# REVIEW ON CHILD SAFETY WEARABLE DEVICE USING ARDUINOs

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#### **ABSTRACT**

The main objective of this system is to provide the safety to child which is lost in major crowded area. Nowadays, Childs are not secured they are facing many issues regarding their security. There are number of security systems for the child security purpose. In order to overcome such problems the child safety wearable system is implemented. This system is not required any expensive technology and it is user friendly for both educated and uneducated people. There are many wearable devices are available in the market to track the child using Wifi and Bluetooth but the Wifi and Bluetooth are the unreliable medium for the communication between parent and child. In this system we use the text SMS as a mode of communication between parent and child there is minimum chances of failing communication as compared to wi-fi and Bluetooth. It also includes SOS light and BUZZER to provide security to the child in real time situations and it helps to parents to check the condition of child using android application.

## **METHODOLOGY USED**

This system will be helpful for children when they are in major crowded areas. this application is designed for trace to missing child. This device uses SMS based technology so the parents are able to use it more efficiently. Some past works on SMS based tracking which is not supportive to get an accurate location inour proposed system we have provided real time tracking. With the help of sensors embedded in the wearable gadget the parents can keep track of health conditions of the child. This system can overcome the fear that scares child in the country about her safety and security.

## **Hardware interfaces**

- ATmega 328p
- Temperature Sensor
- Heartbeat Sensor
- IR sensor
- Pulse Sensor
- Ultrasonic Sensor
- Accelerometer

# **Software Interfaces**

• Programming Language: Embedded C

• Tools to be used: Arduino

• Operating System: Windows

# CHILD SAFETY WEARABLE DEVICES WITH IOT

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#### **ABSTRACT**

This paper talks about the idea of a child safety wearable gadget for little kids. Child wellbeing and following is a significant worry as the more number of wrongdoings on youngsters are accounted for these days. The inspiration for this wearable originates from the expanding requirement for security for little kids in current occasions as there could be situations of the youngster losing all sense of direction in the major swarmed regions. The significant bit of leeway of this wearable over other wearable is that it tends to be utilized in any mobile phone and doesn't really require a costly advanced cell and not a very technically knowledgeable individual to work. The motivation behind this gadget is to assist guardians with finding their youngsters effortlessly. This gadget is customized for day by day action in kid. As we realize that there are numerous wearable gadgets, for example, (Wi-Fi and Bluetooth) effectively present in the market which helps track the every-day movement of youngsters however they give off an impression of being a questionable vehicle of correspondence between the parent and kid. Our task dependent on SMS arrangement utilizing GPS framework to help guardians to follow their kid's area continuously. The parent can send a book as SMS with explicit watchwords, for example, "Area", "TEMPERATURE", "BUZZ", and so forth, to the wearable gadget. The gadget will answer back with a book containing the constant precise area of the kid. Since these days, most cell phones are furnished with area administrations capacities permitting us to get the gadget's geographic situation continuously. Subsequently this undertaking targets giving guardians a suspicion that all is well and good for their kid in the present time.

#### **EXISTING SYSTEM**

This work endeavors to handle a cultural worry that has been decimating the lives of uncountable people and their families. Well being gadget with wearable which help track the day by day action of youngsters and further more help discover the kid utilizing Wi-Fi and Bluetooth administrations present on the gadgets. Weakness of Wi-Fi and Bluetooth has all the earmarks of being inconsistent mechanism of correspondence between the parent and youngster. A gadget like this improves the degree of wellbeing of youngster. Exact acknowledgment of a hazardous circumstance is a concerned issue anyway the extension for improved exactness is promising.

#### PROPOSED SYSTEM

From the disadvantage of the current framework, we proposed the youngster wellbeing wearable gadget which is equipped for going about as a keen lot gadget. The parent can send a book with explicit watchwords, SONIC""BUZZ", and so forth., the wearable gadget will answer back with a book containing the constant exact area of the kid which after tapping will give bearings to the kid's area on Google maps application and will likewise give the encompassing temperature, UV radiation list so the guardians can follow along if the temperature or

UV radiation isn't appropriate for the youngster.

It gives guardians the constant area, encompassing temperature, UV radiation list and SOS light alongside Distress caution signal for their kid's environmental factors and the capacity to find their youngster or ready spectators in acting to save or solace the kid. A concealed camera is additionally fixed alongside the youngster dress, when the gadget gets initiated, the camera begins working and it transmits the live situation to the enrolled contacts, with the goal that they can have the option to perceive what's going on there.