

## Project Design Phase-II

### Solution Requirements (Functional & Non-functional)

Date	10 November 2022
Team ID	PNT2022TMID12669
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	<b>User Registration</b>	<ul style="list-style-type: none"><li>Registration through Form</li><li>Registration through Gmail</li><li>Registration through LinkedIn</li></ul>
FR-2	<b>User Confirmation</b>	<ul style="list-style-type: none"><li>Confirmation via Email</li><li>Confirmation via OTP</li></ul>
FR-3	<b>App installation</b>	<ul style="list-style-type: none"><li>Installation through link</li><li>Installation through play store</li></ul>
FR-4	<b>Location History</b>	<ul style="list-style-type: none"><li>Used to detect the location precisely</li><li>Point -to-point location can be seen in the app</li></ul>
FR-5	<b>GPS tracking</b>	<ul style="list-style-type: none"><li>In order to track the location, GPS module needs to be implemented.</li></ul>
FR-6	<b>Battery Life</b>	<ul style="list-style-type: none"><li>Since the gadget works on the basis of battery life, the life of the battery should be long lasting.</li><li>So the main aim is to provide additional battery(spare), which is used when they forgot to charge the battery</li></ul>

## Non-functional Requirements:

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

NFR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	<ul style="list-style-type: none"><li>✚ Since it uses GSM, which helps to inform the current situation and danger accurately and immediately to parents.</li></ul>
NFR-2	<b>Security</b>	<ul style="list-style-type: none"><li>✚ Provides assurance to parents(specially working parents)about the security of their child</li><li>✚ Develop the parents to monitor and locate the location of the child</li></ul>
NFR-3	<b>Reliability</b>	<ul style="list-style-type: none"><li>✚ Easy to access and to use</li><li>✚ Easy to handle</li><li>✚ Portable</li></ul>
NFR-4	<b>Performance</b>	<ul style="list-style-type: none"><li>✚ Instance notification is sent to the child's parent immediately</li><li>✚ Location of the child is stored for the future use</li></ul>
NFR-5	<b>Availability</b>	<ul style="list-style-type: none"><li>✚ Amber alert GPS</li><li>✚ Accessing of location</li></ul>
NFR-6	<b>Scalability</b>	<ul style="list-style-type: none"><li>✚ Gives more confident to the parents about child safety</li><li>✚ Easily approaching the child with the help of GSM</li></ul>