**IOT BASED SAFETY GADGET FOR CHILD SAFETY**

**MONITORING AND NOTIFICATION**

**IDEA 1:**

This project child tracker helps the parents in continuously monitoring the child's location. They can simply leave their children in school or parks and create a geofence around the particular location. By continuously checking the child's location notifications will be generated if the child crosses the geofence. Notifications will be sent according to the child's location to their parents or caretakers. The entire location data will be stored in the database. Here we can also notify the child’s location to the near by police station by attaching the emergency number of the corresponding police station to the gadget. So that the police can take action immediately.

**IDEA 2:**

By using a portable device which will have a pressure switch. As soon as an assailant is about to attack the person or when the person senses any insecurity from a stranger, he/she can then put pressure on the device by squeezing or compressing it. Instantly the pressure sensor senses this pressure and a conventional SMS, with the victim’s location will be sent to their parents/guardian cell phone numbers stored in the device while purchasing it, followed by a call. If the call is unanswered for a prolonged time, a call will be redirected to the police and the same message will be sent. Additionally, if the person crosses some area which is usually not accessed by the person then a message with the real-time location is sent to the parent/guardian's phone via conventional SMS.

**IDEA 3:**

This project focuses on monitoring children by wearable sensors attached either to the kid or to their belongings. Vibration sensor and heartbeat sensor are used in addition to GPS to track their location . We can also have a Push Button to check whether the child is wearing the sensors or not. A keypad is attached so that we can type any contact number to which messages are sent in the time of emergency. The working of the product is that once the kid wears the product, the push button goes to ON state. Heartbeat sensor measures the heartbeat of the kid continuously. Vibration sensor senses the vibration if it exceeds the threshold level. GPS keeps track of the kid"s current location.

**IDEA 4:**

The device has IoT monitoring and a GSM module that allows the child to be monitored at all times. It also has numerous sensors that are connected to a CPU and are used to detect exact signals such as heart rate, temperature, and other dangers and alert the parents. In the event of a power outage, the wearable serves as a backup. On the device, there is an additional panic button. The purpose of this button is to notify parents and the police of a child's current location whenever they are in a perilous scenario. A GPS module is utilised to access their present location, and a GSM module assists in transmitting the information via SMS to designated contacts. In this approach, the device tries to provide child safety while remaining unobtrusive.

**ADVANTAGES:**

* Easy Availability and Affordability
* Tracking of missing kids can be made easily
* Short response time and high accuracy.
* High Data accuracy

**DISADVANTAGES:**

* It will affect the children's privacy .
* High Cost but once it is implemented the expenses can be reduced