
WOMEN SAFETY APP

Mrs. B. Uma Rani*1, S. Srinidhi*2, PH Rohith*3, M. Mohan Nayak*4

*1Assistant Professor, Department Of Computer Science And Engineering, Ace Engineering College, Ghatkesar, Telangana, India.

*2,3,4-Btech Students Department Of Computer Science And Engineering, Ace Engineering College, Ghatkesar, Telangana, India.

DOI: <https://www.doi.org/10.56726/IRJMETS-NCASCTE202232>

ABSTRACT

Women safety matters a lot whether at home, outside the home or working place. Few crimes against ladies particularly rape cases were terribly dread and fearful. Most of the women of various ages, till this day are being subjected to violence, domestic abuse, and rape. As ladies ought to travel late night generally, its necessary to remain alert and safe. Although the government is taking necessary measures for their safety, still, there are free safety apps for women that can help them to stay safe.

Most of the females these days carry their smartphone with them, so it is necessary to have at least one the personal safety apps installed. Such a security app for ladies will definitely facilitate in a way or the opposite. This is user-friendly application that can be accessed by anyone who has installed it in their smart phones.

Our intention is to provide you with fastest and simplest way to contact your nearest help. In this system user needs to feed three contact numbers, in case of emergency on moving the phone up and down thrice, the system sends SMS and calls on one of the numbers feed-ed into the system with the location. The phone starts vibrating and siren starts ringing. This features for both everyday safety and real emergencies, making it an ultimate tool for all.

Keywords: Women Safety, Android Application, GPS, Mobile Application, GPRS.

I. INTRODUCTION

In the modern world, it is dangerous to travel alone at night, especially for women; it will be wise to go alone because women lack the physical strength of men and cannot defend themselves against them. Finding and using services to get you out of dangerous circumstances is a smart approach to lower your risk of being a victim of violent crime (including robbery, sexual, assault, rape, and domestic violence). These apps can reduce risk and provide aid when we need it, whether we are in an emergency situation or become separated from pals at night and are unsure of how to go home. Women are adapting at mobilizing diverse groups for a common cause. They often work across ethnic, religious, political, and cultural divides to promote peace. We are all aware about importance of safety of women's but we must realize that they should be properly protected.

Problem Definition:

Having these applications on your phone will lower your risk and bring aid when you need it if you find yourself in an urgent situation or become separated from pals after a night out and are unsure how to go home. Users of Women Security applications benefit from an intuitive user interface. Both online and offline usage of this application are possible. People are preparing in various ways to fight back and made us aware of the safety issues for our daughters despite the fact that many of them were initially created for students to reduce the risk of sexual assault on campus.

Objective of Project:

To encourage Women's freedom to travel late at night, companies have rolled out mobile apps dedicated to complete women safety and security. These women safety apps revolve around empowering women to live fearless and explore the world confidently, keeping their family members and close friends informed of their whereabouts. Women Safety is one of the best apps available in the market which focuses on the safety of the women to decrease the crime rate against women and increase their safety. The basic aim of the system is to develop a low-cost solution for GPS based women tracking system (women safety system) which can applied to

various domains of the industrial and personal use just by using the very common mean i.e., mobile with android enabled. The main objective of the system is to track the current location of the person which has an android enabled mobile by extracting the longitude and latitude of that target person. The primary objective of our system is to track the person and plot the location on real time system like Google map.

II. LITERATURE SURVEY

As a part of literature survey, we investigated some applications of women safety that already exist in market. The aim is to observe how these applications work and to see how they can be improved and how are they different. To date it is identified that the following Android Apps of women security application are good and are offering relatively similar service.

[A] WOMEN'S SECURITY: This app is developed by App Soft India. The key features of the app are: the user has to save some details. These details include: Email address and password of the user, Email address and mobile number of the recipient and a text message. Then, app is loaded as a "widget", so that when the user touches the app, it alerts the recipient. Another key feature of app is that it records the voice of surroundings for about 45 seconds and this recorded voice, text message containing location coordinates of the user is sent to the recipient mobile number. [2]

[B]SCREAM ALARM: Scream Alarm, an android application developed by Go Pal App-Maker in November 2013. By clicking this app, it generates a very high-volume scream in times of distress when the lungs of a person fail in screaming in trouble. The generated scream is in a woman's voice is severely helpful in discouraging the potential strong trouble makers. The only work done by this application is whenever the person pushes or touches the application, the phone screams loudly with a woman's voice. [3]

This paper presents, 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.

