

Project Design Phase-II

Solution Requirements

Date	15 October 2022
Team ID	PNT2022TMID45857
Project Name	IOT Based Safety Gadget for Child Safety Monitoring and Notification
Maximum Marks	4 Marks

Functional Requirements:

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Register phone number	<ol style="list-style-type: none">1. Confirmation by sending OTP.2. Confirmation by calling.
FR-2	Navigation and tracking	<ol style="list-style-type: none">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	<ol style="list-style-type: none">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	<ol style="list-style-type: none">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	<ol style="list-style-type: none">1. End to end encryption where strangers cannot operate.

		2. Access only by parents and some family members.
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Non Functional Requirements:

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, there 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.