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# Safety Band for Girl's

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**Abstract:** Women's safety plays a very vital role now a days due to rising crimes against women. To help resolve this issue we propose a GPS based women's safety system that has dual security feature. The proposed system consists of a dual alert that is buzzer and message is sent through GSM. This system can be turned on by a woman in case she even thinks she would be in trouble. This Project presents a women safety detection system using GPS and GSM modems. The system can be interconnected with the alarm system and alert the neighbors. This detection and messaging system is composed of a GPS receiver, GPS Receiver gets the location information from satellites in the form of latitude and longitude. The user receives the information from GSM which receives the processed information from the Microcontroller. A GSM modem is interfaced to the MCU. The GSM modem sends an SMS to the predefined mobile number. When a woman is in danger and in need of self-defense then she can press the switch, which is allotted to her. By pressing the switch, the entire system will be activated then immediately a SMS will be sent to concern person with location using GSM and GPS.

## I. INTRODUCTION

In today's world, over 80% of the world population, including children around the age of eight or seven. In our opinion, GPS offers outstanding capabilities in locating position and this can be used to develop resourceful application that helps in locating missing or lost children. Studies conducted by Cyber Travel Tips showed that in Malaysia, missing children are basically classified into . The first category is disappearance, which includes running away from home. The other category is abduction . Statistics reveal that since 2004, a total of 5,996 children under the age of 18 went missing from their homes. Fortunately, around 4092 children returned home or found by the police. However, the other 1,904 children are still missing. Those children are boys and girls with ages between 14 years and 17 years. Moreover, when parents want to go family trip, always concern about their children's safety. This worrying may affects negatively on the parent to enjoy trip. Even worst, parents can lose sight of their children and fear the possibly of kidnaping or worst for them. Consequently, this project is designed to be used by parents and aimed to help locating missing or lost children. It takes advantage of the fact that many of today's children carry the system which is convenient for this kind of situation. In this work, GPS is combined with one of the basic services of a GSM, more specifically SMS, in one system. An application at the parent side will allow parents to send a location request to a child side then retrieve the location from the request reply and shows it on a map. On the other hand, the application at the child's side gathers the necessary information that will be used to locate. Information such as GPS coordinates and time are gathered and sent to the parent via Text SMS. The communication between the parent and the child applications is done using Short Message Service (SMS). SMS offers the system unique features.

## II. LITERATURE SURVEY

- 1) The Basics, Working and Pin Configuration of 8051/ PIC Micro controller.
- 2) The programming of the Micro Controller studied by Embedded C by Mazidi.
- 3) The simulation of the circuit diagram and code done by Multisim, and Kiel Software tools.
- 4) About the GSM and GPS wireless technology by Engineers garage.
- 5) The basics of all circuit s like rectifier circuit, filtering circuits etc studied by the Basics of electrical book.
- 6) Projects like VithUapp, Nirbhaya, Spot N Save Feel Secure app disadvantages over advantages. Firstly, the concept was done by the app VithU mobile app. In this app when the user faces any challenges, Alert messages are sent to the listed contacts, which can be saved prior itself. The message is sent along with their physical location to the already saved contact. But the disadvantage of this app is that we have to click the power button for 2 times consecutively, which is not possible at all the situation.

## III. PROBLEM STATEMENT

Women endure a lot of sexual harassment these days which is becoming alarming day by day. The situation is extremely serious in developing countries as well as underdeveloped ones. Consequently, it poses a significant challenge to women's empowerment as well as to a country's budgetary growth.

#### IV. PROPOSED SYSTEM

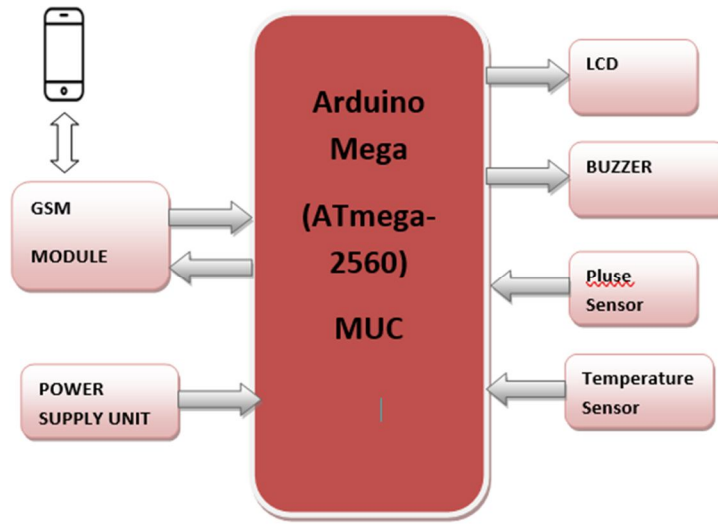


Fig 1: Proposed system architecture

The system is using the MUC, GSM, GPS etc to meet our requirements. GPS is going to fetch the location of child. GSM sends the location (In terms of latitude and longitude) of child via Text SMS at fixed time. Whenever parents want to know the child location, they have to send text SMS to the system. Whenever GSM module is going to receive the SMS and fetches the location via GPS and sends location of child back to the parents so they come to know about location. Here we are using emergency key for emergency purposes. If girls come to know about kidnapping, he/ her can press the emergency key, our system activates the alarm and sends location to their parents to take action automatically and automatically calls the parents so that hear the conversation whatever happening. Or parents the called her system automatically receives the call without making sound to hear the conversation.

