

A Speakup App for People

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Abstract—In today's world, people using smart phones have increased rapidly and hence, a smart phone can be used efficiently for personal security or various other protection purposes. The heinous incident that outraged the entire nation have waken us to go for the safety issues and so a host of new apps have been developed to provide security systems to people via their phones. This paper presents Safety Android Application for the people and this app can be activated by a single click, whenever need arises. A single click on watch which has Bluetooth connectivity the smartphone pops up the app identifies the location of place through GPS and sends a message comprising this location URL to the registered contacts, audio and also call on the first registered contact to help the one in dangerous situations. The unique feature of this application is connection of Bluetooth between smartphone and watch to pop up the app and send the message to the registered contacts continuously for every five minutes until the "stop" button in the application is clicked. Continuous location tracking information via SMS helps to find the location of the victim quickly and can be rescued safely

Keywords — GPS, Android, URL, Registered contacts, Bluetooth.

I. INTRODUCTION

Speak up is an Android Application for the Safety of people. The heinous incident that outraged the entire nation has wakened us to go for the safety issues and so a host of new apps have been developed to provide security systems to people via their phones. We are aware of importance of people's security, but we must recognize that they should be well secured.

The best way to minimize chances in becoming a victim of violent crime is to identify and call on resources to help you out of unsafe situations. This app can be activated by a single click, whenever need arises.

The key features of this app which makes it different from other apps designed till now are as follows: Initially, we have to enter the four contact numbers of police, family members and friends in to the application say and click on "save" button. As soon as "start" button pressed in the hardware the app gets activated and then app sends information such as messages or audio/video to the contacts and nearby police stations. Unique feature of this app is message with location URL is sent continuously to the registered contact numbers. So, continuous location tracking

of victim is possible with this application.

II. PROPOSED SYSTEM

A. Mechanism



Fig-1 Arduino nano

In this system it includes a hardware such as watch as well as an android application. The watch includes an emergency button. The android app is used to send some informations to the registered contacts. This app will be background even if the mobile devices get switched off.

When an emergency situation occurs, the victim can click the button in the watch and a message is sent to the app via Bluetooth. As soon as the button is pressed in the watch, the app starts to send messages or other information such as audio/video to the registered contacts and to the nearby police station with the location .It can be also used by other people who has android app. In case any network problem arises emergency call will activated automatically.

Whenever the app sends the information its also sends the location which will be tracked by using GPS. Bluetooth is used as the mode of connection between mobile devices and the hardware such as watch.

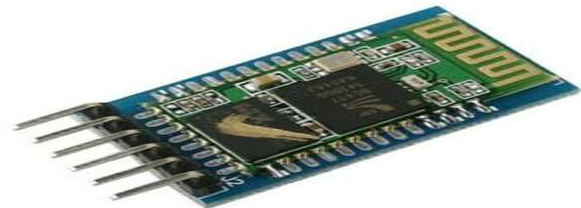


Fig-2 Bluetooth HC-05

B. Block diagram of system

The block diagram gives a brief idea about the working of whole system. It consists of android application. Required contacts are stored in the android application. As the send the app starts, it sends the information to the required contacts that have been stored in the app. Its location is obtained by using GPS. 2G OR 3G network connection is also enabled if its required.

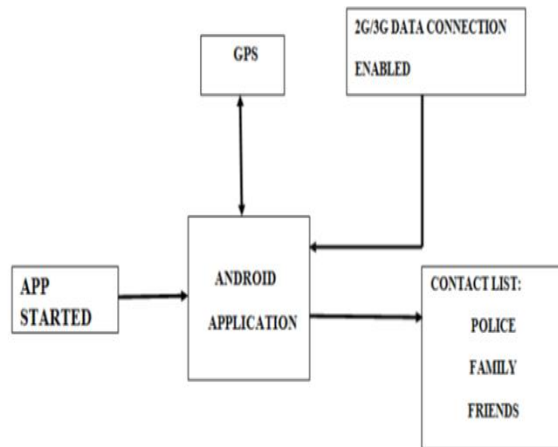


Fig. 2.2: Block diagram of proposed system.

III. SIMULATION

- A. To develop a system for android users for keeping track through several applications. This application uses GPS for identifying the location of the person in trouble.

The system can be divided into two modules:

1. First module can be the victim's phone i.e the root device which uses 3G/2G data connection for tracking the location of the victim through GPS.
2. Second module can be the mobile phone of registered contacts either police or friends or family members which receives the message containing URL of location of victim that is sent from the root device.
3. Initially, first it checks whether the location settings and Bluetooth is on or not. A single press on watch via Bluetooth connectivity to phone sends the message along with URL of location of victim and audio to the registered contacts. Here, registered contacts means the contact details that are saved in the application during its initialisation.

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Now, at the received device, by clicking on the URL in the message, it spots the exact location of the victim. Also, as the message containing victim's location is sent for every five minutes from the root device, the victim can be tracked wherever she goes and can be rescued safely and quickly.

B. Uniqueness

In the existing systems, we have mentioned many Android applications having similar feature to this application. In all those applications, victim's location is sent to the registered contacts in different forms like SMS, EMAIL etc. But in practical situation during emergency a victim may not be able to use the phone all of sudden, so we have implemented a watch which has Bluetooth connectivity with the phone wherein single click on the watch will let the application to send the messages along with GPS and audio to the registered contacts.

IV. CONCLUSIONS

This paper, we have described an android application for the safety of people. This application helps in live tracking of the victim through GPS along with audio to the registered contact. The merit of this application is even when victim is not able to use the phone a single click on watch will let the application to send the message to the registered contacts. Thus this application can help the people in a big way from unsafe conditions.

V. FUTURE WORK

This app can be extended to windows and iOS, now it is just developed for android OS. Also we can implement in such a way that it still works when there is no signal or when the phone is switched off. And the phone numbers of all the police station can be registered as a future enhancement.

REFERENCES

- [1]. Dhruv Chand, Sunil Nayak, Karthik S. Bhat, Shivani Parikh, Yuvraj Singh, Amita Ajith Kamath "A mobile application for women's safety: WoS app"
- [2]. Ravi Sekhar Yarrabothu, Bramarambika Thota "Abhaya: An android app for the safety of women"
- [3]. Dantu Sai Prashanth, Gautam Patel, Dr. B. Bharathi "Research and development of a mobile based women safety application with real-time database and data-stream network"