

WOMEN SECURITY AND SAFETY BAND WITH AUTO MAIL OF IMAGES AND INSTANT LOCATION

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ABSTRACT:

Now a day's women security plays a vital role in the society. The number of attacks have been increased on women. And it is the responsibility of everyone to protect them from such incidents. To accomplish this, we have proposed this women security system. This system is a portable wrist band will perform voice recognition and image capturing continuously in real time. When the system recognizes the voice help me continuously then captures the image of the attacker who has attacked. It will automatically send a mail containing the images and location details to the women's parents and police department.

Keywords: IOT, security, Images, GPS, mailing, voice recognition, RPI camera

INTRODUCTION:

Security against women have become an owlsh issue these days. Many women are been harassed by the society and man. Women not only are protested by these security issues but also they are been tortured by their in-laws and to bring much more dowry after being married to. For the

last few years we have seen the "Disha" (Priyanka Reddy) and Nirbhaya cases for whom the accused were hanged to death. Recently many cases have been filed against women. Even today many women are tolerating many security issues.

As the generation changes and technology gets updated the mobile phones usage has been increased to a larger view in such a case the android applications has been developed such as Sos app, Be free, Dail 100, Vithu app, Circle of 6 app, Life 360 family locator app, Nirbhaya : Be fear less app. All the apps mentioned above are applicable in all the mobile phones which connect the guardians of the women or girl and will be locating the accurate position of the girl via the Google maps and the GPS Module. These would also be calling to the nearest police station through the phone call or a message but will not be able to capture the images of the attacker and can't make a Buzzer sound to the surrounding areas if any person is available to rescue her.

Over the years numerous algorithms have been proposed and implemented but none can provide the security for women developed to improve the face detection efficiency. The status of women in India has gone through many great changes over the past few millennia. From equal status with men in ancient times through the low points of the medieval period to the promotion of equal rights [6] by many reformers, the history of women in India has been eventful. In modern India, women have adorned high

offices in India including that of the President, Prime Minister, Leader of the Opposition and Speaker of the Lok Sabha. However, women in India continue to face social challenges and are often victims of abuse and violent crimes [6] and, according to a global poll conducted by Thomson Reuters, India is the “fourth most dangerous country” in the world for women, and the worst country for women among the G20 countries.

This paper focuses on a security system that is designed solely to serve the purpose of providing security [7] to women so that they never feel helpless while facing such social challenges. The system consists of various modules such as GPS Module which sends the location details via the Google maps, camera which captures the images of the victim and the accused and the Raspberry pi (Hardware used) and the Buzzer system which alerts the surrounding areas of the people.

The Delhi Nirbhaya case and the Hyderabad Priyanka Reddy case (Disha) that triggered the whole nation were the greatest motivation for this system. It was high time women needed a change. In this paper we have implemented a new system for the purpose of women and girl child security issues which gives us the

current location status of the women and also captures the images of surrounding areas and the accused person which has a very large use in security related issues in real world scenarios. for this we will be giving the device with a registered mail Id taken from the user.If the girl press the buzzer or utter a word that she is at risk the GPS Module gets activated sends the accurate location details of the women and camera gets activated and captures continuous shots and sends them to the

registered mail Id.The Buzzer also gives an alert sound so thatthe surrounding area people can rescue her.This project has been developed by using the camera module,GPS Module connected to the satellite via Google maps and the Buzzer sound. It is a way computers gather and interpret visual informationfrom the surrounding environment and aims to have SMART way for signal managementwhich will ultimately be a cost effective solution.

Block diagram:



LITERATURE REVIEW:

1. A Women Security System by Snehal Lokesh¹, Avadhoot Gadgil² said that “The system consists of three main components namely, an Android Application, Main Device and Portable Camera. Together these devices will work as an effective security system”.

2. Toney et al (2015)[14] says that, with increasing atrocities on women and children, arises the need of an advanced system to serve the purpose of alerting someone for help. Most of the cases remain mystery because of lack of evidences or them being tweaked. The situation is noxious and they propose a system that would aid the victims not only to send a panic and alert message but also collect evidences in the form of images. They propose a system initiated by a human action.

3. A Women safety device is design by Smart girls’ security system
AUTHOR:-Prof. Basavaraj Chougula

et.al. This paper suggests a new perspective to use technology to protect women. The system resembles a normal belt which when activated, tracks the location of the victim using GPS (Global Positioning System) and sends emergency messages using GSM (Global System for Mobile communication), to three emergency contacts and the police control room.

