WOMEN SAFETY DEVICE WITH HIDDEN CAMERA DETECTOR

S.Akilandeswari[2], E.Elakkiya[3], P.victoriya[4]

MR, C.John selvaraj1 (AP/EEE)

Kings College of Engineering, Punalkulam, Thanjavur

riya2521998@gmail.com

ABSTRACT - In the current scenario the safety of persons is a major concern in India and other countries. The rising increase to provide safety of the persons is a major concern and challenge in front of the society. From the past many decades Individuals are facing much unethical physical and mental harassment which even leads to casualty. In the minds of every individual they feel comfortable when they are safe to move freely on the streets even in the odd hours. More accidents occur for women, children and elderly people who always feel that they need the support to move around. With the help of advanced technology individuals can make use of a simple gadget which can be used whenever they are in unpredictable circumstances to establish connectivity between police and family. The device designed is a portable one which can be activated as per the requirement of the individual which will locate the victim using GPS and with the help of GSM emergency messages can be sent to the respective locations as per the design. The gadget provides an alarm system, call for help, and electric shock to get rid of the attacker. The system provides safety for the person and makes them fearless.

Keywords-GPS, GSM, Individual, Security.

1. INTRODUCTION

It is an unfortunate observation that there has been a substantial increase in crimes against women in the past decade. With a variety of software applications now in action, to help women, the statistics have not lowered. According to the National Crime Records Bureau (NCRB), in India, 93 women were raped everyday in the year 2014.Also 3,307,922 cases of crime against women were reported in year 2014 alone. The current practices in female security broadly fall into different categories ranging from android applications developed for mobile phones, and extend to fashionable apparels that can be wore and carried in day to day life. However, our focus is on creating a safety system that merges the benefits of existing techniques and brings about a solution that ensures both defense and creation of a seamless pathway to initiating legal procedures, if any; have to be taken by the victim. We intend to create a

partial wearable that can provide a complete security solution and become a utility that eases the apprehension among women and their family members. The objective of research work is to create a safety system in the form of a portable safety device for women, that does the following tasks: Alerts family and police and gives location coordinates of the woman being attacked. Captures and stores an image/video of the attacker to maintain a proof for legal actions. Incorporates a defensive mechanism by giving a mild shock In this paper, we provide a summary of the progress achieved so far, in making of the desired system. The rest of the paper is organized as follows: Section II gives an overview of the system designed to create a safety system for women. Captures and stores an image/video of the attacker to maintain a proof for legal actions. Incorporates a defensive mechanism by giving a mild shock In this paper, we provide a summary of the progress achieved so far, in making of the desired system. The rest of the paper is organized as follows: Section II gives an overview of the system designed to create a safety system for women**.**

2. Methodology

2.1. Hardware Device

The methodology used in our paper, device can be activated by just merely pressing the emergency button once. This device gets activated and sends instant location with a distress message to the police pre-set numbers through a GSM module3 , shows the triggering button and how the device looks like and when the emergency button is double clicked, the device sends both the distress message with instant location and records the audio of the incident. When the same button is long pressed it activated call to the police and sends message to the police instant location.

2.2. Android Application

The general methodology of the application. When you click on the application, there is a thread and then it leads title main page, which consists of simple user interface. Depending upon the problem, we can choose the icon, which will guide the user during emergencies6 . When you click on the following icons the following pages like hidden camera detector, women Security, SOS message, video recorder pages will be opened. In our application, the user gives the input either manually or by the volume button. First the user starts the application by going inside it by clicking on the application icon. Then a thread of 2 seconds is rendered which displays the name of the application. Then after this process ends, the user interface where the user can interact with the application is displayed. This page lets the user interact with our application. When the user clicks on the each icon, it leads to that respective page7 . The 4 different icons used in our application is the woman safety, SOS message, video recorder, hidden camera. When you click on the emergency button (volume key+ power button), the application gets opened automatically then sends an emergency message and audio is recorded and sent to the pre-set contacts.

