

‘Help Anytime Anywhere’: An Android Application Providing Help and Safety

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Abstract--- *Now a days, smart phones have become an important part of our lives. Number of people using smart phones has increased dynamically. These days, numerous innovative applications are being created to provide various services over the mobile phones. Mobile applications can also be used as the safety hazard. Motivated by this, we have created an application which provides a complete package of safety using various other applications like GPS. Women safety is one of the major concerns these days. The proposed application is useful in such cases as well. A facility is provided by the application, in case of challenging situation, for sending current GPS location along with text alert messages. Using this application, users can also call nearby hospitals, police stations, fire stations, blood banks around their location in case of emergency. Apart from this, the proposed application also works as a guide in problematic situations.*

Keywords--- *Android, Application, GPS, Safety, Mobile App.*

I. INTRODUCTION

In today’s world when there are so many mishaps happening every day. We need to be ensured that we are fully equipped for any negative situation that comes up to us unfortunately. We need to have knowledge about what to do in such situations like accidents, snake bites, CPR or if some woman feels unsafe which we may not have for all of them or may not recall in some panic situations. We may require help from somebody else while we might not be in a situation to call or message or inform our near and dear ones to come and help. We need something to be quick.

Here, we introduce an android application. This application will ensure the safety of the user during many such crisis situations. It helps reduce the risk by providing the location and identification of the person in danger. Let’s understand why is Help Anytime Anywhere(HAA) is better than others application as it works like a friend in the critical time and emergency situation, the application provides safety and security for someone in need. It allows locating nearest Hospitals, Medical stores, fire stations in case of emergency. This application also measures the distance between your locations to the nearest hospitals, fire stations, police stations .The application is very useful in the situation where accident takes place and emergency medical treatment is required. Women safety is one of the major concerns; this application is useful in such cases as well. A facility is provided by the application, in case of challenging situation, for sending current GPS location along with text alert message. User can also send details to their friends and family about the vehicle they are travelling in using this application. It provides a unique functionality of ‘police siren alert’ and ‘Whistle’ as to help user in the cautious situation. Using this application, users can also call nearby hospitals, Police stations, Fire stations, blood banks around their location in case of

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emergency and also work as a guide in problematic situations.

HAA also work as a guide in problematic situations. The application is a complete package of safety and awareness.

The main features of 'help anytime anywhere' are:

- To locate the location of nearest Hospitals, Police stations, Fire stations and Blood banks.
- To call directly to the respective locations.
- To get the location and directions of the Places. This will be helpful to the users to locate hospitals, Police stations, fire stations etc.
- The effectiveness of any framework is worried about the base preparing time just as the ideal utilization of framework assets in planning the proposed framework; the productivity factor has been contemplated well.
- Our topmost priority is to secure the data and integrity i.e. no data must be in the compromising state and must be kept confidential.
- The application has to be user friendly so that anybody can use it easily. The user interface is prepared in a very simple way, so that the section switching can be done easily.
- The application is aimed to provide with Technology and Control.

II. DESIGN FOR PROPOSED SYSTEM

The system uses the Android Studio 3.0.1. It is a Google and Jet Brains prepared stack of software. An open source designed framework called Android Studio 3.0.1 is used for the devices which are mobile that is a complete package of middleware or an operating system or any other mobile application. To deploy any Android Application the Android Software development kit has various libraries which are required to create an interface along with the hardware.

The application system gives results for static places like hospitals, police stations, fire stations, blood banks. The application gives the location of such static places using Google maps and calling such places is possible by the user in the emergency cases. When we consider the rural areas, where the location of hospitals is quite far, finding the nearest available hospital is possible which may help save patient's life.

Even the user can send the need help message to their contacts. The system will connect the data in a better and efficient manner.

Figure 1 depicts the process for retrieving the location of the victim or the patient. Whenever the user needs any kind of help, the location of the user is must to be known which is received using the server and is sent further.



Fig. 1: Process for Retrieving the Location

Figure 2 depicts the flowchart of the user and its details. Here, the application works as, the user fills in the details onto the application when registered which includes the people, user needs help from or the people who are to be informed about the user's location when in need.