4. A Women security system Author :-Shaik Mazhar Hussain says that the users can press a button that is located on watch with RFID technology that is, RFID tag is embedded in the watch or locket that contains information about unique ID and name. The RFID reader is embedded in mobile phone that receives radio waves and once the RFID tag is activated and emits radio waves, the RFID reader takes the information and triggers the mobile phone where the processor will perform the task and sends the messages to 4 or 5 predefined

contacts in which one is for police women cell where they can get the information about location of the victim through GPS and message alert"HELP".

OUTCOMES OF LITERATURE REVIEW:

1. It is very difficult to identify the person who has attacked.

EXISTING SYSTEM:

As the generation changes and technology gets updated the mobile phones usage has been increased to a larger view in such a case the android applications has been developed such as Sosapp, Be free, Dail 100, Vithu app, Circle of 6 app, Life 360 family locator app, Nirbhaya : Be fear less app. All the apps mentioned above are applicable in all the mobile phones which connect the guardians of the women or girl and will be locating the accurate position of the girl via the Google maps and the GPS Module. These would also be calling to the nearest police station through the

2. It is very difficult sometimes to manually press the button where an incident makes her unconscious.
3. For improving we are going to use USB mic which detects voice and enables the camera.

phone call or a message but will not be able to capture the images of the attacker and can't make a Buzzer sound to the surrounding areas if any person is available to rescue her.

Keeping the same concern in mind many developers have come up with innovative applications. Few of such applications are as follows-

1. VithU app: This is an emergency app initiated by a popular Indian crime television series "Gumrah" aired on Channel [V]. In this app when the power button of the Smartphone is pressed twice consecutively, it will begin sending out alert

messages with a link to the location of the user every two minutes to the contacts fed into the app.

2. SHE (Society Harnessing Equipment) : It is a garment designed by three engineers from Chennai. This garment has an electric circuit that can generate 3800kv of current which can help the victim to escape. In case of multiple attacks it can send up to 82 electric shocks. Since the fabric is bilayer, the user is not affected. It can also send emergency messages.

3. ILA security: The co-founders of this system, McGivern, James Phillips, and Neil Munn, have designed three personal alarms that can shock and disorient potential attackers and draw attention to dangerous situations.

4. Another system is designing a portable device which resembles a normal belt. It consists of Arduino Board, GSM/GPS modules, screaming alarm and pressure sensors. When the threshold of the pressure sensor crosses, the device

will get activated automatically. Immediately the location of the victim [3] will be tracked with the help of GPS and emergency messages will be sent to three contacts and one to police control room every two minutes with updated location. The screaming alarm unit will be activated and will send out sirens to call out for help. The system is also capable to generate an electric shock to harm the attacker which may help the victim [8] to escape.

Drawbacks:

1. Manual pressing of the wrist band button.
2. Sending only alert not the attacker information.
3. Continuous connectivity of device with mobile.
4. Providing the user alert by calling manually in the smart phones.

PROPOSED APPROACH:

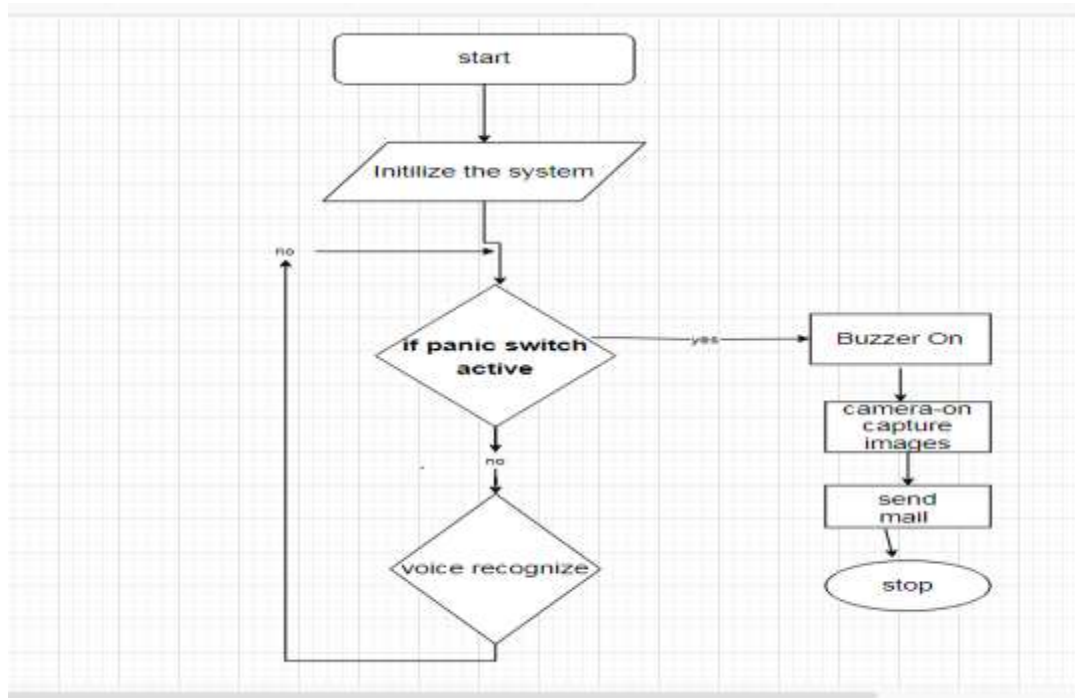
We have proposed a system. This system is just like a wrist band which consists of a camera and a USB Mic. In this paper we have implemented a new system for the purpose of women and girl child security issues which gives us the current location status of the women and also captures the images of surrounding areas and the accused person which has a very large use insecurity related issues in real world scenarios. for this we will be giving the device with a registered mail id taken from the user. If the girl press the buzzer or utter a word that she is at risk the GPS Module gets activated sends the accurate location details of the women and camera gets activated and captures continuous shots and sends them to the registered mail id. The buzzer also gives an

