

## Project Design Phase-II

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

Date	15 October 2022
Team ID	PNT2022TMID46841
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"> <li>✓ Registration through Form</li> <li>✓ Registration through Gmail</li> <li>✓ Registration through Mobile number</li> </ul>
FR-2	User Confirmation	<ul style="list-style-type: none"> <li>✓ Confirmation via Email</li> <li>✓ Confirmation via OTP</li> <li>✓ Confirmation via Password verification.</li> </ul>
FR-3	User Information	<ul style="list-style-type: none"> <li>✓ User login.</li> <li>✓ (Name , Password)</li> </ul>
FR-4	External interface	<ul style="list-style-type: none"> <li>✓ IP Address, IBM Cloud (history of location is stored along with the timestamp.</li> </ul>
FR-5	User interface	<ul style="list-style-type: none"> <li>✓ A menu system should pop up on the screen when buttons are pressed to allow the user to make selections to control the system</li> </ul>
FR-6	Location access	<ul style="list-style-type: none"> <li>✓ Share their location and access via API Token(link)</li> </ul>
FR-7	Media access	<ul style="list-style-type: none"> <li>✓ Sharing their images and video of surrounding in case of emergency situation</li> </ul>
FR-8	Customer request	<ul style="list-style-type: none"> <li>✓ Communication through the chat bot between customer and product service centre</li> </ul>
FR-9	Transaction process	<ul style="list-style-type: none"> <li>✓ Checking the status of payment details and also update the status</li> </ul>

FR-10	Acceptance to request	✓ Confirmation of final order of delivery to the customer
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### Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	✓ Device sends alert to the parents about child activities.
NFR-2	<b>Security</b>	✓ Protect the information/data by enhanced security. ✓ Authentication security, Communication security.
NFR-3	<b>Reliability</b>	✓ Easy to monitor ✓ Easy to access
NFR-4	<b>Performance</b>	✓ Device can send SMS to user and also works in offline mode. ✓ Device can find child's current location and also monitor the health condition of children.
NFR-5	<b>Availability</b>	✓ The device automatically turn on the audio recorder and camera in any emergency situation.
NFR-6	<b>Scalability</b>	✓ This gadget can enhance the communication between parents and child.  ✓ By this overall process, the parents can feel confident and safe about their child safety.