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

Date	21/10/2022
Team ID	PNT2022TMID03538
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	Communicate and exchange information to provide server for user	To monitor the children's location continuously in schools or parks. Alert the parent if the child crosses the geofence through SMS.
FR-2	Continuous monitoring	Create the geofence around child location. Continuously monitoring the child location. Notifications send when child cross the geofence and chid face any issues.
FR-3	User requirement	Easily upgrade to any environments. Easy to handle. Gives more accuracy. Low power consumption.
FR-4	Mandatory	The system will send the detail of location information to the receiver via 4G network or Wi-Fi. Accuracy of location is important. The system should be scalable. The entire location data will be stored
FR-5	Testing Set the geofence.	The device is kept together with the children. Create geofence around the child location in school or parks, if child crosses the geofence notify to the parents Notifications sent in the form of SMS.
FR-6	Architecture	(Image)
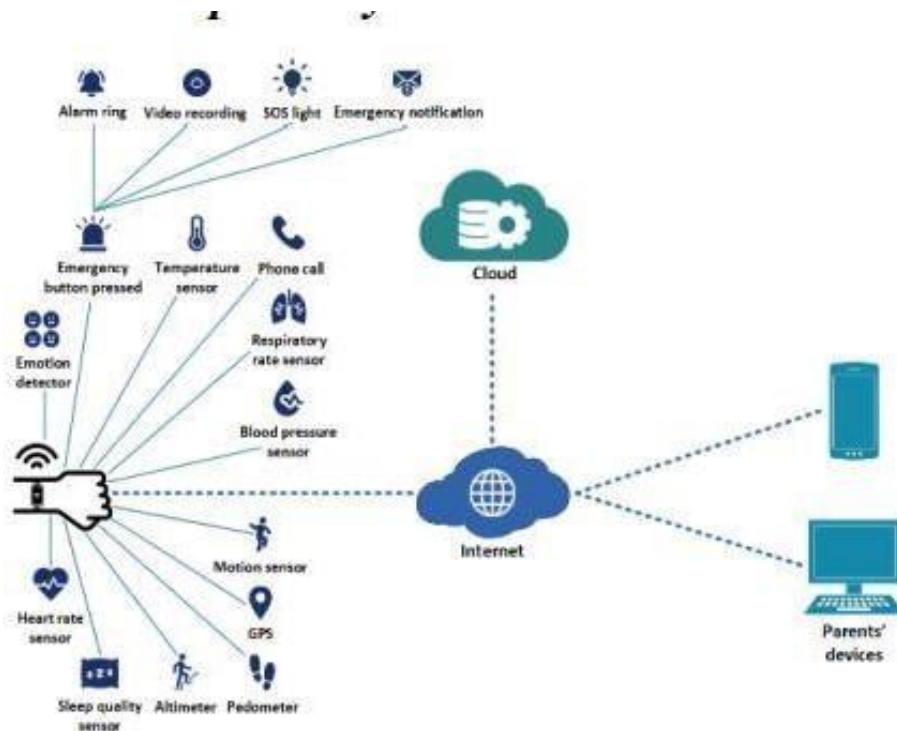
Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	High usability of user experience design for user, Which is usable for finding the children if they lost.
NFR-2	**Security**	The system can accessed by authorized persons only.
NFR-3	**Reliability**	Monitoring the location continuously and easy to upgrade the system .
NFR-4	**Performance**	The performance should be more effective and efficient. The location data will be stored.
NFR-5	**Availability**	If we are going to upgrade the system or make any changes in the the system it will not take much time to recovery.
NFR-6	**Scalability**	The website traffic limit must be scalable enough to support users at a time.