

Problem Statement

Team ID	PNT2022TMID43472
Project Name	IOT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING & NOTIFICATION

TEAM MEMBERS :

- 1.G Mourya Varma
2. Mannur Rohith
3. Manickavasakar M
4. Naveed N

TECHNOLOGY : INTERNET OF THINGS

DOMAIN : SAFETY

PROBLEM STATEMENT :Child Safety Monitoring & Notification

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. system. Every parent is aware of how challenging it is to constantly watch over and locate their children. It would be great if a device was available that could track a child's whereabouts constantly and notify them via text message. Making an IoT-based safety device that can send an SMS to the child's parents or caretakers to let them know something is wrong will alleviate their anxieties. The database stores the information that the device is tracking. A notification will be issued if the child leaves the geofence thanks to the design of the gadget.

Nowadays, crime rate associated with children keeps increasing due to which draws peoples' attention regarding child safety. This research is conducted to propose a child security smart band utilizing IoT technology. Online questionnaire and semi-structured interview are methodologies used to collect data. The online questionnaire gains feedbacks by sending questions electronically, where answers need to be submitted online. In the semi structured interview, researcher meets and asks respondents some predetermined questions while other being asked are not planned in advanced. Through information obtained, a smart band have been proposed to monitor the safety of children. By

this, parents know what is happening remotely and can take actions if something goes wrong.

The safety device protects individuals from potential harms and dangers. A research done by [1] proposed the child safety wearable device using raspberry pi 3. The raspberry pi 3 gathers data from pi camera, pulse sensor and sound sensors. Then, send collected data to parents' smartphones by SMS using GSM shield. Images captured from pi camera and detect children location and send message to parents.

Advantages:

These benefits include stress relief, learning to understand cues from your infant, and increased self-esteem when it comes to being a parent.

Disadvantages:

If you get a monitor that links to your phone and uses wifi, it can get hacked. The hackers can change the image you see on your phone or talk to your child—saying some really scary effed up stuff.