



A Device That Connects Woman To A Network Of Emergency Services And Supports

Mrunal V. Nimbhore¹, Nabi S. Choudhari², Prajwal S. Shinde³, Seema Idhate⁴
Department of E&TC, SKNCOE, SPPU, Pune

¹mrunalnimbhore29@gmail.com, ²nabi.choudhari.nc@gmail.com,
³prajwalshinde9096@gmail.com, ⁴seema.idhate_skncoe@sinhgad.edu

Abstract— A women safety device is a technology-enabled device that is designed to enhance the safety and security of women. The device typically includes features such as GPS tracking, panic buttons, and loud alarms to alert authorities or nearby individuals in case of an emergency. Some devices may also include features such as self-defense mechanisms, camera surveillance, and real-time monitoring. The purpose of a women safety device is to provide women with a means to protect themselves from potential harm or danger, especially in situations where they may be alone or vulnerable. These devices can help women feel more confident and secure, knowing that they have access to immediate assistance if needed. Overall, women safety devices are an important tool in the fight against gender-based violence and can play a crucial role in promoting the safety and well-being of women.

Keywords—Woman safety, Panic Button, microcontroller

I. INTRODUCTION

Safety is the most wanted power for everyone in today's world. Technology is the best way to achieve it. That's the reason to develop this project that can act as a rescue device and protect at the time of danger. The motivation behind this project is an attempt to focus on a security system that is designed merely to serve the purpose of providing security to women so that they never feel helpless while facing such social challenges. An advanced system can be built that can detect the location and health condition of person that will enable us to take action accordingly based on electronic gadgets like GPS receiver, GSM, pulse rate sensor, flex sensor, MEMS accelerometer, body temperature sensor. We can make use of number of sensors to precisely detect the real time situation of the women in critical abusive situations. The heartbeat of a person in such situations is normally higher which helps make decisions to detect the abnormal motion of the women while she is victimized. Current scenario from the media shows that women are facing lot of troubles and they are not secure in untimed situation. Meanwhile, women are working equal to men like an IT Techie, Doctor, Engineer, Business women, Police, nurse, teacher, Army, Air forces, etc., When they are leaving alone, they may face the problems like robbery, rape and murder or harassment, etc..

II. LITERATURE SURVEY

B.Vijayalakshmi in [1] proposed a scheme to improve the women safety by using GPS and gsm model. A small device with a buzzer and microcontroller is designed, and it can be placed on band or watch. When any insecure situation, the woman can make use of this device to send alert SMS by pressing this buzzer to predefined numbers(5 members). But this scheme cannot generate automatic alert SMS. Instead, it requires the human interaction during a panic situation.

Rameshkumar.P in [2] described a scheme to identify the location of the individuals by using image metadata. A device GPS mapper is used to identify the location of a person using image and video by utilizing background metadata. With the help of GPS mapper, it can identify the altitude, longitude and position of a person who has uploaded their images to social media.

Charranzhou in [3] proposed a mechanism to find the trip ends while travelling or not - travelling by using the smartphones based on GPS tracking system. The author modelled a device using PR (Promoted Recall) technology and data-driven machine language to find the speed, distance, heading direction. These features are used to characterize the smart phone holders and identify the travel point identification. The author has tested PR technology in the random forest and accurately tracked the distance of trip ends This scheme will take many days to find the location of trip ends

Jakuryamaekawa in [4] proposed a scheme to determine user's current location preference using user's coordinate point, user's location information is disclosed to external providers even if this is not user's wish. A local Wi-Fi network is used to detect a user's location privacy preference. This enables to save energy and protect a user's private location. The disadvantage is Wi-Fi won't be available at everywhere and will be limited in space.

Humnguyen in [5] developed the system called ambulatory based on the inertial sensor to observe and detect the person's behaviour in daily life with PD (Parkinson disease) and facilitate early treatment. It will identify the disease in short time. From the free environment. observe the disease and take treatment. The limitations of measuring the device will be fixed in objects. If the person away from the object can't be predicted.

III. IMPLEMENTED SYSTEM

Main purpose of our system is to provide security to women .When women she fill in trouble Women safety is very important issue due to rising crime. When women walking on lonely road at night or she think she is in trouble that time may or may not get the chance to press The emergency button. Hit on the head from back side she gets unquantious. Our system solve this problem. In advance press emergency button when she feel insecure Switch is pressed by women system is alert all the component the microcontroller gets the command trace the complete path of the victim with the help of GPS module microcontroller send sms using gsm module to registered mobile number, and near police station. If changing position easily trace.