alert sound so that the surrounding area people can rescue her.

Advantages:

1. Providing the attacker information.
2. Sending the captured images to the registered mails.
3. Cost effective and portable.
4. Data Security and sending the location through GPS with the google map link.

Methodology of Proposed System:

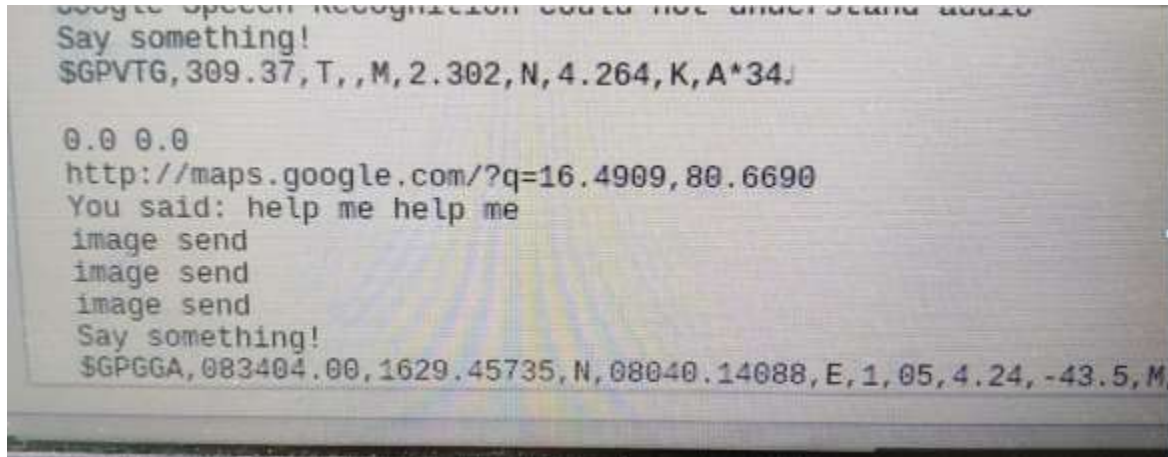


Procedure:

