

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

Date	19 October 2022
Team ID	PNT2022TMID38545
Project Name	Project - 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	User Login/Sing up	Through app using forms to input details
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Interfacing	Connecting all involved databases , scripts and device
FR-4	Setting Geo fence	Creating the geo fence in the map
FR-5	Database	Create and maintain a database containing user(child's) locations
FR-6	Tracking location	Update current location in cloud and store location history. Current location is viewable from the dashboard.

FR-7	User Location Check	Check for out of boundary location against established geo-fence by fetching live location from cloud database.
FR-8	User Notification	Notification to registered mobile number Notification via app

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The device and its applications are user-friendly. The device is portable and easy to use.
NFR-2	Security	Providing permission for some information can only be decided by the user. Location data can only be viewed by the user.
NFR-3	Reliability	Current location and history of previous ones too can be viewed so it provides enables guardians to continuously monitor child
NFR-4	Performance	Works well as long as there is internet connectivity to use the app
NFR-5	Availability	Can last as long as backup power supply is available.
NFR-6	Scalability	Very scalable as more sensors can be added easily according to need.