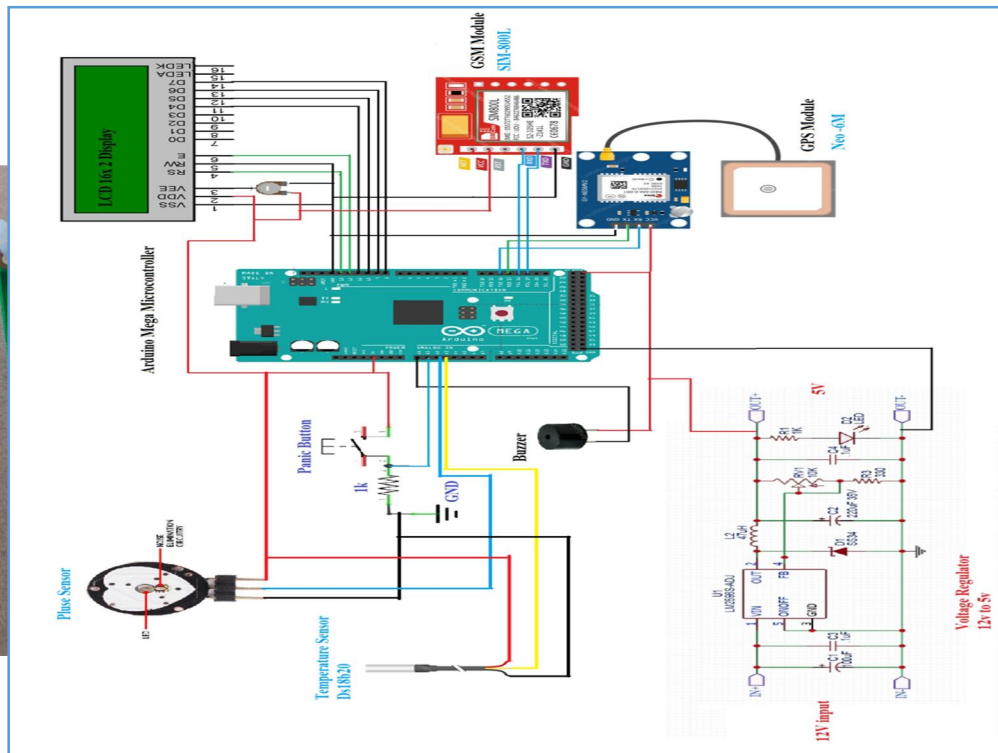


Fig 2: Hardware design

## V. RESULT

### A. Result

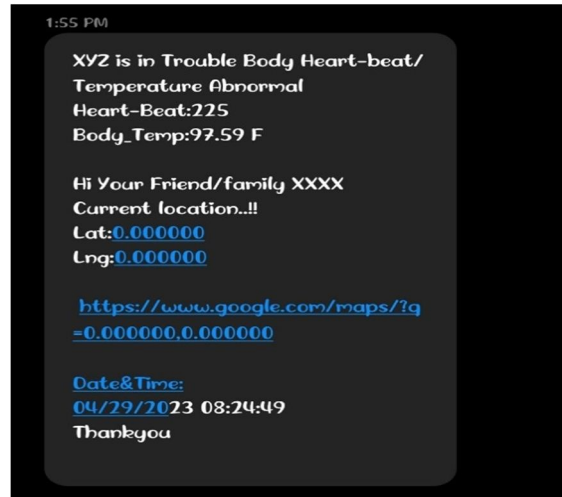


Fig 3: Display and the emergency message output

## VI. CONCLUSIONS & FUTURE SCOPE

This project reviewed the emergency response system which is helpful for women in the incidents of crime. The key objective is to develop a low-cost system which can store the data of the members in the particular locality and provide immediate alert in case of crime against women. This provides women security. Being safe and secure is the demand of the day. Our effort behind this project is to design and fabricate a gadget which is so compact in itself that provide advantage of personal security system. This device will probably be very useful for the women. It is certainly a short term and preventive solution. This will be proved as a multi-pronged strategy with the participation of multi stake holders of society. This system will help its users in difficult situation. This system would be highly sensitive and easy to handle. Its quick action response will provide safety and security to individual user.

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