WRIST BAND FOR WOMEN SECURITY

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INTRODUCTION:

The status of women in India has gone through many great changes over the past few years. But still women are facing social challenges and are often victims of abuse and violent crimes. Hundreds and thousands of incidents of physical abuse are happening to women every day.

The basic approach in this project is to intimate instant location and along with a message to a predefined number like parents, friends, media, and women cell to avoid unfortunate incidents. The Nirbhaya case in Delhi triggered the whole nation was the greatest motivation for this project.

OBJECTIVE:

The aim of this project is to develop a self defense system especially for women to protect themselves from present day physical harassments. It has wide range of features and functionality like providing instant location of distress victim to the predefined number as soon as the emergency switch is pressed or if someone else tries to remove it forcefully. This would help to reduce the crime against women.

METHODOLOGY:

The design is implemented using an embedded microcontroller, in a modular form to be adaptable to different types of location tracking. Based on the total design of the system, the hardware and software of the system is a real-time monitoring of the women’s body condition and location details in order to provide immediate help. The lady can protect herself by pressing the switch thereby it produces the electric shock and helps to deter the person harassing her. The software is developed in embedded C language to demonstrate the system capability in providing real-time response. Using the location information supplied by this system, the location is traceable using GPS through Google Maps.
If switch 1 is pressed it obtains location information from the GPS and prepares a text SMS containing the present location information and sends SMS through GSM modem to the pre-programmed mobile number. Once the message is sent to the pre-defined number it displays “sent” instruction in the LCD, and if it’s not send then it displays “error” instruction in the LCD. Similarly if switch 2 is found to be pressed, it activates the buzzer to make loud shouting sound to catch the attention of the nearby people for help. It also prepares the high voltage electric shock circuit to be ready to give a non-lethal shock to the attacker. On the other case if any of the parameter values are abnormal or any variation is detected, then also it obtains location information from the GPS and prepares a text SMS containing the present location information and sends it to the predefined number or pre-programmed mobile number.

CONCLUSION:

This project is a short term measurement for the present day harassment against women with variety of features. It gives immediate alert to the predefined number in case of any crime which provides women security. It is certainly a short term and preventive solution. The creation of a hardware and software prototype has achieved two objectives: validation of the proposed architecture and checking whether the utilized technology is appropriate for the system. This system will help its users in difficult situation. This system is highly sensitive and easy to handle. Its quick action response will provide safety and security to individual user.
FUTURE WORK:

In future, we can implement a camera on the band, in which the image of the attacker can be captured easily and act as solid evidence against the crimes. An additional pepper spray if used makes it a short term preventive solution against the attack.