

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

Date	07October 2022
Team ID	PNT2022TMID01183
Project Name	IOT based child safety monitoring system
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 is unreliable 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	<b>Usability</b>	How easy is it for a customer to use the system?
NFR-2	<b>Security</b>	How well are the system and its data protected against attacks?
NFR-3	<b>Reliability</b>	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?
NFR-6	<b>Scalability</b>	How much will this performance change with higher workloads?