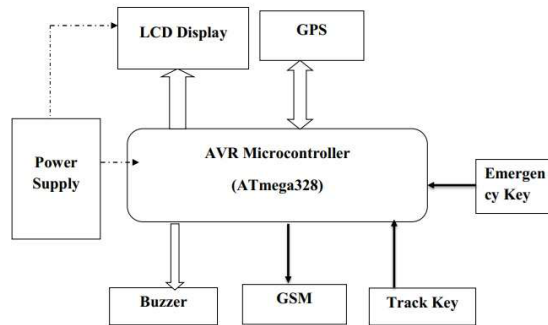


Fig.1. Block diagram of the Implemented Woman Safety Device

GPS module is used to establish communication between a computer and a GPS system. It is used to track the actual position of the women. Once the system turn on track complete path of women. GPS module is used to establish communication between a computer and a GPS system. It is used to track the actual position of the women. Once the system turn on track complete path of women. - GSM module is used to communication between GSM and LCD display suppose we turn on our system in advance.GPS track whole path & Send SMS via GSM..liquid Cristal display is flat panel display it produce digital image. LCD display are used to display the massage on screen for example, TVs, cell phones portable video games.

It has also called beeper. It is an audio signalling device,which may be mechanical, electromechanical, or piezoelectric (piezo for short). Typical uses of buzzers and beepers include alarm devices in this project we are using buzzer to alert near people.In our project emergency key plays very important role they allow the emergency services to gain quick action.