3. Existing System

In the existing system there is no monitoring system for girls, it should create many problems for them and the no safety mechanism to protect the girls from the misbehaviour activities. In addition, in the existing system there is no alert mechanism for the girl's safety, it should be done by manually only.

3.1 Disadvantages

• All the existing systems must be connected to the GPRS service to work properly, hence cannot be used during emergency if there is no internet connectivity.

• There is no hidden camera detector which is portable to ensure our privacy.

• Monitoring was tedious.

• Mischance in arriving rate.

4. Proposed System

The device which we proposed in this paper, Using the ARM controller the device is designed in which the GSM, GPS, Bluetooth and RF detector is connected. The whole device just runs with total of 12v in which 5v is enough for the ARM to process. Figure 4 represents the prototype of the device which we initially made and can be miniaturized in future for real time use. In this system, an Android Application is used to find the location and send the location the group of people stored in the phone, SOS Message, Track your phone and additionally we used a technique of clicking the volume button, if the button is pressed on time then message alert, second if button is pressed two times then message and audio and third if the button is pressed long time then calls to police, message and Audio. We implement the same part in the hardware side if the person use in case of hardware he/she can user hardware or if he/she want to use software use software.

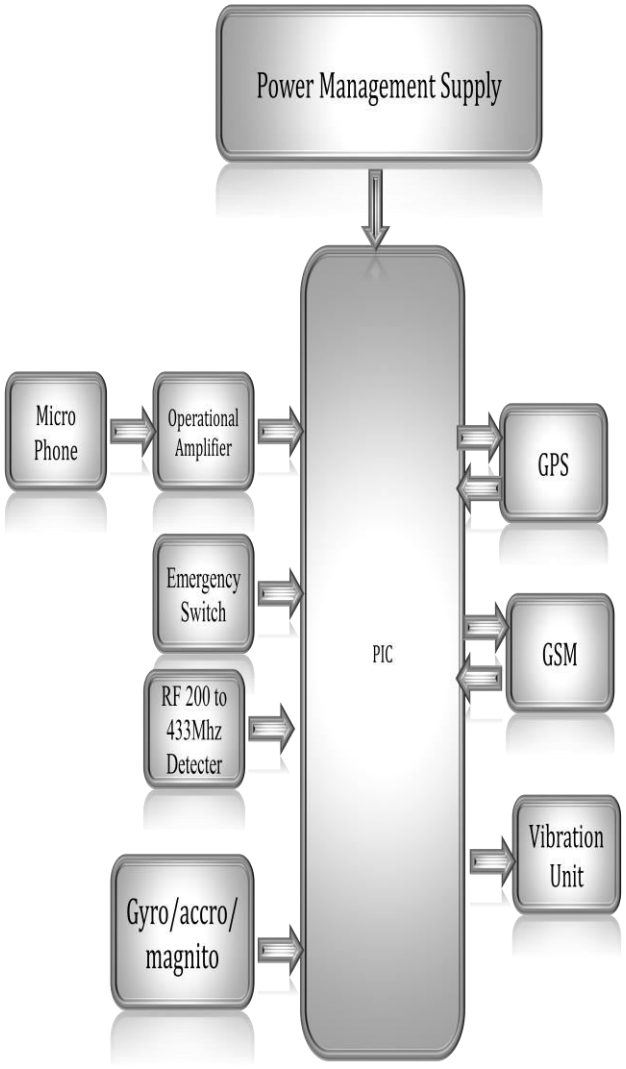

Fig 1: Proposed system

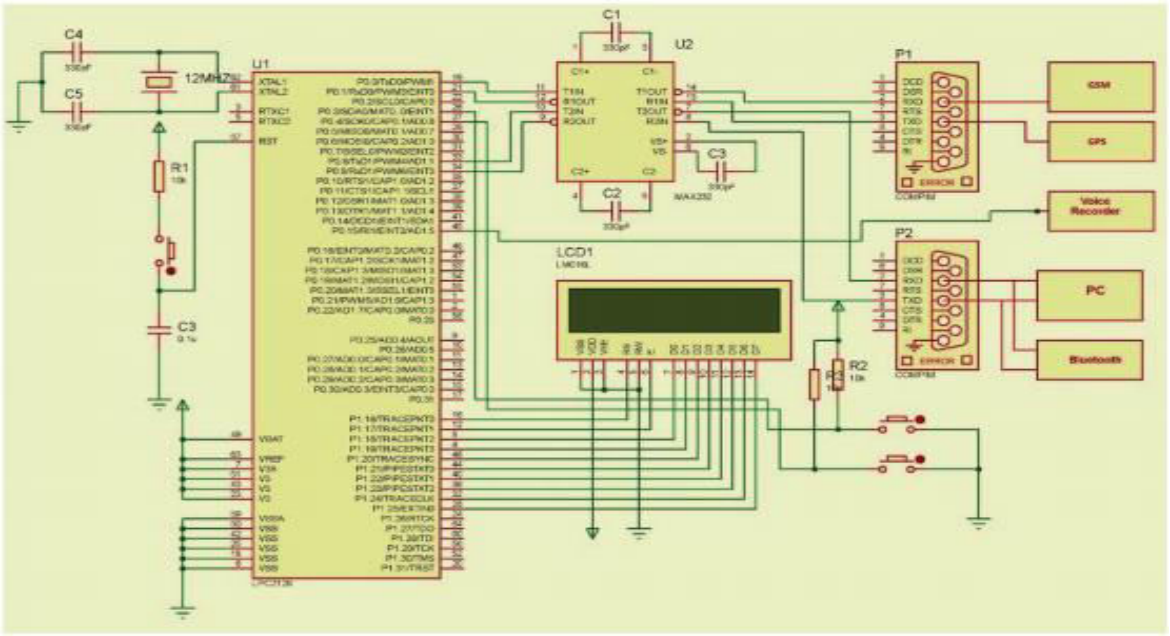

Fig 2: Circuit diagram

