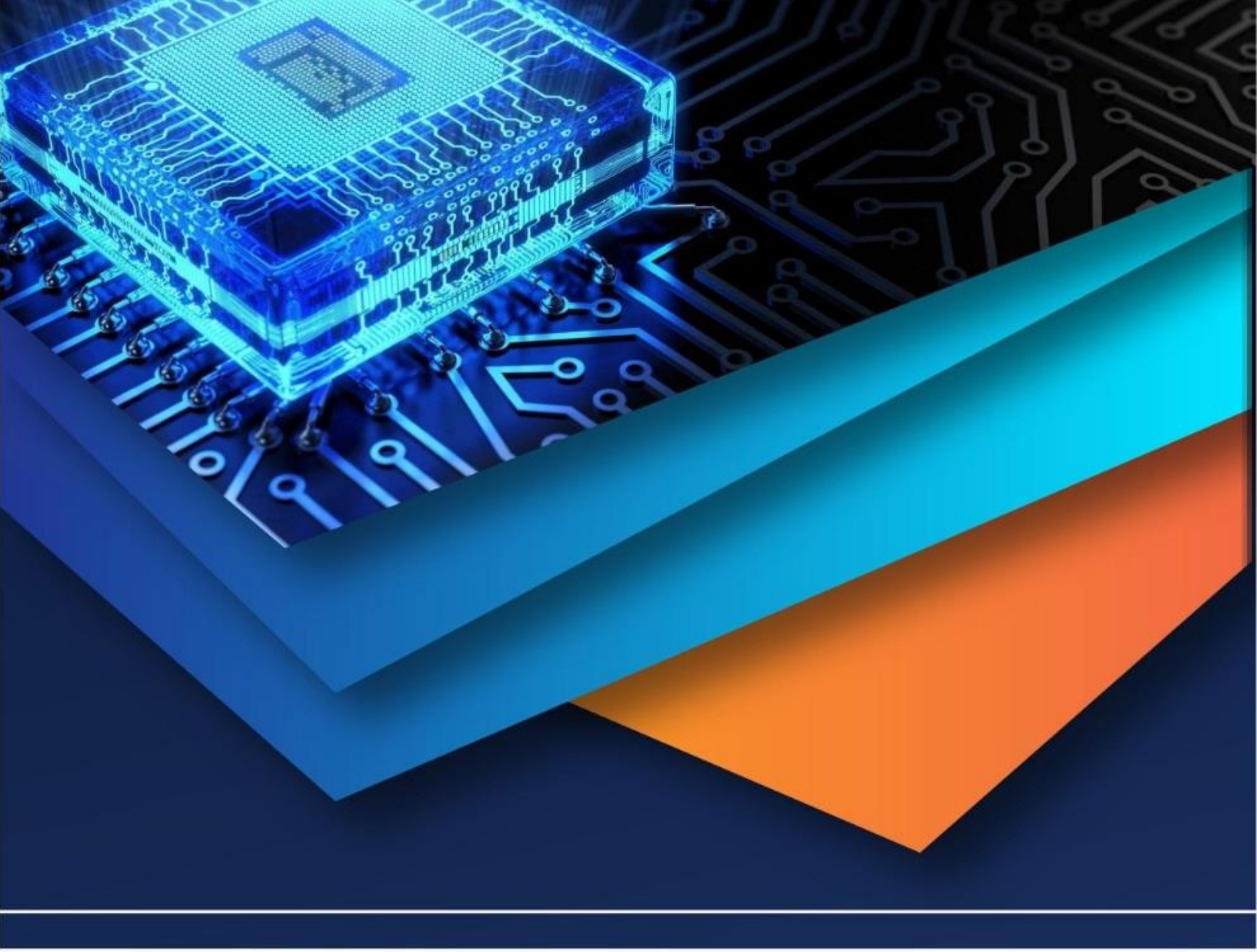
Fig. 9: Victim Request Page

V. CONCLUSION

In this paper, an idea is to ensure the person safety by assuring the first level support to the victim within first one hour of an emergency i.e. the golden hour. This application has been developed with main functionality which shows the working on the basic level. Global Positioning System (GPS) technology is implemented to reach the particular location, hospital and to save the life of victim. Hence, with a single tap all the problems related to the emergencies can be solved.

REFRENCES

[1] Mobile emergency system and integration. Proceedings - IEEE International Conference on Mobile Data Management, 2, pp.67–72.
[2] Ambulance emergency response application International Journal of information system and engineering Vol. 4, April 2016 ISSN:2289- 7615
[3] Emergency Service using GPS Tracking International Journal of Advanced Research in Computer and Communication Engineering Vol. 5, Issue 4, April 2016
[4] Ghaith Bader Al-Suwaidi, Mohamed Jamal Zemerly, "Locating friends and family using mobile phones with global positioning system(GPS)," IEEE/ACS International conference on Computer Systems and Applications, 2009
[5] Smart Ambulance System International Journal of Computer Applications (0975 – 8887) National Conference on Advances in Computing, Communication and Networking (ACCNet – 2016
[6] Smart Phone Based Enhancement In Health Services Using GPS Imperial Journal of Interdisciplinary Research (IJIR) Vol-2, Issue-3, 2016



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