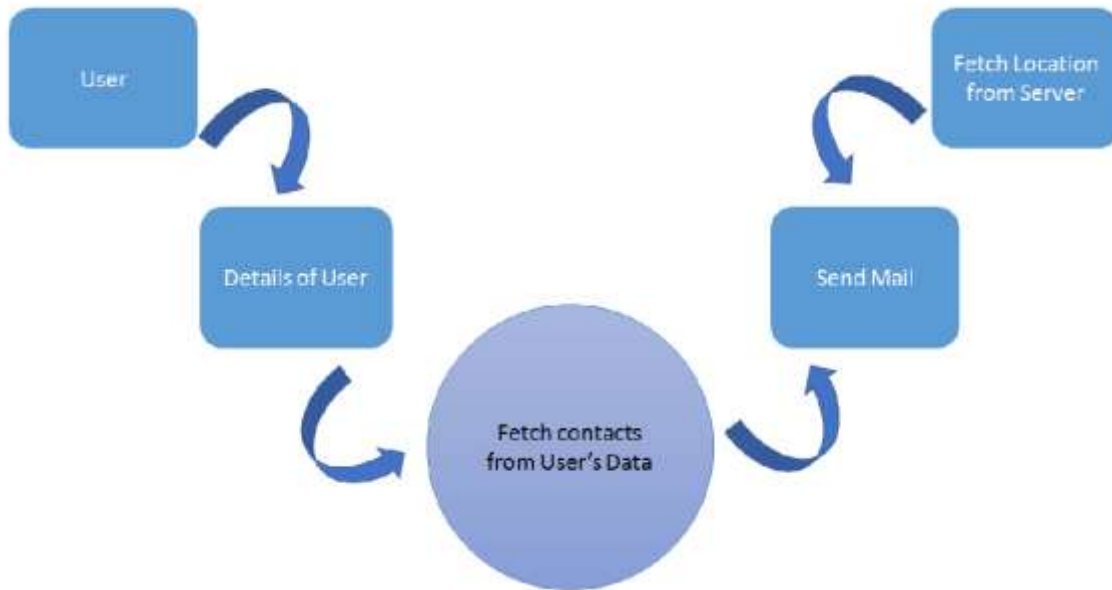


Fig. 2: Process for Sending Alert

A feature has also been added for the siren sound which would start once clicked for help and would continue till not clicked to stop.



Fig. 3: Process to Play Sound

The application provides an option to make automatic calls to the phone numbers chosen by the user through the server.



Fig. 4: Featuring Click to Call

III. UNIQUENESS AND RESULTS

A. Uniqueness

There are many safety applications available in the market but they are all different for different purposes. In the application prepared here, we provide all in one application. There can be many situations when a person needs help then and there and cannot wait for people around to help. Hence, one application in your mobile phone can save a life. So, you have help in your pocket. The application is an android application which provides complete safety to the user as the application is very useful in the situation where accident takes place and emergency medical treatment is required. Women safety is one of the major concerns; this application is useful in such cases as well. A facility is provided by the application, in case of challenging situation, for sending current GPS location along with text alert message. User can also send details to their relatives or friends about the vehicle they are travelling in using this application. It provides a unique functionality of 'police siren alert' and 'Whistle' as to help user in the cautious situation. System is user friendly and easy to work with and provides user friendly interface. It provides flexibility and location of nearby Blood Banks, hospitals, etc.

B. Results

The following figures show the screenshots of the HAA mobile application from the first view of it. Fig 5 shows the welcome screen where you can start off right after installing it on the device. Later comes up the 'Go screen' as shown in the labeled figure which has further tabs: Near Me, Alert, Defence and first aid. Further, in the 'Near me' tab the user can find locations for all the hospitals, police stations, fire stations and blood banks over the GPS as shown in Figure 7, followed by figure 9.

