Project Design Phase-I
Proposed Solution

Date	19 September 2022
Team ID	PNT2022TMID33419
Project Name	Iot Based Safety Gadget for child safety Monitoring and Notification
Maximum Marks	2 Marks

Proposed Solution :

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Heart-beats, temperature is monitored and the values are updated to cloud continuously for parent app monitoring. Boundary monitoring system is implemented on safety gadgets with the help of BEACON technology, as soon as the safety gadget moves far away from the binding gadget an alert is provided to the parent on the binding gadget. The system is used to monitor the health parameters and also used for location tracking during necessary situations in safety concerns.
2.	Idea / Solution description	**A smart IoT device for child safety and tracking is developed to help the parents to locate and monitor their children**. The system is developed using LinkIt 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 **the system automatically alerts the parent/caretaker by sending SMS, when immediate attention is required for the child during an emergency**. 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	In this section, we provide an overview of technical system requirements related to privacy and security in IoT-cloud-based e-Health systems, including identity, authentications and authorizations. By examining each aspect and independently identifying vulnerabilities, systems can be designed that can reduce the chances of attack and of private data being leaked. Privacy has various types, states, clusters, categories and dimensions, including information privacy.
5.	Business Model (Revenue Model)	Through the deployment of sensors, product companies can charge for post-sale services that help customers maintain and make better use of those products (a model sometimes called “servitization”). This enables companies to shift the paradigm from customer-owned products to a subscription model delivering recurring and predictable revenue.

6.	Scalability of the Solution	In this study, a wireless patient monitoring system is developed that allows patients to be mobile in their social areas. The developed system continuously measures the heart rate and body temperature of the patient and provides monitoring and tracking through an android based interface. When the patient's vital data reaches a predetermined limit value, the mobile application alerts the patient and the people in the vicinity. This warning is made at a volume level that people near the patient can hear.