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

Date	18 October 2022
Team ID	PNT2022TMID34780
Project Name	Project – IoT Based Safety Gadget For Child Safety Monitoring & 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 Registration	Registration through Form Registration through Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Login	Validate username Validate password Take to homepage
FR-4	Track child location	Get the map Get the coordinates of the child's location Display result
FR-5	Create geo fence	Get the map Create the geofence Store the geofence in database
FR-6	View location history	Fetch history from database Display history
FR-7	Get child's weather condition	Get the coordinates of the child's location Get the weather updates Display results
FR-8	Receive out of safe zone notification	Get the coordinates of the child's location Check and notify if out of safe Zone
FR-9	Receive emergency notification from the child	Listen to child emergency notification API If notification initiated , notify the user
FR-10	Communicate with the child	Connect with the device Transmit the voice data

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Attractive and effective UI that gives complete enjoyable and user friendly experience.
NFR-2	**Security**	Protecting the users data and storing their children's location history safely
NFR-3	**Reliability**	Ever consistent API that never fails and gives proper response to the user.
NFR-4	**Performance**	Fast tracking and providing instant updates about the child's location to his/her parent.
NFR-5	**Availability**	The APIs should be readily available to satisfy the users' needs.
NFR-6	**Scalability**	Ability to process and update thousands of users data instantly