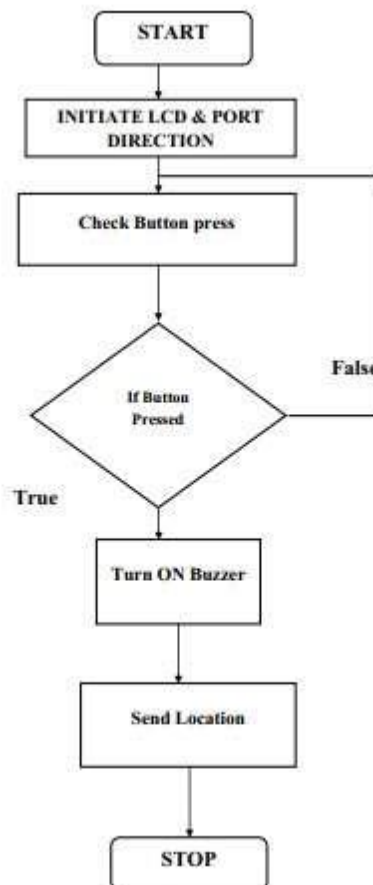
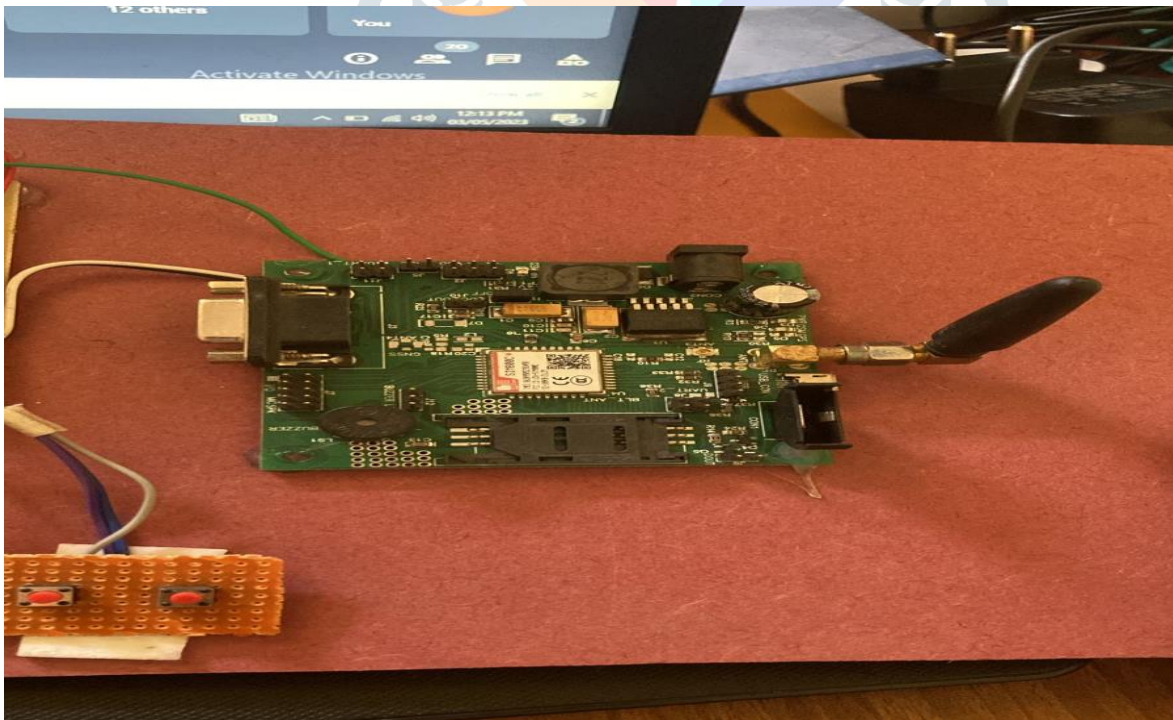
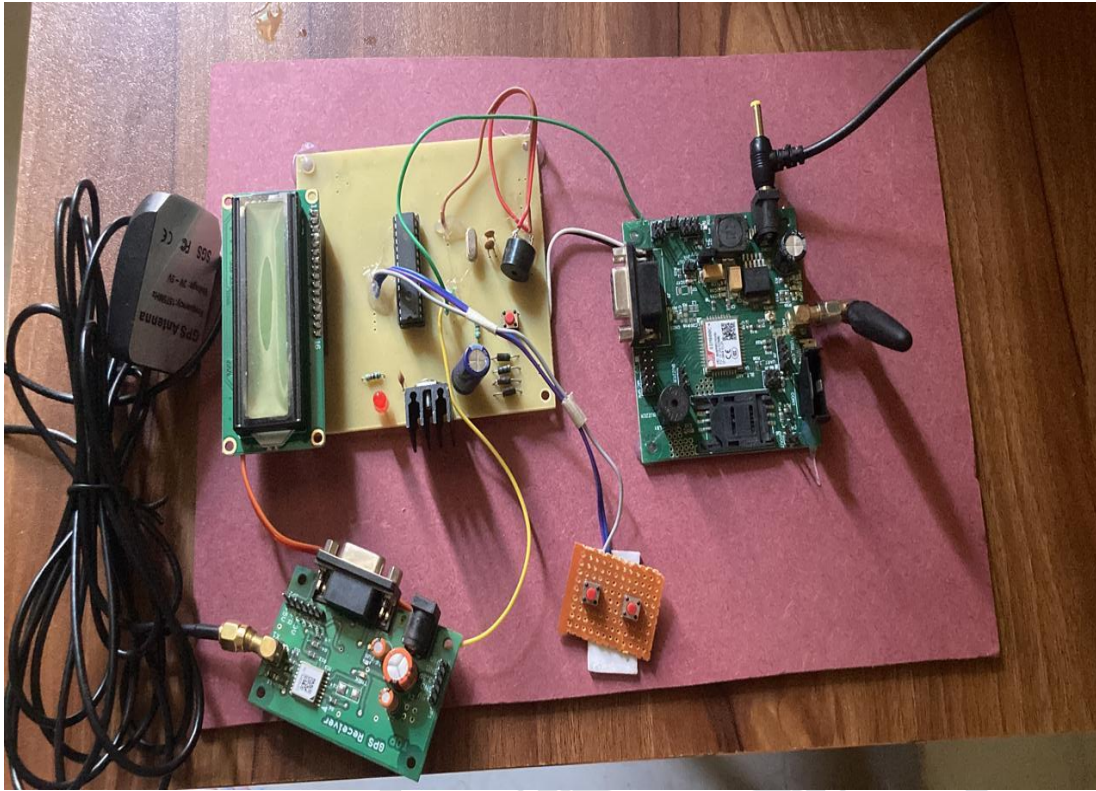


Fig.3. Flowchart of the Implemented Woman Safety Device

RESULTS



IV. CONCLUSION

This type of an idea being the first of its kind plays a crucial role towards ensuring Women Safety in the fastest way possible automatically.

The proposed design will deal with critical issues faced by women in the recent past and will help solve them through technologically sound gadgets With further research and innovation, this project can be implemented in different areas of security and surveillance.

The system can perform the real time monitoring of desired area and detect the violence with a good accuracy

THE SYSTEM CAN PERFORM THE REAL TIME MONITORING OF DESIRED AREA AND DETECT THE VIOLENCE WITH A GOOD ACCURACY

REFERENCES

- [1] Design and development of GPS-GSM based tracking system
- [2] Internet of things ([http://en.wikipedia.org/wiki/Internet-of- Things](http://en.wikipedia.org/wiki/Internet-of-Things))
- [3] Garrab, A.; Bouallegue, A.; Ben Abdallah, "A new AMR approach for energy saving in smart Grids using Smart Meter and partial Power Line Communication", march 2012 .
- [4] Ashna. K and Sudhish N George, "GSM based automatic energy meter reading system," IEEE Wireless communications 2013