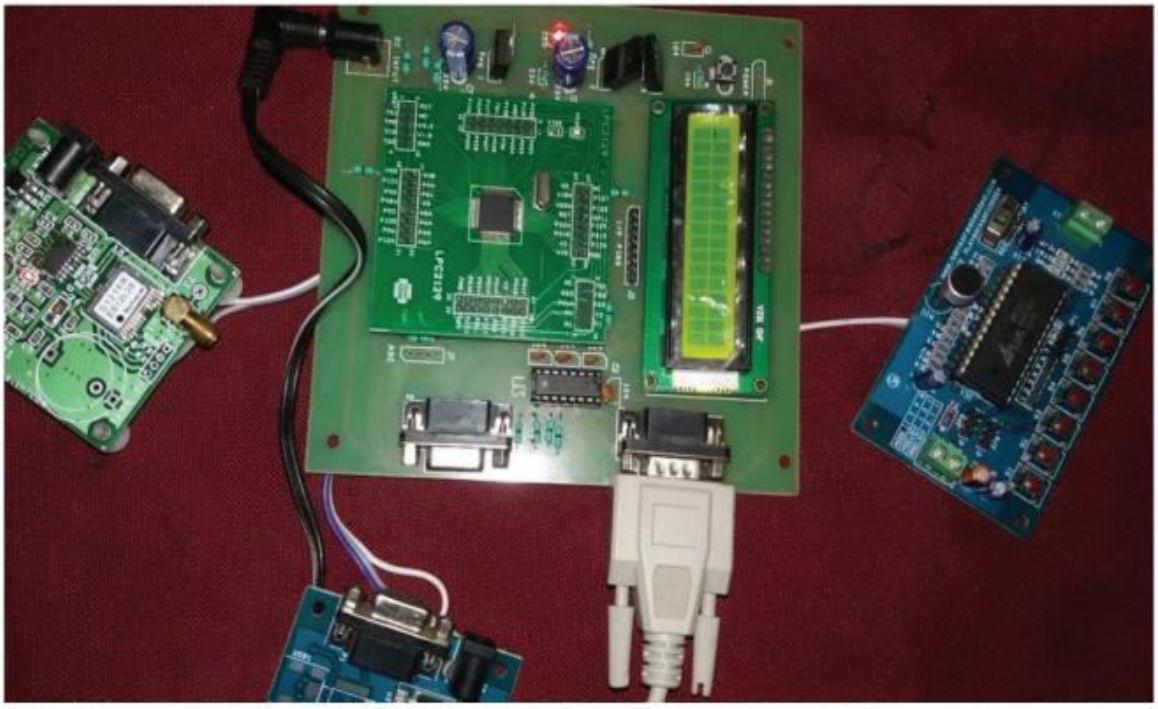

Fig3: complete prototype

4.1 Advantages of the Proposed System

• It is an all-in-one system. Hence no need to carry multiple devices.

• GPS tracking feature tracks the user lively when you are the move after triggering the emergency button.

• It records audio, which can be used for further investigations.

• When the battery is running low, it automatically sends the location the pre-stored contacts.

• The second distinct feature is, it also detects the hidden cameras which help in our privacy.

• This device works without internet connectivity.

5. Conclusion

In this paper, we have proposed the designing and implementation of a safety system for women in the form of partial wearable. Going serially as per the objectives mentioned, a location tracking subsystem was successfully implemented and the corresponding results were logged. The successful streaming of images of a live event on a web page was done within an intranet. The further implementation of the system will be performed in accordance with the goals mentioned in the future scope.

6. REFERENCES

[1] Nandita Viswanath, Naga Vaishnavi Pakyala, Dr. G. Muneeswari, "**Smart Foot Device for Women Safety",** IEEE Region 10 Symposium (TENSYMP), Bali, Indonesia, May 2016.

[2] G C Harikiran, Karthik Menasinkai, Suhas Shirol, **"Smart Security Solution for Women based on Internet Of Things(IOT)",** International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT), India, March 2016.

[3] Anand Jatti, Madhvi Kannan, Alisha RM, Vijayalakshmi P, Shrestha Sinha**,"Design and Development of an IOT based wearable device for the Safety and Security of women and girl children",** IEEE International Conference On Recent Trends In Electronics Information Communication Technology, India, May 2016.

