

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	03 October 2022
Team ID	PNT2022TMID18932
Project Name	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	<ul style="list-style-type: none">• Enlistment through account and through Gmail• Registration through Form• Registration through Gmail• Registration through LinkedIn
FR - 2	User Confirmation	<ul style="list-style-type: none">• Email confirmation and confirmation by OTP• Confirmation via Email
FR - 3	User Notification	<ul style="list-style-type: none">• Notification to registered mobile number via message• Notified through mobile and mail
FR - 4	User location check	<ul style="list-style-type: none">• Location check through account
FR - 5	Authentication	<ul style="list-style-type: none">• Only the authorized person for that product will know Ensures security
FR - 6	User Interface	<ul style="list-style-type: none">• The Inventor Able to see the location of children when they are out of geofence will also track the exact information about the children

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">• Allows parents to track and assist their child's location. Sound the alarm in an emergency.• Accessed through Mobile App Showing location (latitude and longitude) of child and other measures to ensure safety like notification. Portable and comfortable to use.
NFR – 2	Security	<ul style="list-style-type: none">• Creates a secure environment when the child moves around.• Database security and ensuring the safety of the product while in use.
NFR – 3	Reliability	<ul style="list-style-type: none">• Increased reliability towards technology and reduced reliability towards guardians.• Once logged in, the webpage is available until logging out of the app, and a comfortable platform or creates a good environment for users to use.
NFR – 4	Performance	<ul style="list-style-type: none">• High performance in the sense usage and security.• Each page must load within 4 seconds and database needs to be updated every few seconds and a notification must be sent immediately if a change in the child's location is seen.
NFR – 5	Availability	<ul style="list-style-type: none">• Reliable use of electricity and all-time delivery.• The data must be available whenever needed and the product should be able to be used at any time.
NFR – 6	Scalability	<ul style="list-style-type: none">• High stage with growth in performance.• The process must be flexible to use at any time and versatile.