Project Design Phase-II

Solution Requirements (Functional and Non-Functional)

| Date | 16 October 2022 |
|---------------|--|
| Team ID | PNT2022TMID33515 |
| Project Name | IoT Based Safety Gadget for Child Safety Monitoring & Notification |
| Maximum marks | 4 Marks |

Functional Requirements:

| FR No. | Functional Requirement(Epic) | Sub Requirement(Story / Sub-Task) |
|--------|------------------------------|---|
| FR-1 | Authentication | An SMS is sent to the parents mobile when abnormal values are read by the sensor |
| FR-2 | External Interfaces | Temperature sensor, Touch sensor, heartbeat sensor, GSM, GPS modules and serial camera |
| FR-3 | Reporting | Whenever the pulse rate value is less than 400 then automatically sent an SMS alert to the mobile Touch is not identified by the touch sensor, then automatically an SMS alert is sent to the mobile |
| FR-4 | Business rules | Provide good environment where child safety problems are resolved in an efficient manner |

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution

| NFR No. | Non-functional requirement | Description |
|---------|----------------------------|--|
| NFR-1 | Usability | Make parents easily monitor the children in real-time |
| NFR-2 | Security | Detects the status of the child and alert the respective guardian |
| NFR-3 | Reliability | High accuracy, reliability and short response time when the child is in danger |
| NFR-4 | Performance | Identifying what standards are being monitored |
| NFR-5 | Availability | To show the child's actual data with reference values |
| NFR-6 | Scalability | GPS is installed on gadget to track its current location can be tracked on android application |