

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

Date	19 September 2022
Team ID	PNT2022TMID16777
Project Name	<b>IoT Based Safety Gadget for Child Safety Monitoring and Notification</b>
Maximum Marks	2 Marks

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	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 future improvements of this device will be adding functions and software to make it works like a phone such as messaging, gallery, Google, YouTube, meanwhile, adding more child security features so that child safety is guaranteed.
2.	Idea / Solution description	<b>A smart IoT device for child safety and tracking</b> is developed to help the parents to locate and monitor their children. The system is

		developed using Link It ONE board programmed in embedded C and interfaced with temperature, heartbeat, touch sensors and also GPS, GSM & digital camera modules
3.	Novelty / Uniqueness	The novelty of the work is that <b>the system automatically alerts the parent/caretaker by sending SMS, when immediate attention is required for the child during emergency.</b> The parameters such as touch, temperature & heartbeat of the child are used for parametric analysis and results are plotted for the same.
4.	Social Impact / Customer Satisfaction	With this motivation, a smart IoT device for child safety and tracking is developed to help the parents to locate and monitor their children. The aim of this work is to develop a wearable device for the safety and protection of women and girls.
5.	Business Model (Revenue Model)	The advancements of IoT make it possible to be used in organizations for automating and monitoring business processes
6.	Scalability of the Solution	Also, the advent of smart cities will soon make Wi-Fi stations ubiquitous and publicly available, further.