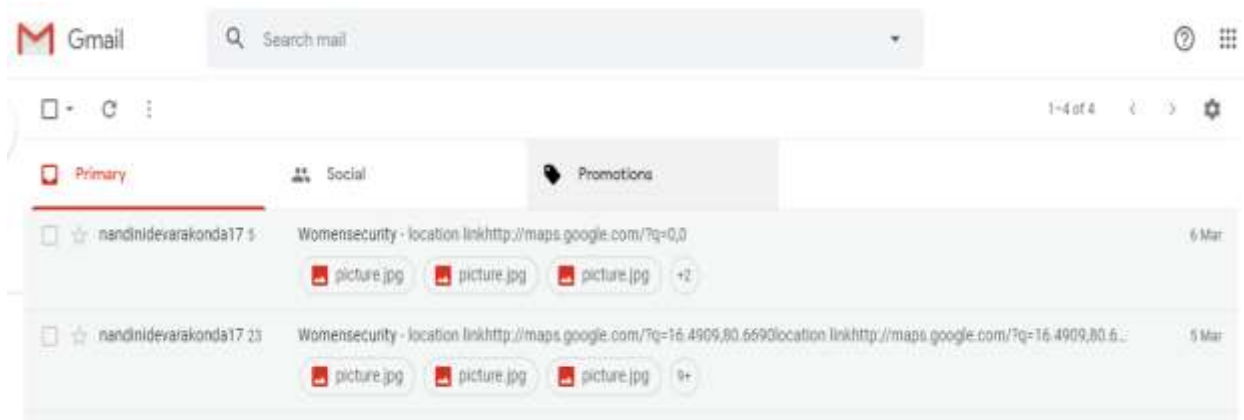
Whenever, woman thinks that she is in trouble she just has to utter the word “HELP” followed by any sentence like help me or help I am in risk. So, that the mic recognizes the statement. Later, the camera inside the wrist band captures the images of the person continuously who has attacked as well the surroundings. And automatically sends image as well the GPS location to the nearby police station and to her relatives. That is location is send with the help of google map link. And even there is a situation, where she cannot utter a word. In that situation, we will keep a button to the wrist button. When she presses the button a buzzer makes a sound and the same process is carried out. So, that the surrounding people can save the life of women and she will get out of those situations. And even helps in making justice to the women.

RESULTS:

Voice recognition or panic button pressed:



Alert mailing:

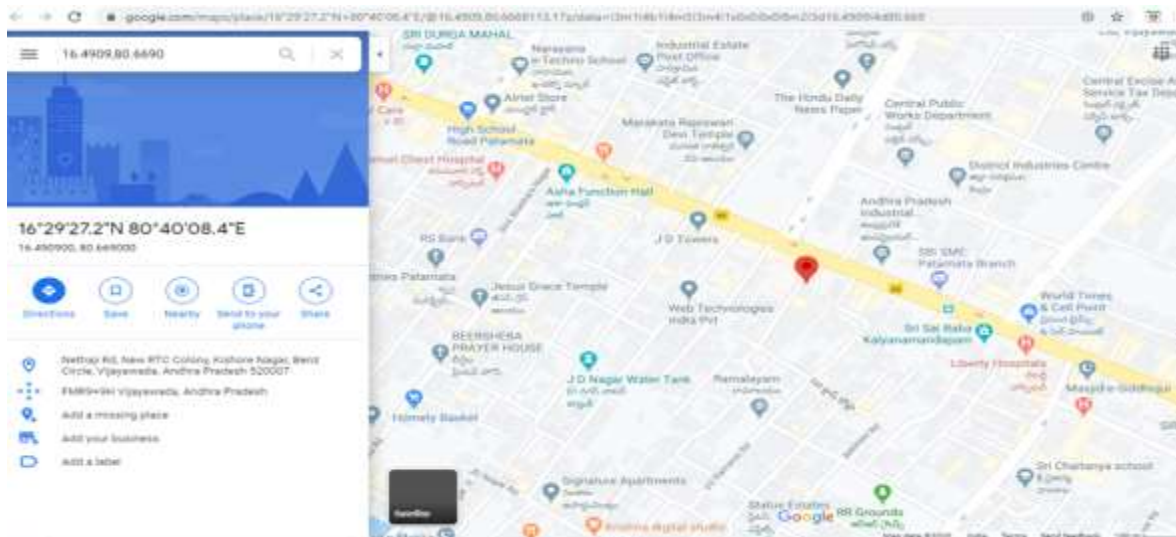


Attacker Images:



5 Attachments

Location map:



CONCLUSION AND FUTURE BEHAVIOUR:

In this paper, a method for estimating the position of the girl is presented with the camera. Each image will be observed with a perspective view ensuring that the girl is in a safety view and position. This system is very

helpful to the women and girl child who need security especially who would go out at night times for a working or any other purposes. The "women safety device based on raspberry pi" is basically based on the embedded systems networking equipment. This paper shows that security device for women is

applicable in real time situations and small scaled areas which is cost effective one.

The applications of this project are not limited as the each application gives rise to the new applications. There are many further scope implementations such are followed by

1. The video recorder can be implemented via a high speed internet connection.

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2. To achieve more sound when the button is pressed the buzzer frequency can be increased which is audible to much distance.

3. To improve the system performance, we can use the advance versions of the raspberry pi module as per requirement.

4. The available android applications can be future enhanced.

7, p no. 2.

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