

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

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| Team ID | PNT2022TMID17111 |
| Project Name | IoT Based Safety Gadget for Child Safety Monitoring and Notification |
| Maximum Marks | 4 Marks |
| Submission Date | 11 November |

Functional Requirements:

Following are the functional requirements of the proposed solution.

| No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|-----|-------------------------------|--|
| 1 | Database | Stored in cloud for seamless connectivity. Parents and kids link with the distance and the location values obtained from the mobile devices are stored here. The values include parent id, kid id, distance, longitude, latitude etc. |
| 2 | Server | It connects the database and the front end application. The backend server has been implemented to run as a service and is deployed in an IBM cloud instance. The backend server has been implemented to run as a service and is deployed in an IBM cloud instance. |
| 3 | Battery Life | 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 last the whole day with one charge. It should be long-lasting. |

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| 4 | Location History | <p>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.</p> <p>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.</p> |
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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 | <p>Make children parents more assure abouttheir kid's security, we have a feature in our device called Geo- Fence.</p> <p>Whenever your child crosses that specificarea, you will get an instant notification on your phone.</p> |
| 3 | Reliability | <p>Portable</p> <p>Easy to use</p> <p>Flexibility</p> |
| 4 | Performance | <p>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.</p> |
| 5 | Availability | <p>Track your child even in a crowd</p> <p>Get travel details of kids at any time</p> <p>Know the current location</p> |

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| 6 | Scalability | Gadget ensures the safety and tracking of the children. Parents need not worry about their children. |
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