



A MOBILE BASED WOMEN SAFETY APPLICATION

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Abstract : In the last five years, the percentage of smart phones with GPS navigation units has risen sharply from 3% to over 20%. Thus, a smartphone can be effectively used for numerous forms of protection, including personal safety in particular for women. When the user senses that she is in danger, she only needs to click once to activate this application. This program sends out messages to registered contacts every few seconds with the user's position. Consequently, it follows the user until she feels safe, much like a sentinel. This article analyzes an application's unique feature that allows messages to be sent to registered contacts continually until they touch the "HELP" button. Constant location monitoring data sent by SMS makes it easier to locate the victim and ensure their safe rescue. The purpose of this application is to protect ladies. This is accomplished by tackling the issues that put women's safety at jeopardy in the modern world. Through a variety of capabilities provided by our system, this software makes sure that ladies are never placed in such circumstances.

Index Terms - Android, App, GPS location, mobile, safety, URL, women.

I. INTRODUCTION

Traveling alone at night is dangerous in today's environment, especially for women; it will take more time to travel alone because women are not very powerful as men to keep them at bay. One effective strategy to lessen the likelihood of falling victim to violent crimes such as rape, robbery, sexual assault, or domestic abuse is to recognize and utilize resources that can assist you in escaping dangerous circumstances. Whether you find yourself in an emergency situation or become separated from pals late at night and are unsure about how to get home, possessing these Apps on our phones can reduce risk and provide support when needed. In this article, we introduce Security Alert, an Android-based smartphone application. According to the National Crime Records Bureau of India, there was a 6.4% increase in crime against women in 2012; one crime against a woman is perpetrated every three minutes. In order to maintain the stability of the home, 65% of Indian males think that women should put up with violence and that there are instances when beatings are justified. The International Men and Gender Equality Survey (IMAGES) Questionnaire released its findings in January 2011. revealed 24 per cent of Indian males had abused their sexuality at some point in their lives. Our goal in creating this software was to give women access to a safe environment via their smartphones, as most people carry them around with them these days. Naturally, the Delhi Nirbhaya case compelled the government to pass more stringent laws, but even so, India's rate of sexual crime has not decreased. Consequently, it is better to take safety precautions for our own protection than to become victims of these kinds of crimes. This document is organized as follows. A literature review is presented in section 2 followed by some methods and materials in section 3. The results and discussions in section 4. Finally, the paper future scope section 5. The concludes in section 6 with future research direction in section 7.

II. LITERATURE SURVEY

- 1) A survey [1] claims that 35% of women worldwide have experienced non-partner sexual abuse or intimate relationship violence, whether it be physical or sexual. A major concern for worldwide public health is violence against women. The paper also explains the effects that violence has on women's reproductive and mental health
- 2) The authors of [2] aim to situate concerns about surveillance technologies within a theoretical framework that highlights the difficulties that antiviolence movements face as a result of emerging surveillance technology. They specifically discuss how surveillance technologies affect violent behavior, offer potential remedies, and take into account the various applications of these technologies. Disproportionately when it comes to criminalizing disadvantaged communities. The goal is to exacerbate worries about surveillance technologies by centering emphasis on violence against women.
- 3) The author of [3] talked about how technology is applied in situations involving interpersonal terrorism. It will look at how a batterer uses technology to exercise coercive control over their victim. It will also examine how regulations have changed in an effort to keep up with the quick development of technology. In We will specifically examine the current usage of GPS monitoring of terrorists who are close to us.
- 4) In the UK, 92% of adults individually own or use a mobile phone, however just 39% of people use their mobile device to access the internet[4].

