

## SCIWARS Android App for Women Safety

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### ABSTRACT

Every human on this planet is working hard for a comfortable living and wants to safeguard his investment that he has made in his day to day work. Ultimately, at the end of the day we all seek for security of life and our belongings. The major question to ask your self is we really secure? The world is not perfect and we are susceptible to the dangers that exist in the society hence the urge to feel protected and safe is fulfilled by the use of hidden cameras. A hidden spy video camera can be available anywhere. We should be conscious about this aspect, because we might be in a particular place, where our actions will be recorded without us being aware of it. Unfortunately, the very reasons that make this device so effective can also lead to its misuse by some. Sex scandals involving women and children have occurred due to being recorded illegally. Profits are made through exploiting this to others whose actions have been monitored by a hidden camera. Victims' lives are bust through the same technology that should have been used to make people feel secure. There should be some way or technique which can help the person from spy cameras to maintain their privacy. So we have to propose SCIWARS (Spy Camera Identification And Women Attack Rescue System) intelligent alerts system which will help to prevent from being victim of any kind of attack or spy cameras. This system contains two modules, first module will detect Hidden cameras, which are hidden in hotels room, changing rooms. The second module will helps victims from attack like physical violence, if victims feels insecure and helpless at any time then by pressing any key of her mobile continuously the alert message is send to nearest police control room, family, Ambulance, Friends which are in emergency list that alert message will contains the entire location of that victims place and images of that location which are taken by camera of her mobile. This will helps victims to avoid attack and it also helps to police to reach that place as fast as possible for provide help to victim and save her from attack.

**Keywords**-GPS Terminology, Audio Recording, Auto Call Receiving System, GPS Tracker.

### I. INTRODUCTION

Women are adept at mobilizing diverse groups for a frequent cause. They often work across racial, sacred, opinionated, and intellectual divides to encourage serenity. We are all aware of importance of women's security, but we must recognize that they should be well secluded. Women's are not physically powerful as compared to men, in crisis situation a helping hand would be a relief for them.

The best way to minimize your chances of 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. Whether you're in instant trouble or get separated from friends during a night out and don't know how to get home, having these apps on your phone can diminish your risk and bring assistance when you require it. Although several were formerly developed for students to reduce the risk of physical attack on campus, they are also suitable for all women.

In the light of recent outrage in Delhi which shook the nation and woke us to the safety issues for our daughters, public are gearing upbeat in different ways

to fight back. A swarm of new apps have been developed to provide security systems to women on their phones.

Here we introduce an app which ensures the safety of women. This reduces risk and brings assistance when we need it and help us to identify the location of the one in danger. We propose our app since it have some key features which diverse it from others are as follows:

- 1) At first user have to save some details. These details consist of: contact numbers like friends, family etc. And send the Text Message to the recipient.
- 2) Then initialize this app as a "widget", so that a finger touch is enough to alert your recipient
- 3) It will also record voice in the region of surrounds for 45 seconds and then save this recording.

This message also includes the current position (latitude and longitude) of the victim. Android is the first truly open and comprehensive software platform for mobile devices, it's a comprehensive software to run a mobile phone but without the proprietary

obstacles that have stuck mobile modernization. It is motorized by Linux Kernel. This is the first complimentary platform which is robust and is expected to gain much popularity. The idea originated from Android-Mobile Application Development. The current system is developed on the basis of android platform. Android is an open source software platform and operating system for mobile devices. It is based on the Linux kernel. It was developed by Google team and allows writing managed code in the Java language. There are number of technologies and the process presented with an opportunity such to create a foundation for future development of actual Android-based hardware with the inputting and tracing functions built in it.

## II. EXISTING SYSTEM

As part of our initial research, we decided to investigate applications that offer the same or similar services for android and other platforms. The aim is to see how these applications work and to see how they can be improved. To date it is identified following Android Apps that offer the relatively similar service

### Android Apps for Women Security

Today the cases of atrocities on women are growing. In these types of cases mobile is play an important role for safety of women. Now android is budding some apps for women security purpose. These apps are as follows –

