

WOMEN SAFETY LOCATION TRACKER

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Abstract

It is a simple android application used mainly for women safety purpose, but also for child safety too. It focuses on one of the important problem of society that is eve teasing. It makes the society to be aware of the misbehavior which is happening and to come forward for help. It enables women to be self dependent and can handle any kind of unpredictable situation. It mainly share the location based on GPS(Global Positioning System). Thrice pressing the power off button it sends the emergency message with time and location to the nearby contacts in emergency situation and default to the parents. When the application triggers on the time of travelling it sends the location to the parents when the base station get changed. While long pressing the volume button the Police siren rings which gives immediate help. Using this application we can store the emergency numbers like blood bank, women well fare etc. It sends the location of the user automatically to the intended people either based on the remote base station or by manual setting of time interval for location based messages. It broadcasts the emergency messages to the contacts based on the current location of the user. Police siren helps the user to get immediate help. Including emergency numbers facilitates the user not to memorize all those numbers. Self defense techniques make them self dependable as well as make the society to come forward for help.

Keywords: Smart Phone, Registered nearby Contacts, GPS location, Database, police siren.

I. INTRODUCTION

In today's world, it is not safe for a person to travel alone at night especially for women; it will be high time to travel alone because a woman is not highly strong as men to protect herself from them. The good way to reduce chances in becoming a victim of violent crime (robbery, sexual assault, rape, domestic violence) is to identify and call on resources to help you out of unsafe situations. In this paper, we present Women safety location tracker application for smart phones working over android platform. It is an innovative safety application for women, senior citizens and anyone who needs assistance in an urgent situation. This application is designed to get you help with minimal or unnoticeable efforts. This paper presents an alternative approach to the traditional methods. This application will notify friends or family if you are in some trouble and need a help from them. It sends Android phone's location and time by using GPS through SMS only to the nearby contacts and default to the parents. Through this the user can get the help as soon as possible. This system can help the user to get immediate help from the friends or family. This reduces risk and brings assistance when needed. This feature of the application not only helps in finding the exact location of the person in problem but also will help the police to trace the location of incident easily.

II. RELATED WORKS

P.Kalyanchakravarthy[1]-This paper describes about a Safety Triggering application being developed and its successful implementation with tested results. The application has target users those sections of the people who surprisingly fall into a situation where instant communication of their whereabouts becomes indispensable to be informed to certain authorized persons at remote end. This application main purpose is for women's safety. When we feel that we are in emergency situation, for example travelling alone in the Auto/Cab at night time we can use this application so that on one click we can send our location to our family members and to any police stations continuously until we stop with password based button.

Bramarambika Thota and Udaya Kanchana KumarP[2] The usage of smart phones equipped with GPS navigation unit have increased rapidly from 3% to more than 20% in the past five years. Hence, a smart phone can be used efficiently for personal safety or various other protection purposes especially for women. This paper presents Sauber, a personal safety application developed for smart phones of android platform. This app can be activated by a single click when the user feels she is in danger. This application communicates the user's location to the registered contacts for every few seconds in the form of message. Thus, it acts like a sentinel following behind the person till the user feels

she is safe. The key features of this application are along with the user's location, one of the registered contacts gets a call. Also, the registered contacts and GPS location are saved from time to time in a database.

Mr.Magesh Kumar.S, Mr.Raj Kumar.M [3] this project presents an alert system for PROB detection using common commercially available electronic devices to both detect the PROB and alert authorities. Data from the accelerometer is evaluated with several threshold based algorithms and position data to determine a PROB. The threshold is adaptive based on user provided parameters such as: height, weight, and level of activity. The algorithm adapts to unique movements that a phone experiences as opposed to similar systems which require users to mount accelerometers to their chest or trunk. If a PROB is suspected a notification is raised requiring the user's response. If the user does not respond, the system alerts pre-specified social contacts with an informational message via SMS. If a contact responds the system commits an audible notification, automatically connects, and enables the speakerphone.

Bhijit Paradkar and Deepak Sharma[4] According to the reports of WHO, NCRB-social-government organization 35% Women all over the world are facing a lot of unethical physical harassment in public places such as railway-bus stands, foot paths etc. In this paper the authors have reviewed of various existing systems on women security. The authors have felt a need of advanced women security system to provides the safety measure in public places as well as travelling alone through public transports (school buses, company vehicle etc). This paper proposed a new model for the women security in public places which aims to provide the 100% safe environment.

Ravi Sekhar Yarrabothu And Bramarambika Thota[5] 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 has wakened us to go for the safety issues and so a host of new apps have been developed to provide security systems to women via their phones. This paper presents Abhaya, an Android Application for the Safety of Women and this app can be activated this app by a single click, whenever need arises. A single

click on this app identifies the location of place through GPS and sends a message comprising this location URL to the registered contacts and also call on the first registered contact to help the one in dangerous situations. The unique feature of this application is to 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.