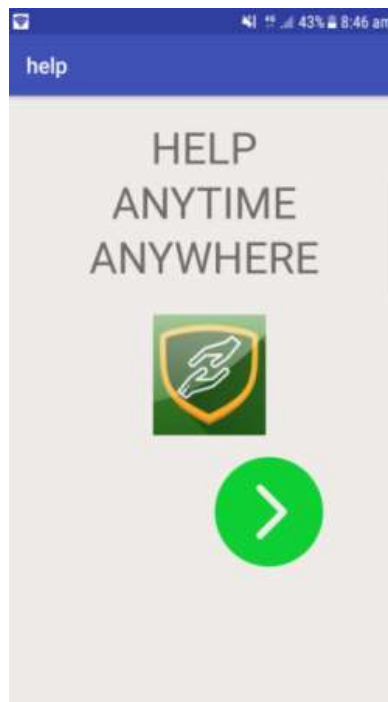


Fig. 5: Welcome Screen

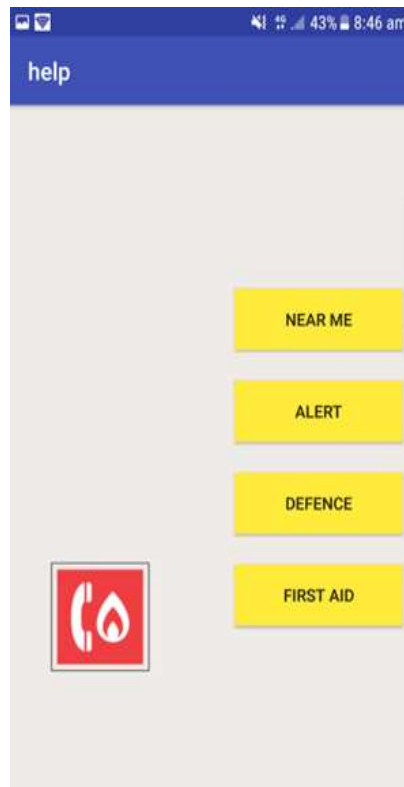


Fig. 6: Go Screen

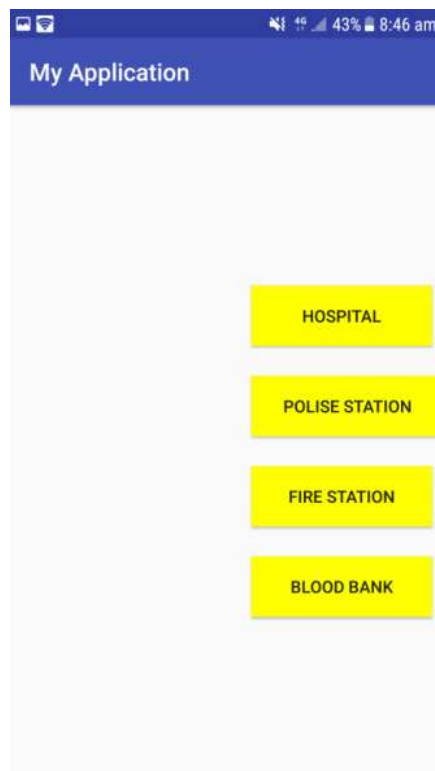


Fig. 7: Near Me Screen

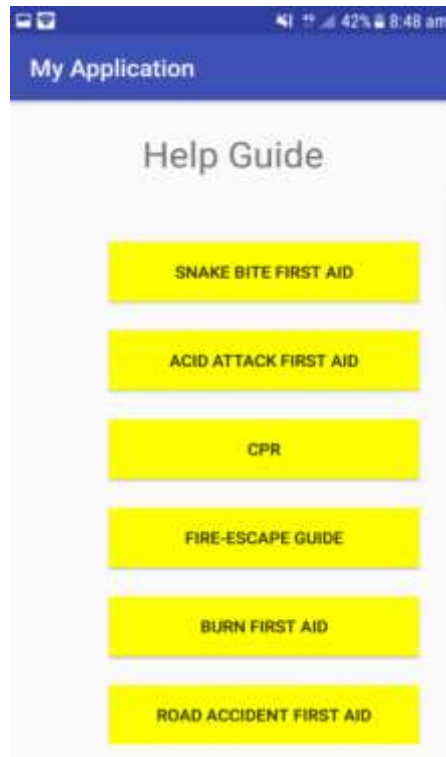


Fig. 8: Help Guide

Figure 8 depicts the screen showing the 'help guide' page which can help or provide first aid during the emergency situations of emergency like snake bite, acid attack, CPR, fire escape, burn or a road accident.

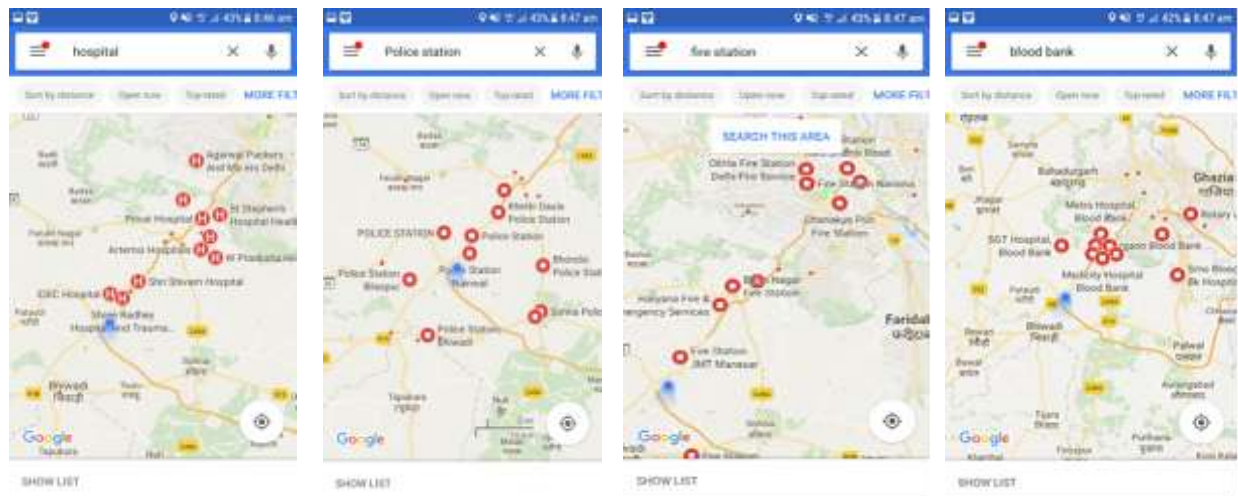


Fig. 9: Location Trackers (i) Hospitals (ii) Police Station (iii) Fire Station (iv) Blood Banks

The help guides for all the emergency cases can be fetched right at a single click and this can be witnessed in the figures below labeled figure 10. Apart from this, any type of emergency calls are also a click away as shown in figure 12 which shows the screenshot for the emergency calls like Police:100, Ambulance:102, Fire station: 101, Women helpline: 1091 etc.