- **FIGHTBACK:** - This app is developed by Mahindra faction. In earlier days, this app was not complimentary, customer have to compensate for this app. But after Delhi gang rape this app is on hand at no cost. This app sends a message to your friend or contacts that “user is in trouble” using E-mail, GPS, SMS and GPRS. This app works on that mobile which supports Android Java Programming. Using this application, you can send SMS of your location using maps also [3].
- **Guardly:** - This app is developed basically for women safety intention. This app put a phone call by your name, instantaneous location, and emergency hit to your selected friends. In this app you have to give your details in profile sheet e.g. birthdate, tallness, weight, eye-color, blood group, hair-color, etc. This app is also used in i-Phone, i-Pad, BlackBerry, Windows Phone etc[4].
- **OnWatch:**-This is persona security application. In urgent situation user can alert through this applicaton to his friend. Through this app you can send ‘Time Based Alert’ just like if you are not reached on given time then within one hour it will alert to your family and friends. This app has 6 custom-made alert methods that allow you the

flexibility to inform your friends, Police Station or a combination of all two if you need help.[5].

- **Life 360 Family Locator:**-This is free app. In emergency this app report to your friends and family. Using this app you can find relative members on personal map. This app helps you to know about your family, whether they are safe or in trouble. Life360 shows wellbeing places like hospital, police stations, etc near to you as well as recent crimes nearby and registered sex offenders[6].
- **Street Safe:**-This application is developed on worldwide Women’s day. It will call community to help you in any situation. This app has 4 features for crisis which would be started by just clicking on the button. These features are as – First, it automatically updates on your Face book account with your recent location. Second, SMS will be sent to chosen associates with your locality. Third, an alarm is started with large volume on your mobile. Fourth, call is to be found to your chosen emergency number[7].

## III. PROPOSED SYSTEM

To develop a system for android users for keeping track through several applications. The application uses some GPS terminology for location mapping and tracking the restricted zones, and detecting hidden web camera`s by using android mobile devices. And women’s attack handling system for women’s security and protecting against rape and from other harassment.

### A) Hidden Camera Detection Module

This module will detects Hidden cameras, which are hidden in hotel rooms, changing rooms .Every Night-vision camera emits Infrared Rays, so when victim will enters in room if there is any hidden camera she will get Alert message on her mobile that there is an hidden camera, this will happens by catching the infrared rays through her mobile while she entering in a room. After getting Alert message, she can send this message to Police control room or NGO’s to expose the reality of that mall or hotel.

### System Diagram:

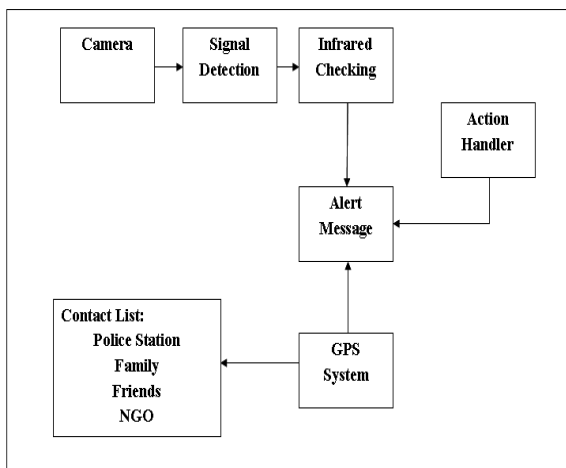


Fig. 3.1 Hidden Camera Detection System

Fig.3.1 shows the block diagram of hidden camera detection system. Initially, when the user entered into the area where hidden cameras are placed. The signal detecting system will help in detecting infrared rays coming out from hidden cameras. As soon as camera will detect infrared rays, it will generate an alert message to user using action handler. At the same time, the GPS system will generate address of location where the hidden camera is detected and its user responsibility to decide whether to register a complaint or not.

**B] Women’s Attack Handler Module**

This module will helps victims from attack like physical violence, if victims feels unsecure and helpless at any time then by pressing any key of her mobile continuously the alert message is send to nearest police control room, family, Ambulance, Friends which are in emergency list that alert message will contains the entire location of that victims place, and images of that location which are taken by camera of her mobile. This will helps victims to avoid attack and it also helps police to reach that place as fast as possible for providing help to victim and save her from attack.

