CHILD SAFETY AND SECURITY SYSTEM

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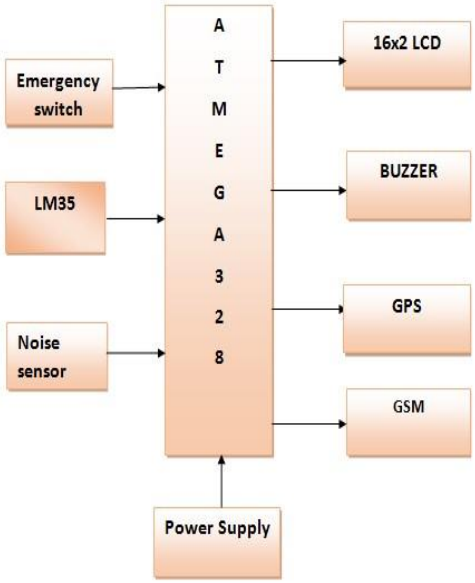
ABSTRACT: In today's world, children and women are not safe as crime related to them increasing rapidly. So, security and safety is most important for especially child and women. The important advantage of this project is that it can be used in any cellphones and it does not require any smartphone. This project's goal is to assist parents in locating their children.

KEYWORDS: Safety, Security, cellphones

1.INTRODUCTION

Crimes against children are on the rise, with a child going missing every 40 seconds around the world. As a result, parents have begun to be concerned about their children's safety, making it difficult for them to provide assurance of their children's safety while they are out. Technology today has touchdown to make peopel's life easy by providing solution to all the problems in the society. In this approach we are going to developed child safety and security system. The system include controller, GSM for sending the message and call, GPS to locate the child. Noise sensor will be receive the voice of the child The user can easily press the switch provided on the device. If the switch is pressed once, it will send the message and location of the user to that emergency contact.

2.BLOCK DIAGRAM



3.PROPOSED SYSTEM

Our proposed system comprises of a noise sensor, temperature sensor, LCD, buzzer, GPS module, GSM module, emergency switch and a ATMEGA328. An emergency switch will be designed to initialize system and will alerting somebody in emergency situations. If a child is subjected to attack, then a panic button has to be pressed manually by child. This switch will trigger the controller.

In this system the value of the temperature is set, if temperature sensor cross the value

then buzzer glows and display message on LCD —high temperature detected.

Buzzer glows and displays indication on the LCD —noise detected, when the noise sensor detects noise. We choose GSM module which sends alert message to parents number. The Global Positioning System (GPS) module is used in this system will obtain location co-ordinates of the area of the child exposed to assault. If sensor detect any of the condition then alert message is sent on the parents number via GSM and track the location of the child via GPS.

4.OBJECTIVE

1.The GSM and GPS are used to identify the location when in need.
2.The location is shared to the preregistered mobile number.
3.The buzzer starts to alert the surroundings of the location.

5.METHODOLOGY

In this system AT-Mega 328 Microcontroller retrieves the data from various sensors and transmits. Electronic framework for child which involves an controller and sensors, the several sensors used in this system are Switch limit GPS, GSM sensor, noise sensor. GSM and GPS are used to communicate the user's location and send alert messages to the contact's registered phone number. An LCD display with a resolution of 16x2 is also connected to the input pin.

6.SOFTWARE REQUIREMENT

1.PROGRAMMING LANGUAGE:
Embedded C
2. COMPILERS:
Keil. 4.0uv
3.DUMPING SOFTWARE:
Using Microcontroller flash magic preload Software .We dumped HEX Code into Microcontroller.

7.SPECIFICATION

1.The Atmega328 microcontroller

- 14 digital input/output pins
- 6 analogue input/output pins
- 40mA DC current per I/O pin
- 50mA DC current each 3.3 pin
- SRAM: 2 KB
- Flash Memory 32KB(ATmega328)
- 1 KB EEPROM (ATmega328)
- Clock Frequency: 16 MHz

2.GPS

Power supply: 3-5Volts:
Default baud rate: 9600bps
Interface used: RS232 TTL

3. GSM

- GSM 900:
- Uplink: 890-915 MHz
- Downlink: 935-960 MHz
- Bandwidth: 2 * 25 MHz

4.Emergency Switch

5. Noise Sensor.

Working voltage: DC 3.3-5V

8.ADVANTAGES AND APPLICATION

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Advantages:-

- This device works without internet connectivity.
- GPS tracking feature tracks the user lively in emergency condition.
- GSM send the alert message.
- Provide safety provided additional safety for child

Applications:-

- This system is used for the women and child.
- This system also used for the old peoples.
- This system is useful for the collage, school students.

9. CONCLUSION

Through this project we can focus on developing smart low cost device for the safety of the child. This project is designed for the safety and security of all dependent and badgered child. It provides the contacts of the parents

or guide of the child with real time location which is a message that makes possible to prevent major casualties. Through this the crime rate against children can be reduced.

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