

**Project Design Phase-I**  
**Proposed Solution**

Date	19 September 2022
Team ID	PNT2022TMID31679
Project Name	IOT Based Safety Gadget For Child Safety Monitoring & Notification
Maximum Marks	2 Marks

**Proposed Solution :**

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Around the world, many children disappear each year and are not found. Runaways, parental abductions or kidnappings by others, these acts are difficult to prevent and have dire consequences on the children involved. Nowadays, crime rate associated with children keeps increasing due to which draws people attention regarding child safety.
2.	Idea / Solution description	The users are required to register using their credentials to use the application. The device will be given to the children for monitoring them regularly. We will feed the boundary value while writing code for the system and we control it using GPS for that device which is also known as Geo Fencing. These data are stored in the server.
3.	Novelty / Uniqueness	The aim of this work is to develop a wearable device for the safety and protection of women and girls. This objective is achieved by the analysis of physiological signals in conjunction with body position. The physiological signals that are analyzed are galvanic skin resistance and body temperature. Body position is determined by acquiring raw accelerometer data from a triple axis accelerometer.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"><li>• A tracking device can be useful in the case when the parent feels that his or her child is in danger. This device provides real-time location.</li><li>• These kinds of devices also help parents to set a parameter for their children when they leave the house. Whenever the child steps beyond a defined area, the tracking system will alert the parent.</li></ul>

		<ul style="list-style-type: none"> <li>The idea of the system is to restrict the child's freedom but to know how far the child has gone.</li> </ul>
5.	Business Model (Revenue Model)	The innovative business model involves sponsors and partners who share their commitment to edutainment to kids. The two key factors are architectural design and business concept development by involving edutainment activities.
6.	Scalability of the Solution	In our system, we automatically monitor the child in real time using Internet of Things. Hence in the future, these issues can be overcome by using Zigbee concept or accessing the system without internet and using high-speed server transmission.