Fig. 10: Help Guide (i) Snake Bite (ii) Acid Attack (iii) CPR (iv) Fire Escape (v) Accident

We are all aware of essentiality of women's security, but we must make sure that they should be safeguard and well protected. Women are somewhere not that powerful physically when compared to men, and needs a help to get relieved. If some unsafe situation is about to happen like sexual assault, robbery, domestic violence, rape etc., it is advised to call out for help so that the lady can be rescued from becoming a victim. If somebody has this application on to their mobile phone, it diminishes the risk of these negative situations to come true. For, the situations like this, there is screen named 'Alert' which can be used by the women for their safety. The message can be typed once, which remains default and can also be edited when sending the alert. This message will be sent along with the GPS location to all the contacts opted at the time of registration by the user with a single click on the button 'send alert'. It also provides a unique functionality of 'police siren alert' and 'Whistle' as to help user in the cautious situation.

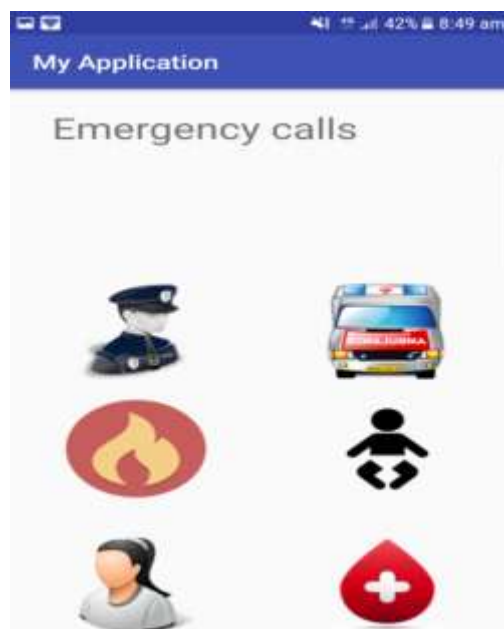


Fig. 11: Emergency Calls

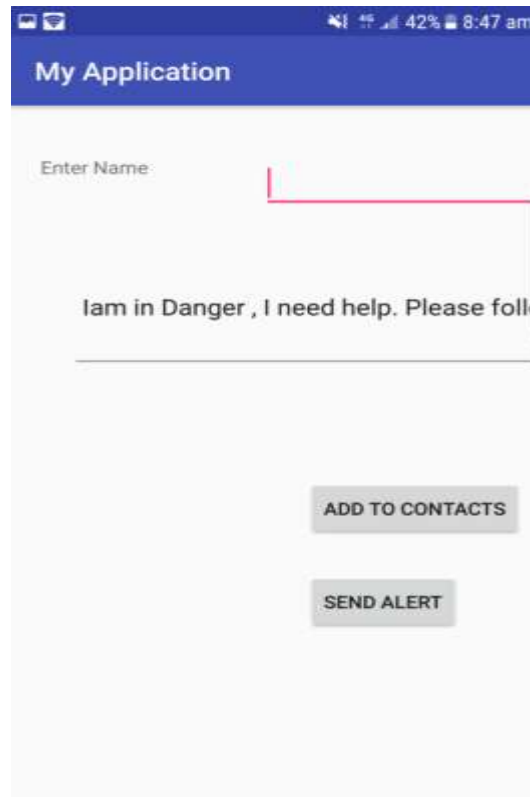


Fig. 12: Alert Screen

IV. CONCLUSION

This application provides a faster and organized way for the citizens to save themselves in accidental situations and this application provides a better way to communicate directly with our loved ones, make easy to share location of the victim so that to get help easily. The Help Anytime Anywhere justifies its name in a better manner as it is helpful to every victim in almost every situation. HAA is an well organized and dependable system that based on integration of an mobile application with GPS. Finding the help like nearest located hospital, police stations, blood banks and fire stations via mobile application helps in rising the chance of saving the patient/victim's life especially in rural areas, where it's difficult to get any help.

Police siren, Whistle sound, Fire alarm will make easy escape from the danger. The guide makes it more supportive and easy to access for the user. Alert will help to take care of loved ones in dangerous situation as it will send location of the user and will get help as soon as possible. Thus we can conclude that the Help Anytime Anywhere application is the need of every user nowadays to make a safe society.

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