

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

Date	15 October 2022
Team ID	PNT2022TMID46774
Project Name	Project – 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	IN MOBILE APP, User Registration	Registration through Gmail. Registration through Phone Number.
FR-2	User Confirmation	Confirmation via OTP to Email. Confirmation via OTP to Phone number.
FR-3	User Login	Set Username and Password.
FR-4	App Permissions	Allow App to Access Notifications from gadget, Data Usage, Enable Accessibility etc,.
FR-5	User Dashboard	Show Menu, In that there is Location Setting for Geofence and Settings Option for Notifications etc,.
FR-6	IN GADGET, SOS Button	On by Children when there is unwell Situation and the time of Fear for Children.
Fr-7	LED On	When Geofence Crossed – RED Blinks. When charging - WHITE. When GPS Network is gone Low – BLUE Blinks. When GSM GOOD – GREEN. BAD – Green BLINKS.
FR-8	Notifications	When Geofence out, The Camera is ON and send it as Notification to the Parents.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The Gadget is Designed for Security Purposes at Emergencies to give GPS locations, videos scenario, and notification in real-time with instant time.
NFR-2	Security	Access Permissions for the Particular System Information is Only be Changed or Accessed by the System Administrator (Parents/Gaurdians) who was Monitor the Children.
NFR-3	Reliability	One of the most effective ways to protect children. And we design this Gadget only for Safety of Children and the Parent's Mind free Condition.

NFR-4	Performance	The load time for any Action is no more than 3 Seconds for Users that access the Work using an High Network Speed.
NFR-5	Availability	The Gadget is Off only if the Charge is dead, Otherwise can't off the Device by Anyone, And it is 24hour Stability for Charge Usage, once Charged fully.
NFR-6	Scalability	The App used for Access the Gadget is limited to Support 100,000 Users at a time. And little Slow for others come After 100,000 and the first batch finish can move fastly in their Work.