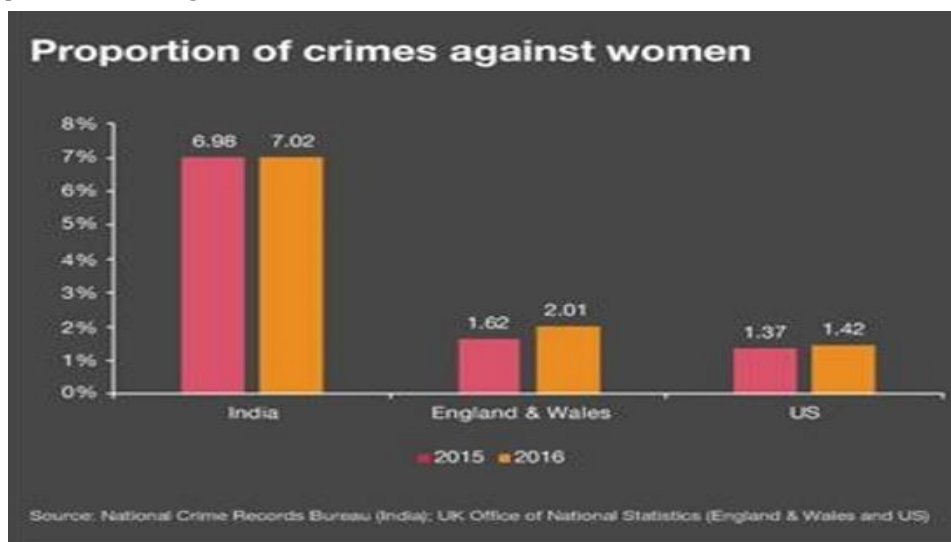


Fig.1. Statistics of international crime records.

In figure 1 as per the horrifying statistics, every 16 minutes, a woman is raped somewhere in India, and every four minutes woman experiences cruelty at the hands of her in-laws.

Existing System:

- BSAFE-PERSONAL SAFETY APP
- CIRCLE OF 6
- Hollaback

Disadvantages of Existing System:

- Requires good network connectivity.
- Good Android platform.
- Difficult to inform immediately the location of the user in trouble.

III. PROPOSED SYSTEM

The prime objective of WOMEN SAFETY APP is to create a fully pledged android application designed for women’s safety and security. WOMEN SAFETY APP has an unobtrusive screen that is simple to operate, that is two taps will send out a predefined text message I AM UNSAFE MY LOCATION IS, to the registered contacts of your choice which automatically includes address and exact location of yours. It a free of cost service available to every individual. In order to track the movement of the person we have used Google Maps for mapping the location sent by the mobile phone.

The mobile phone which fetches the GPS location communicates with the server using General Packet Radio Service (GPRS). This service is a low-cost service provided by the service providers which is a wireless data communication system. Mobile phones equipped with GPS receiver are easily available in the market these days and is a booming technology these days. This cell phone technology has enabled us to communicate almost every part of the world across the boundaries. The GSM/GPRS is one of the best and cheapest modes of communication present these days and in future.

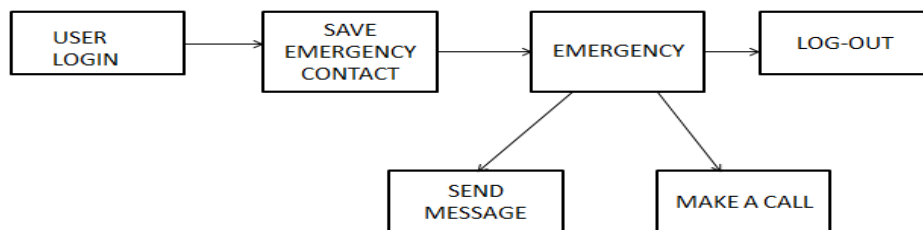


Fig.2. System Architecture

IV. REQUIREMENTS SPECIFICATIONS

This document describes the software requirements and specification for an Android Application i.e, Stay Safe.