III. WORKING OF PROPOSE MODEL

A) Database Module: The user needs to feed the emergency contact numbers and address of the stored contacts with the system which are stored in Register Contact Database. It uses SQLite database.

B) Global Positioning System (GPS) module: It is a precise positioning tool, tracks the location in the form of latitude and longitude. The GPS Coder Module used this information to search an exact address of that location as the street name, nearby junction etc. In case when the GPS gets disabled, then the system will send the previous stored location. Internet is mandatory.

C) GSM System Module: Global System for Mobile communication (GSM) SIM card is inserted inside the mobile device to send and receive the messages using GPRS. The GSM SIM card number is registered with the system. With increasing usage of GSM, network services are expanded beyond speech communication to incorporate many other custom applications, machine automation and machine to machine communication.

D) GPS Automatic Enable

The Global Positioning System (GPS) is automatically enabled when the user switches into the application. When the application gets triggered, a notification occurs for enabling GPS or not.

E) Emergency Number

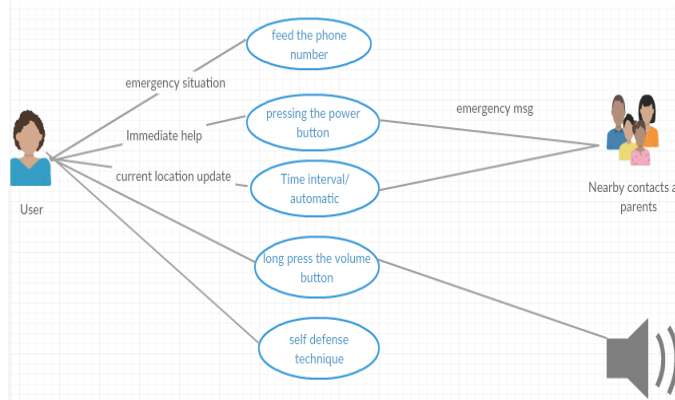
This app contains such as emergency number such as police, fire service, ambulance etc., In an crucial time user press a power button thrice the emergency message with "I need help" ,time and user location to the nearby location contacts. It contains police siren sound when a user long press a volume button this sound will

be enabled in an emergency situation for an immediate help.

F) Send Short Message

The recent mobile location change activity details are send as SMS to a stored nearby location contacts. In addition in an emergency situation user press a power button thrice this app sends the as SMS to the corresponding mobile numbers.

IV. WORKING MODEL



V. FUTURE ENHANCEMENTS

The project provides a best assistance in the network based regime. It allows adding up the following facilities in future

- Automatic pre-recording call to owner.
- Take photo from camera and send it to owner.
- Implement website with integration of app.
- Integrate with loud speaker to alert theft message to people.

VI. CONCLUSION

This project focuses on providing security to users which includes location-based services, SMS services, GPS services and system Architecture. Throughout the development of the first phase of the project, we have learned much more new skills ranging from vital experience in working as a team and the new

technologies. The application eliminates the manual communication difficulties currently faced by the user. It is developed in a user-friendly manner since the application is developed using Android. The application is very fast and any transaction can be process across the network. Error messages are given at each level of input of individual stages. Concurrently the application can be executed since the database is SQLite and capable of processing more client connections. The database is required to be installed in server space only. Only client drivers are required in client nodes before accessing the application.

VII. REFERENCES

[1]P.Kalyanchakravarthy1, T.Lakshmi2, R.Rupavathi2, S.Krishnadilip2, P.Lakshankumar2” Android Based Safety Triggering Application” International Journal of Computer Science and Information Technologies, Vol. 5 (1), 2014, 646-647

[2] Bramarambika Thota, Udaya Kanchana Kumar .P,” Sauver: An Android Application For Women Safety” International Journal Of Technology Enhancements And Emerging Engineering Research, Vol 3, Issue 05

[3] Mr. Magesh Kumar.S1, Mr.Raj Kumar.M2” Iprob – Emergency Application For Women” International Journal of Scientific and Research Publications, Volume 4, Issue 3, March 2014 1 ISSN 2250-3153

[4] Abhijit Paradkar and Deepak Sharma, “All in one Intelligent Safety System for Women Security” International Journal of Computer Applications (0975 – 8887) Volume 130 – No.11, November2015

[5] Ravi Sekhar Yarrabothu And Bramarambika Thota “Abhaya: An Android App For The Safety Of Women”

[6] A.Suresh and C. Pabitha (2010), “Retrieval of Fresh Information Using P2P Network”, CiiT International Journal of Networking and Communication Engineering, Vol. 2, December 2010, Print: ISSN 0974 – 9659 & Online: ISSN 0974 – 9551.