**System Diagram:**

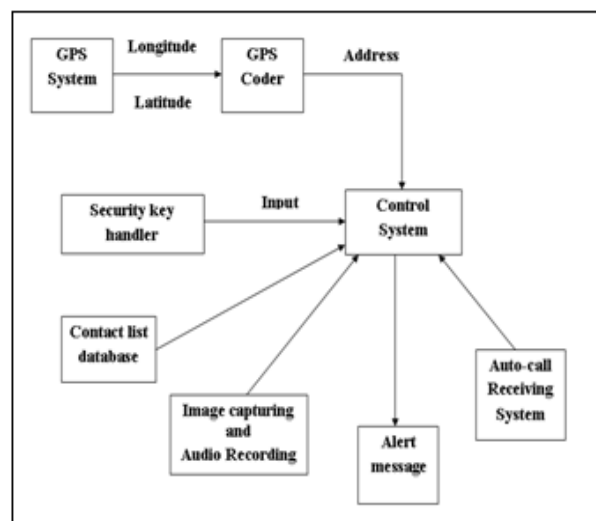


Fig.3.2 Women’s Attack Handler System

Fig.3.2 shows the Women’s Attack Handler System. When there is attack on women, the application will get activated by pressing any key of mobile phone. After pressing the key, Geo coder find the location and send it to members which are included in contact list. Also it will capture the images of that location and send it with the message. Audio recording will be also done and it is stored in secret location of mobile. Auto-call Receiving system is also done in this module.

**Text Summarization Algorithm**

This Summarization is to compress an original document into a summarized version by extracting almost all of the essential concepts with text mining techniques. Text summarization can be performed in two different approaches: extraction and abstraction [1]. The extraction approach is to construct the summary by taking the most important sentences out of the original document. In contrast, the abstraction approach is to form summary by paraphrasing sections of the original document. In general, abstraction is more powerful and generates closer results to those composed by humans than extraction.

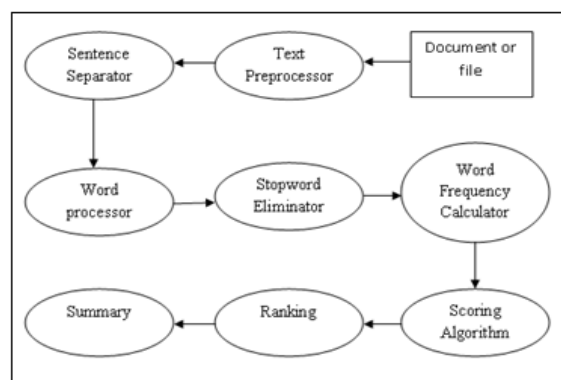


Fig.3.3 Algorithmic Execution

### Text preprocessor

Text preprocessor is used to translate prepared file like Email file into simple text file for further processing.

### Sentence Separator

This goes through document and separate documents on basis of some rule or criterion like sentence should be finish with dot (.) and there should be gap between sentences etc.

### Word Processor

The word separator works like sentence separator only it separates words based on some regulation or criterion like space denotes end of word.

### Stop Word Eliminator

Stop word eliminate the ordinary English word from your document for additional processing.

### Word Frequency Calculator

This calculates the number of times a word appears in document and also calculates the word come out in text. After calculating frequency of word we scored that document on the basis of scoring algorithm. We give the rank to that document and summarize that document [2].

## IV. EXPERIMENTAL RESULTS

This will helps victims from attack like physical violence, if victims feels unsecure and helpless at any time then by pressing any key of her mobile continuously the alert message is send to nearest police control room, family, Ambulance, Friends which are in emergency list that alert message will contains the entire location of that victims place, and images of that location which are taken by camera of her mobile. This will helps victims to avoid attack and it also helps police to reach that place as fast as possible for providing help to victim and save her from attack.

Following functions are available in system.

To generate the Alert Message, when victim press any key of her mobile when victim is in trouble, Automatically capturing real time image and recording audio, Sending SMS with location details and images to selected contacts when victim is in trouble, Automatically converting profile of mobile phone to silent mode, Auto-call receiving System, GPS tracker, Detection of Spy Camera.

## V. CONCLUSION

In this, there are two modules. One for Hidden Camera Detection System, which is used to detect the hidden camera's which are placed in areas like hospital, colleges, Malls, Hotel rooms etc. Another module for women attack Handler System. This system will help in Prevention of attacks on

women and being victim of any sex scandal. This system will give assurance for women to live secured life. In this, we use Text summarization algorithm for calculating word frequency.

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