**Project Design Phase-II**

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

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| Date | 10 October 2022 |
| Team ID | PNT2022TMID49677 |
| 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.

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| FR NO. | Functional requirements(Epic) | Sub requirements (story/sub – Task) |
| FR-1 | User Registration | ➢ Registration through Phone.  ➢ Registration through Gmail. |
| FR-2 | User Confirmation | ➢ Confirmation through Email .  ➢ Confirmation through Mobile Alert. |
| FR-3 | App installation | ➢ Installation through website APK’s.    ➢ Installation through play store. |
| FR-4 | Detecting child | ➢ Detecting location through SMS.  ➢ Detecting location through mobile app. |
| FR-5 | Set Geofence | ➢ Setting by user to find child location. |
| FR-6 | User End Result | ➢ Parents need not worry about their children. |
| FR-7 | User Objective | ➢ Easy to monitor the child anywhere  ➢ Helps to ideentify the child. |

Non-functional Requirements:

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

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| FR NO. | Non- Functional Requirements | Description |
| NFR-1 | Usability | * The device has GSM to inform the parents about the current situation of the child, alert by message immediately to save the child. * Seamless communication is possible between people, processses, and things. |
| NRF-2 | Security | * Make children parents more assure about their kid’s security, we have a feature in our device called Geo-Fence. * Securing your IoT devices and network as you scale up production and deployment can be challenging one, we have a feature like storing all data in the database. |
| NFR-3 | Reliability | * The reliability of an item is to perform a required function in a correct manner.      * It is easy to use and more flexible. |
| NFR-4 | Performance | * Create a Child tracker which helps the parents with continuously monitoring the child’s location. * The website's load time should not be more than one second for users.      * The notification will be sent according to the child’s location to their parents. The overall data collection is stored in the database. |
| NFR-5 | Availability | * The system is accessible to a user at a given point in time. |
| NFR-6 | Scalability | * It is the ability of the application to handle an increase in workload without performance, degradation.      * Parents does not need worry about their children safety. |