Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	15 October 2022
Team ID	PNT2022TMID34921
Project Name	IOT Based Safety Gadget for Child Safety Monitoring and Notification
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Register phone number	1. Confirmation by sending OTP. 2. Confirmation by calling.
FR-2	Navigation and tracking	1. Monitoring the live location of the child by GPS tracker. 2. Check whether the child is within the limited area or not.
FR-3	Notification	1. When the child is out of the range. 2. When the child is reaching and leaving the school. 3. Sudden changes in the health of the child.
FR-4	Alarm ring and sending message	1. When the panic button is ON. 2. When the child is kidnapped or missing. 3. When the sensed data exceed the threshold value.
FR-5	Privacy and encryption	1. End to end encryption where strangers cannot operate. 2. Access only by parents and some family members.

Non Functional Requirements:

Following are the non-functional requirements of the proposed solution.

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The system shall be usable within few minutes of training.
NFR-2	Security	The system and sensed data can be accessed only by the parents not by the strangers.
NFR-3	Maintainability	The system shall be maintainable whenever failure occurs.
NFR-4	Accuracy	The system shall give the accurate result for different factors using sensing material. As a result, their will not be any distractive messages.
NFR-5	Reliability	The timing of the notification directly affects how the effectivity of the system is perceived.
NFR-6	Performance	The system is cost effective comparing to the features it provides.