- 5) In addition, 40% of adults in the UK own a smartphone, and in only a year, tablet ownership increased from 2% to 11%. Owing to its sophisticated software and mobility capabilities, smartphones have proliferated as commonplace everyday communication tools, providing users with access to robust computational software that is frequently a rich in sensors and multiplatform[5].
- 6) The study [6] shed light on the potential and difficulties associated with using smartphone apps to deliver behavioral interventions related to health. The results provided a number of important attributes and features that app developers might want to take into account while developing apps for healthy behavior. The results also revealed a number significant of issues that required more thought and investigation to guarantee the creation of popular and successful behavior modification applications.
- 7) According to a Vodafone report [7] on Connected Women, mobile can help women become more economically and socially empowered. Women's access to banking, health, empowerment, and economic opportunities is enhanced when they utilize mobile phones.

III. RESEARCH METHODOLOGY

The methodologies used in this study are:



Fig 1. Implementation of work

When a user is having trouble or needs assistance, this Android application comes in handy. The user notices a HELP button when they first launch this application. Furthermore, Three phone numbers and a message can be stored. All the user has to do is launch the app, select the "HELP" option, and ask for assistance if they need it. The message is sent to the contact numbers he has stored by this program. The total evaluation can be done in three major steps which are described individually.

3.1 EMERGENCY ALERT SYSTEM:

These applications typically include a feature that allows users to send distress signals or emergency alerts to predefined contacts or authorities with just a tap of a button. If you're in an emergency situation and need immediate help, don't hesitate to call your local emergency services number or use any available SOS feature on your device. If you're unable to make a call, try to find a safe location and use any nearby resources or people to seek assistance. Your safety is the top priority. If you need further assistance or guidance, feel free to ask.

3.2 CONTACT INFORMATION:

Entering the contact information in the developed application is the second important step. These people could be our friends, family, or the local police chief. The individual with whom we are living. The aforementioned contact information should be entered when the app is first loaded on the smartphone. The provided data will be saved by the application. Also provide a nearby help line number.

The identity and phone number of the person who should be called in an emergency are needed for the personal safety application. Multiple users can be added to the emergency contacts list. In the event of an emergency, alerts or SMS will be sent to these individuals.

3.3 LOCATION TRACKING:

Sending the GPS data, which might take the form of coordinates or a URL pointing to the position of the object, is the third important step. When someone is in danger or needs to be rescued, they can send a stock map program (such as one from Google, Nokia, or another company) to the contacts they have registered. Only when application's rescue button is pressed is this step executed. Only after the device is turned on and connected to the correct mobile network can the entire procedure of this step be completed (GPS). Many women safety apps utilize GPS technology to track the user's location in real-time, which can be crucial in case of an emergency.

IV. RESULTS AND DISCUSSION

Simply touching the program on the smartphone screen will bring up the alternatives, and selecting any one of them will cause the relevant action to happen. In it is seen that the available option in the apps. By choosing the option “LOGIN” from the main screen the screen navigates to the other screen and the other screen is having two options “USER NAME”, “PASSWORD” and two button “LOGIN” AND “SIGN UP”. If the “Login” is Successfully completed then the “USER HOME” will be displayed. Then choosing second option “View contact” from the main screen the screen is navigates to the other screen and the other screen showing the contact information. Then choosing the third option “feedback” it will see the feedback of the app it will shown in it. Then choosing the Last option from the main screen “SIGN UP” the screen is navigate to other screen and the other screen it will contain first name, last name, phone, email, username, password and a submit button. After login is completed “USER HOME” will be displayed. There are many option in “user home” that are “profile”, “notification”, “logout”, “emergency contact”, “emergency help”. choose the first option profile it will see the profile of the user. The last option in the user home is “emergency help”, in some emergency situation is their to click this option It will send SMS to nearby control room. It is shown in Fig 1. Also call directly to nearby control room .it is shown in Fig 2. Then share the current location .it is shown in Fig 3.

