

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

Date	16 October 2022
Team ID	PNT2022TMID21372
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 Gmail Registration through Number
FR-2	User Confirmation	Confirmation via Email and OTP
FR-3	User Login	login through User Id and Password
FR-4	Network Connectivity	via wifi/mobile data Internet connection with at least 10 to 20 kbps
FR-5	IBM IoT Platform	Access cloud storage via internet and it gives coordinates
FR-6	Node-RED	World Map node- Coordinates are converted into map location. Geofence - ensures the child is within the geofence
FR-7	Fast2sms	used to send pop up messages.

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	It can easily track and monitor the location of the child and share the information to parents
NFR-2	<b>Security</b>	The cloud database is highly secured and it prevent data from hacking issues
NFR-3	<b>Reliability</b>	Safety of the children is assured all the time.
NFR-4	<b>Performance</b>	Monitoring the child whether he/she is within the geofence
NFR-5	<b>Availability</b>	To check the presence of child within the geofence area
NFR-6	<b>Scalability</b>	It can be adapted to both local and also larger areas based on the customer preference.