

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

Team ID	PT2022TMID11856
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.

No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
1	Database	<ul style="list-style-type: none"><li>✓ Stored in cloud for seamless connectivity.</li><li>✓ Parents and kids link with the distance and the location values obtained from the mobile devices are stored here.</li><li>✓ The values include parent id, kid id, distance, longitude, latitude etc.</li></ul>
2	Server	<ul style="list-style-type: none"><li>✓ It connects the database and the front end application.</li><li>✓ The backend server has been implemented to run as a service and is deployed in an IBM cloud instance.</li><li>✓ The backend server has been implemented to run as a service and is deployed in an IBM cloud instance.</li></ul>
3	Battery Life	<ul style="list-style-type: none"><li>✓ If the child or parent forgets to charge the device for a whole day then also the device will work. That's why we aim to make this device Blast the whole day with one charge.</li><li>✓ It should be long-lasting.</li></ul>
4	Location History	<ul style="list-style-type: none"><li>✓ Location history will help to track the child's activity so that they aren't will be updated. Location history will be there for 30days.</li><li>✓ For example if the child gets missing with the help of location history they aren't can track down their child's activity and also can find their child.</li></ul>

### Non-functional Requirements:

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

No.	Non-Functional Requirement	Description
1	Usability	✓ Device have GSM can help to inform the parents or relatives about the current situations of the child by deliver the message immediately to save the child.
2	Security	✓ Make children parents more assure abouttheir kid's security, we have a feature in our device called Geo- Fence. ✓ Whenever your child crosses that specificarea, you will get an instant notification on your phone.
3	Reliability	✓ Portable ✓ Easy to use ✓ Flexibility
4	Performance	✓ Create a Child tracker which helps theparents with continuously monitoring the child's location. ✓ The notification will be sent according tothe Child's location to their parents orcaretakers. ✓ The entire location data will be stored inthe database.
5	Availability	✓ Track your child even in a crowd ✓ Get travel details of kids at any time Know the current location
6	Scalability	✓ Gadget ensures the safety and tracking ofthe children. ✓ Parents need not worry about theirchildren.