

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

Date	10 October 2022
Team ID	PNT2022TMID46119
Project Name	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 Registration	<ul style="list-style-type: none">➤ Registration through Phone➤ Registration through Gmail
FR-2	User Confirmation	<ul style="list-style-type: none">➤ Confirmation through Email➤ Confirmation through Mobile Alert
FR-3	App installation	<ul style="list-style-type: none">➤ Installation through website APK's➤ Installation through play store.
FR-4	Detecting child	<ul style="list-style-type: none">➤ Detecting location through SMS➤ Detecting location through mobile app
FR-5	Set Geofence	<ul style="list-style-type: none">➤ Setting by user to find child location
FR-6	User End Result	<ul style="list-style-type: none">➤ Parents need not worry about their children.
FR-7	User Objective	<ul style="list-style-type: none">➤ Easy to monitor the child anywhere➤ Helps to identify the child.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	<ul style="list-style-type: none">➤ The device has GSM can help to inform the parents about the current situation of the child, alert by message immediately to save the child.➤ Seamless communication is possible between people, processes, and things.
NFR-2	Security	<ul style="list-style-type: none">➤ Make children parents more assure about their kid's security, we have a feature in our device called Geo-Fence.➤ Securing your IoT devices and network as you scale up production and deployment can be challenging one, we have a feature like storing all data in the database.
NFR-3	Reliability	<ul style="list-style-type: none">➤ The reliability of an item is to perform a required function in a correct manner.➤ It is easy to use and more flexible.
NFR-4	Performance	<ul style="list-style-type: none">➤ Create a Child tracker which helps the parents with continuously monitoring the child's location.➤ The website's load time should not be more than one second for users.➤ The notification will be sent according to the child's location to their parents. The overall data collection is stored in the database.

NFR-5	Availability	➤ The system is accessible to a user at a given point in time.
NFR-6	Scalability	➤ It is the ability of the application to handle an increase in workload without performance, degradation. ➤ Parents does not need worry about their children safety.