[4] D. G. Monisha, M. Monisha, G. Pavithra, R. Subhashini**,"Women Safety Device and Application-FEMME**", Indian Journal of Science and Technology, Vol 9DOI:10.17485/ijst/2016/v9i10/88898, March 2016.

[5] Gowri Predeba.B, Shyamala.N, Tamilselvi.E, Ramalakshmi.S, Selsi aulvina. C, **"Women Security System Using GSM and GPS",** International Journal of Advanced Research Trends in Engineering and Technology (IJARTET)Vol. 3, Special Issue 19, April 2016.

[6] Ms. G. Rathi, Ms. T. Prathipa, Ms. R. Ramya, Ms. B. Vidhya, **"Smart Security Solution forWomen Using Wearables"**, IJAICT Volume 3, Issue 11, Doi:01.0401/ijaict.2017.03.03, March 2017.

[7] C. Ouyang, **"Design And Implementation of a Wireless Zigbee**

Mesh Network," International Journal of Science, Technology & Management, vol. 7, 2014 [10] J.K.Thavil, V.P.Durdhawale, P.S.Elake," Study on Smart Security Technology for Women based on IOT", International Research Journal of Engineering and Technology (IRJET) Volume: 04 Issue: 02 | Feb -2017.

[8] Vaibhav A. Alone, Ashish Manusmare**," A Study Based On Women Security System**", International Journal of Science, Engineering and Technology Research (IJSETR) Volume 6, Issue 8, August 2017, ISSN: 2278 -7798.

[9] Shreyas R.S, Varun.B.C, Shiva Kumar.H.K, Punith Kumar B.E, Kalpavi.C.Y," **Design And Development Of Women Self Defence Smart watch Prototype"**, International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT) – 2016 IEEE.

[10] J.K.Thavil, V.P.Durdhawale, P.S.Elake," **Study on Smart Security Technology for Women based on IOT**", International Research Journal of Engineering and Technology (IRJET) Volume: 04 Issue: 02 | Feb -2017.