

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

Date	15 October 2022
Team ID	PNT2022TMID33419
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 Requirements	Description
FR-1	Notification System	Parents want to be notified when their child is too far away from them.
FR-2	Secure personal information/Privacy	Encryption of data,Any personal data should be deleted as soon as the child is found by the parents;alternatively interviewees suggested data may be stored for upto 24h
FR-3	Local Ranging/Positioning	GPS is a common and available technology; however it isunreliable and should not be expected to work for indoor applications.
FR-4	Voice Navigation	Interviewees prefer to be guided by either voice or map navigation. Generally a map was preferred however two users preferred a car-like voice navigation.
FR-5	Variable Sensitivity	The device should be attractive to the child (colourful design).Alternatively the device should be embedded in clothing or somehow locke
FR-6	Early Alarm	The alarm sensitivity should be adjusted by the parent; this is preferred to a fixed alarm sensitivity setting.

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	How easy is it for a customer to use the system?
NFR-2	Security	How well are the system and its data protected against attacks?
NFR-3	Reliability	How often does the system experience critical failure? eg: the system must perform without failure

		in 95 percent of use case
NFR-4	<b>Performance</b>	How fast does the system return results?
NFR-5	<b>Availability</b>	How is the user availability time compared to downtime?