Software Requirements

- Operating System - Android
- API Level - 14 or higher.
- Disk Usage - 20-50 MB.

Hardware Requirements

- Processor - Snapdragon, Dual Core.
- Memory Space 50 MB.
- RAM 512 MB.
- GPS enabled Android Phone

Non-functional requirements

Non-functional requirements are often called "Quality Attributes" of a system. Evolution qualities, such as testability, maintainability, extensibility and scalability, which are embodied in the static structure of the software system.

GRAPHICAL USER INTERFACE

- The system shall provide use of icons and toolbars.
- Graphical user Interface (GUI) has been made interactive so that user can feel good while using the application.
- We have provided the proper image of buttons so that user can understand properly.

V. IMPLEMENTATION

This android application is useful when the user is in some problem or needs any help. When the user opens the EMERGENCY button is visible in this application. They can also save three contact numbers and a message. The user only needs to open the app and click the "EMERGENCY" button if they are having trouble or need assistance. His recorded contact numbers are used by this application to send the message.

The creation of the application and entering the contact information is the first significant step. Our friends, family, and the chief cop of the city in which we currently reside are some of these contacts. When the application is installed in the smart phone for the first time the above contact details should be provided.

The provided information will be saved by the application. Sending the GPS data to the registered contacts during dangerous situations or when the person has to be rescued is the second crucial step. Only when the application's rescue button is pressed is this step performed. When the smartphone is linked to the appropriate mobile network and location service is turned on, the entire process of this stage can be completed (GPS). The third important phase entails the effort put into continuously sending the message with the location URL to the registered contacts. As a result, the application can continuously track the individual's precise location, which is the main goal of the suggested approach, and the person can be rescued.

VI. RESULT

The testing results of the mentioned three sections are provided with screen shots taken in various intervals of time from the root device and contact's device. Here, the root device means the device over which the rescue application is started; it means the user's device. The contact's device means the device to which the user's location information is sent continuously. The Security Alert app icon can be placed anywhere on the home screen of the smart phone so that we can immediately touch over the application when we are in danger.

Once the application is installed on the mobile for the first time, the following screen shown in figure 4 will appear. Figure 4 depicts the registration page of the application. Figure 5 depicts the EMERGENCY button and the settings icon. When you click on the settings icon figure 6 will appear.

Where you can change your custom message. When you click on the Add people button figure 7 will appear. where you can add your emergency contacts. When you click on the EMERGENCY button figure 8 will appear. Where you can call and send message. When you click on the message button figure 9 will appear.



