IDEATION PHASE PROBLEM STATEMENT

TEAM ID	PNT2022TMID00475
PROJECT NAME	IOT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING AND NOTIFICATION
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Problem Statement:

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 where abouts 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.



Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	PARENT	TRACK THE LOCATION OF MY CHILD	I'M UNABLE TO TRACK IT	I DON'T HAVE ANYWAY TO TRACK MY CHILD FROM ANYWHERE	PANIC, FEAR AND LACK OF CONCENTRATION
PS-2	KID	ESCAPE FROM EMERGENCY SITUATION	I DON'T KNOW TO CONTACT MY PARENTS	I'M TOO YOUNG IN AGE TO HAVE THE ENOUGH KNOWLEDGE	TO CRY, ANXIOUS AND FEAR