

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

Date	21/10/2022
Team ID	PNT2022TMID04693
Project Name	IOT Based Safety Gadget for Child Safety Monitoring and Notification

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Communication	To monitor the live location of the children Alert the parent if the child crosses the geo-fence through SMS and pushing notification.
FR-2	Continuous monitoring	Create the geo-fence around child location. Live monitoring location. Alerting via message when child cross the geofence and child face psychological changes.
FR-3	User requirement	Easily upgrade to any environments. Easy to handle. Gives more accuracy. Low power consumption.
FR-4	Mandatory	All data of the user should be stored in cloud Accuracy of location is important. The system should be scalable. The entire location data will be stored
FR-5	Testing Set the geo-fence.	The device is kept together with the children. Create geo-fence around the child location in school or parks, if child crosses the geo-fence notify to the parents Notifications sent in the form of SMS.
FR-6	Application	Contains the location details of the children stored in database and for investigation purpose

### Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	High usability of user experience design for user, And used to monitor live location of children
NFR-2	<b>Security</b>	The system can access by authorized persons only. It is encrypted.
NFR-3	<b>Reliability</b>	Monitoring the live location and easy tougrade the system .  Alert messages are sent when child crosses geo-fence.
NFR-4	<b>Performance</b>	The performance should be more effective and efficient. It also offers offline access.  The location data will be stored.
NFR-5	<b>Availability</b>	If we are going to upgrade the system or make any changes in the the system it will not take much time to recovery.  It is an online app so user can avail the facilities easily
NFR-6	<b>Scalability</b>	The website traffic limit must be scalable enough to support users at a time.