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

Date	20 October 2022
Team ID	PNT2022TMID47401
Project Name	Project- 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	Registration through Form Registration through Gmail Registration through App Registration through Social Media
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP Confirmation via Call
FR-3	App Installation	Installation through Link Installation through Play Store/App Store
FR-4	Database	Location history is stored in the cloud Values include distance, latitude, longitude
FR-5	Detecting Child Location	Detecting location via app Detecting location via SMS Detecting location through Website
FR-6	User Interface	User login form Admin login form
FR-7	User Notification	Notification through Message Notification through Gmail

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The application consists of a midget setup via is made in the mobile that helps to send SMS/notification to parents. Where the gadget has an GSM that aids in providing information to the parents/guardian about the current location of their kids which in turn helps the parents/guardians take immediate action when any crisis occurs. The gadget is compact and effortless to operate and its applications are foolproof.
NFR-2	**Security**	It builds a safe environment for children to go outside. It gives a sense of assurance to parents about their children's security as the gadget uses GPS and GSM to track their live location.

NFR-3	**Reliability**	It is transportable, Easy to access, and also tensile. We can use the cloud to accumulate the surveillance data of the children. The wifi modules are of assistance in sending the monitoring particulars, the user will be notified with an update if any errors are found, for the efficient functioning of the device.
NFR-4	**Performance**	The web Page's load time is not more than one second for the user's elevated performance concerning simple aidance and security. The originality of the system is that it spontaneously alerts the parents/caretaker by sending an SMS when instant attention is indispensable for the child during a crisis. The complete data of the children's location will be stocked in the repository and the execution of the device diminishes in a less network area
NFR-5	**Availability**	It is used to keep tabs on your child even in a horde. It also provides the current location along with travel details. This system is advanced using a board programmed in embedded C and python. It is a site that is available online
NFR-6	**Scalability**	This methodology can be further enhanced by the installation of the mini camera inside a smart gadget for exemplary security and protection so that a glimpse can be caught on the live footage on the parental phone during panic circumstances. If an intricacy arises parents can see some of the attributes like the location, temperature, and heartbeat of the child along with living perspective around the children without deterrence.