WOMEN SAFETY DEVICE WITH GPS TRACKING AND ALERTS

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Abstract - Today in the current global scenario, the prime question in every girl's mind, considering the ever rising increase of issues on women harassment in recent past is mostly about her safety and security. The only thought haunting every girl is when they will be able to move freely on the streets even in odd hours without worrying about their security. This paper suggests a new perspective to use technology for women safety. "848 Indian Women Are Harassed, Raped, Killed Every Day!!" That's a way beyond HUGE number! We propose an idea which changes the way everyone thinks about women safety. A day when media broadcasts more of women's achievements rather than harassment, it's a feat achieved! Since we (humans) can't respond aptly in critical situations, the need for a device which automatically senses and rescues the victim is the venture of our idea in this paper. We propose to have a device which is the integration of multiple devices, hardware comprises of a wearable "Smart band" which continuously communicates with Smart phone that has access to the internet. The application is programmed and loaded with all the required data which includes Human behavior and reactions to different situations like anger, fear and anxiety. This generates a signal which is transmitted to the smart phone. The software or application has access to GPS and Messaging services which is pre-programmed in such a way that whenever it receives emergency signal, it can send help request along with the location co-ordinates to the nearest Police station, relatives and the people in the near radius who have application. This action enables help instantaneously from the Police as well as public in the near radius who can reach the victim with great accuracy.

Key Words: Safety, women, panic button, GSM.

1. 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.
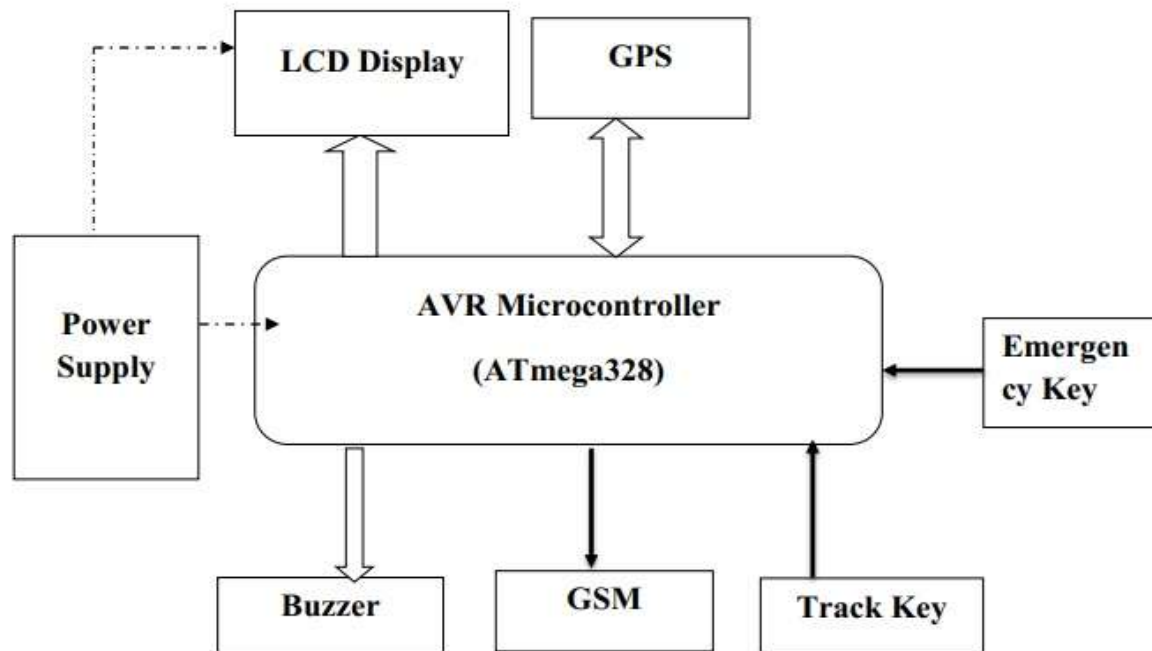
2. BLOCK DIAGRAM

Fig 1. Block Diagram

2.1 Block diagram description-

In our project we use AVR (atmega 328) as key component in our project automatic voltage regulator (AVR). It use of automatic voice recognition, it ability of any electronic devices to identify and understand human voice. also various sensor are interface with AVR microcontroller.