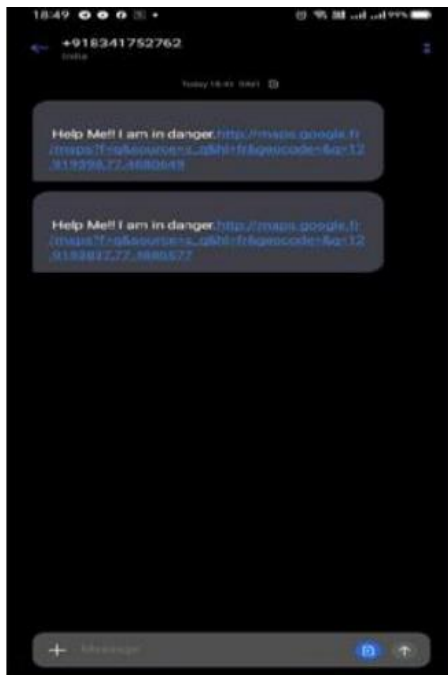


Fig 1. SMS

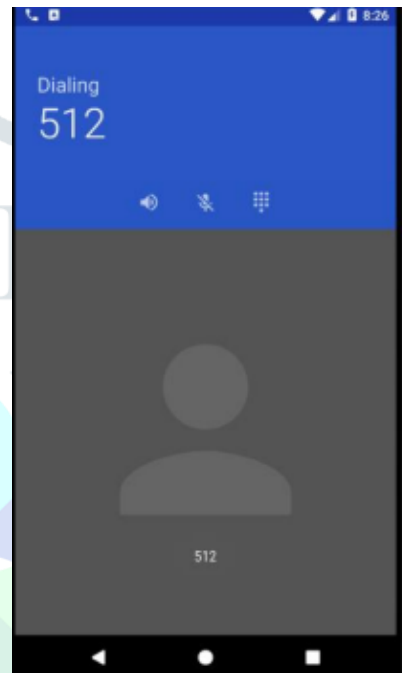


Fig 2. CALLING

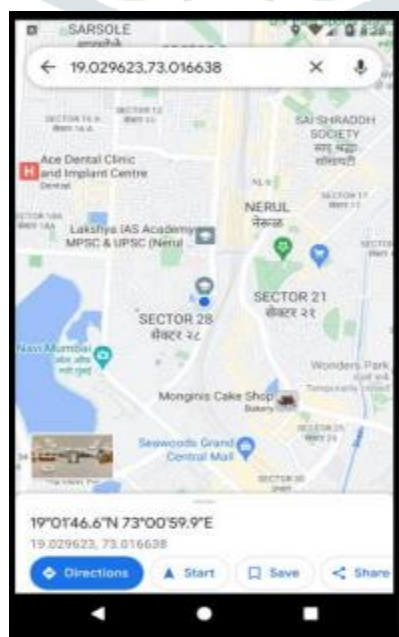


Fig 3. LOCATION TRACKING

V. FUTURE SCOPE

This application can be connected to the law enforcement database in the future (for example, database from the city police control room) as opposed to the project's experimental database. Additionally, if the root device is turned off or the mobile network is unavailable to it, more upgrades may be possible. As a result, this app can greatly assist in rescuing men and women from dangerous situations.

This smartphone application comes in handy in the future in case of any travel-related issues or other scenarios. A new technology develops, the system can be updated and adjusted to fit the intended setting. Owing to its foundation in object-oriented design, any future modifications can be readily accommodated. Emerging technology can be leveraged to enhance security measures in light of potential future security threats.

VI. CONCLUSION

For every woman, this mobile application is quite beneficial. Considering that a lady only needs to touch the I Safety smartphone app to notify her guardians that she is in danger. The app only needs to be touched to initiate a call to the first added guardian number and to convey the message that she was in peril and notifies every saved guardian contact of their whereabouts. We can notify the people at home about the safety or not of a woman who lives there by using this smartphone app.

Mobile-based women safety applications have emerged as valuable tools in the fight against gender-based violence and harassment. While they offer numerous benefits in terms of empowerment and security, it is essential to address challenges such as privacy concerns and accessibility to ensure their effectiveness and inclusivity. Continued research, development, and collaboration between technology developers, policymakers, and women's rights advocates are crucial in harnessing the full potential of these applications to create safer communities for women worldwide.

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