

This section describes the conceptual design of a children's safety device. The child safety device has a capacity to act as a wonderful smart IoT device. This smart IoT device provides parents with the real-time location. This paper proposed a safe and secure electronic system for children, which includes an Arduino controller and buzzer, Node MCU, power supply cord, GPS, and thermocouple sensor. Children's safety precautions have been drastically lowered in recent years. In this paper we are adding a new feature which can track the child's real time location. As a result, violence against children is on the rise. We are taking a modest step in the direction of violence towards children. Our idea primarily focuses on sensing the temperature, and GPS location of the youngsters. In today's world, over 80% of the world population, including children around the age of eight or seven, owns smart phones. This is due to many reasons. One of them is the remarkable features and capabilities that new smart phones offer especially Android based smart phones. With that many features, the need for resourceful applications rises. 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 two categories. The first category is disappearance, which includes running away from home. The other category is abduction or kidnapping.

A device like this improves the level of safety of women and girls. Accurate recognition of a dangerous situation is a complex matter, however, the scope for improved accuracy is promised. The child safety wearable device is capable of acting as a smart IoT device. It provides parents with the real-time location, surrounding temperature, UV radiation index and SOS light along with Distress alarm buzzer for their child's surroundings and the ability to locate their child or alert bystanders in acting to rescue or comfort the child. The smart child safety wearable can be enhanced much more in the future by using highly compact Arduino modules such as the LilyPad, Arduino which can be sewed into fabrics. Also a more power efficient model will have to be created which will be capable of holding the battery for a longer time. With responsibilities that appear to shift on a daily basis. As your child grows older, the daily tasks and roles you play as a parent are bound to change. However, there is one responsibility that should never be overlooked: keeping track of your child's interactions with the environment around him or her. Parents must be mindful of their children's activities and interactions at all stages of their development. You are the link between your child and the outside world as a parent. According to research, keeping an eye on your child's activities is a crucial

method to reduce the odds of him or her being engaged in situations you don't approve of, particularly those that can be hazardous. Not only does your involvement show your child that you care about them, but it also shows them that you care about and his activities are beneficial, it also allows you to notice changes in your child that may suggest a problem. There is an assumption that every 10 minutes, a child goes missing. Mumbai and Delhi have the highest rate when compared to other metro cities. With the lack of availability of affordable child monitoring systems it is hard to monitor the whereabouts of Children [2]. Safety of children is very critical since children cannot protect themselves. A momentary lack in parental supervision should be combated with an appropriate IT solution in context.

These Days parents are worried about their children's so they want a complete track of them and monitor them all the time, This is physically not possible so we introduce **Safety Monitoring system** which is helpful for monitoring or tracking the child and their activities from anywhere in the world. The major issue of child missing can be solved with the help of child tracking system as well as parents who need to keep a track of their every steps, this system plays a vital role. The android application uses GPS and telephony services to locate their child's location. This application secretly retrieves all the Call Logs, Message Details, Contact list and accurate Location without the children's permission or without their knowledge as this application runs in background and the major advantage of this feature is, if child reboots the Mobile phone the background process starts as the reboot is complete, so the process is never ending.

This application sends all the data from the child's phone to the server and from the server to the parent's phone in every 10 minutes interval. This application is divided into 2 Apps, one is for the parent where they can see all the activities of their children and other is the Child Part, where the child can only see a calculator while the data is been fetched in the background without child's knowledge. Therefore, it is necessary for the proposed system to alert the parents when the child walks too far away and/or outside the "circle of safety" when they are away. In case of an emergency, or in a situation of panic, the child must be able to communicate with their parents. This can be done via live transmission of audio from the device with the child, to the parent's device.

When a violation of child safety is identified, a certain sensor in the child module will emit a signal, which is the main function of the suggested child tracking system. These sensors and WFPS will send this signal to the microcontroller, which will then send it to the transmitter, which will then send it to the parent module. The decision will be made by the parent module, and the violation handling procedure will begin. The kid tracking system's functionality necessitates hardware between the child and parent models, which comprises a drive circuit for the sensors' activation. Scope This project is developed for parents to keep track of their child's whereabouts. Nowadays, children are easily influenced by their friends, and might even get cheated or kidnapped by any stranger. By this system, it is comparatively easier to keep a track of a child's current location [3]. The Web application will deal with the Android platform and is utilized for GPS following between the device and parents phone.

The Web application is mindful to keep track of the location of the device. The edit access for the child profile is given to the parents themselves, along with their account. The Web application will include the route history trace where the parent tracks the route their child traversed during a particular period. The Web application in the device will update the location of the child at an interval of 30 min, 1 hour, and 2 hours. Parents can select the interval time to view the current location of the child. They also can make calls from the Web application to the particular school if any inconvenience happens when the location is not found or tracked. Nowadays, crime rates are increasing day by day, especially kidnapping children. Moreover, it is not possible for parents to always stay beside them due to the rising culture of working parents. In such a case, the proposed system can reduce the number of child missing cases. This system provides a tracking solution for the parent to keep tracking their child's location outdoors by using GPS as it allows them to determine the exact location of the child. It, therefore, helps to minimize this tragedy to reoccur in the future.

Applicability Parenting is a difficult profession, with responsibilities that appear to shift on a daily basis. As your child grow