Power supply-

In this project we use battery as power supply .it is electronic device that used to provide electrical energy to the system.

GPS module-

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-

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.

LCD display-

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.

Buzzer-

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.

Emergency key-

In our project emergency key plays very important role they allow the emergency services to gain quick action.
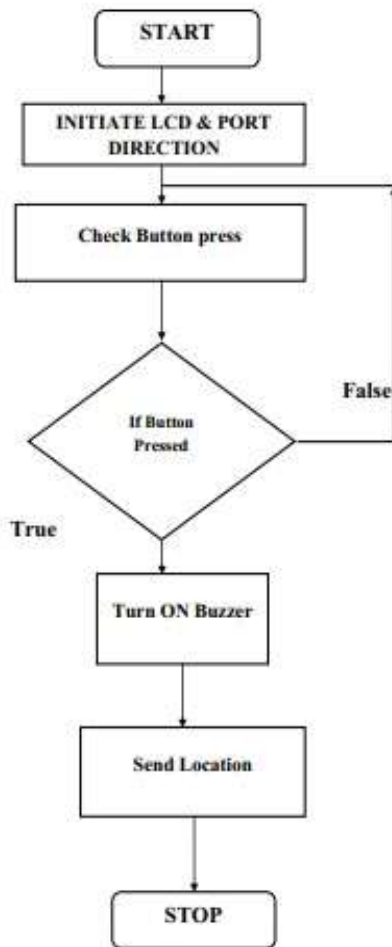
3. FLOW CHART

Fig 2. Flow chart

3. WORKING

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.
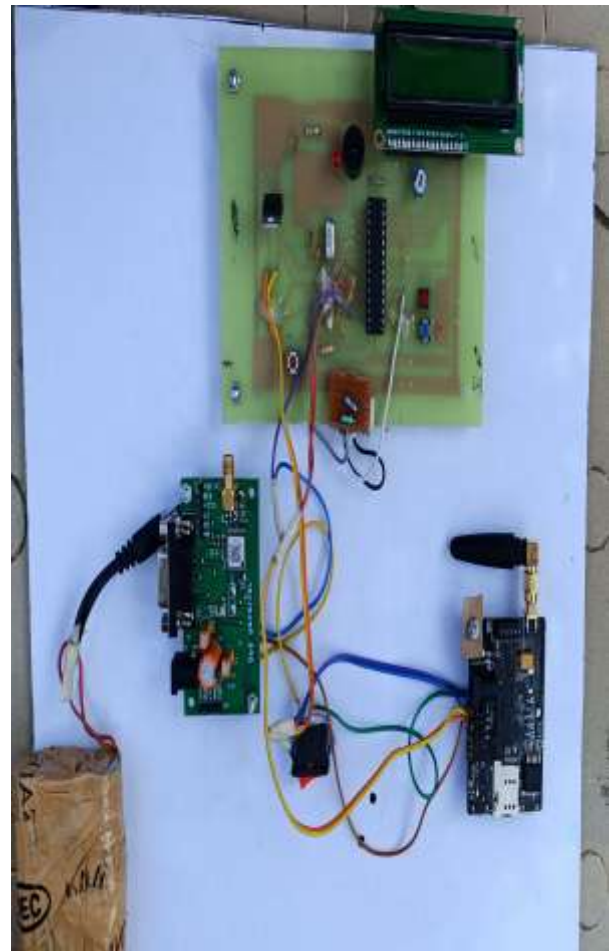

Fig - 3: Project setup

4. 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.

5. REFERENCES

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