Fig.3. Registration page

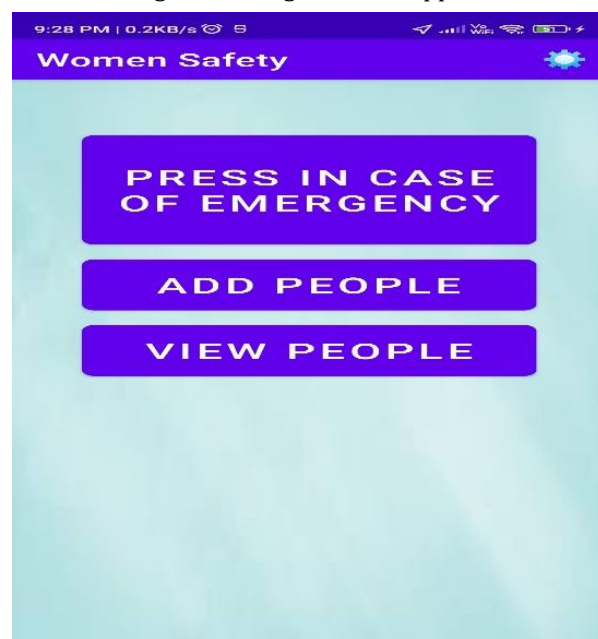


Fig.4. Emergency button

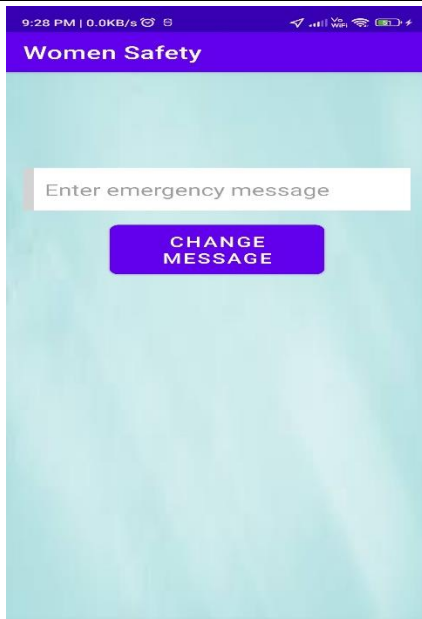


Fig.5. Custom Message

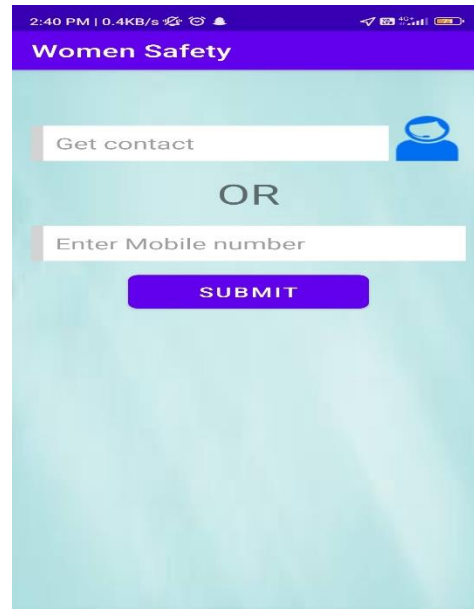


Fig.6. Adding contacts

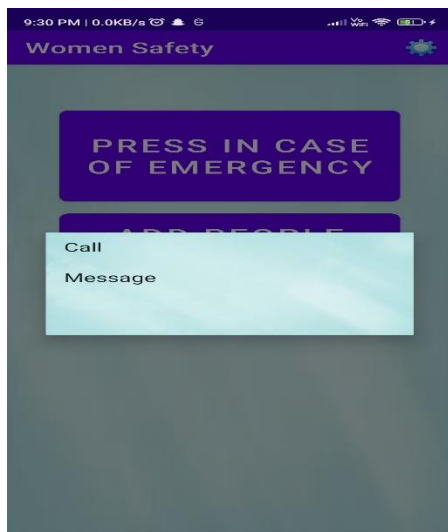


Fig.7. Call and Emergency Button



Fig.8. Message received

VII. CONCLUSION

This paper describes the application, Security Alert that is designed in android platform for safety of women with the aid of recent improvements in mobile technology. In this project to use which is useful for the user when she is in some problem or needs any help. When the user opens this application, he can see an EMERGENCY button. Also, he can store a message and trusted contact numbers. When the user is in some difficulty or needs any help, the user opens this application can see EMERGENCY button. Click that button to send SMS to register user. For future development, this application can be integrated with the law enforcement database (e.g., city police control room database) instead of experimental database used here in the project. Also, some further upgrade can be done when the mobile network is not available for the root device and also if the root device is switched off. Thus, this app can help in a big way to rescue the women or men from unsafe conditions.

VIII. REFERENCES

- [1] Android Developers, Location APIs. URL:
<http://developer.android.com/google/play-services/location.html>
- [2] "WOMEN'S SECURITY", Android App developed by App Soft India, December 17, 2013. <https://play.google.com/store/apps/details?id=com.Zayaninfotech.security&hl=en>
- [3] "SCREAM ALARM", Android app developed by GoPalAppMaker in November,2013
<https://play.google.com/store/apps/details?id=gopal.appmaker.android.com&hl=en>
- [4] Android Studio Development Essentials Book by Neil Smith
- [5] An Introduction to Database Systems Book by Christopher J. Date [firebase.google.com](https://firebase.google.com/docs/database/android)
developer.android.com for SDK
- [6] B. Chougula, "Smart girls security system," International Journal of Application or Innovation in Engineering & Management, Volume 3, Issue 4, April 2014.