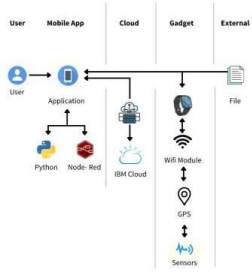
TEAM ID:PNT2022TMID32392

Project Design Phase-II

**Technology Architecture**

**Technical Architecture:**

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table2



**Table-1 : Components & Technologies:**

| **S.No** | **Component** | **Description** | **Technology** |
| --- | --- | --- | --- |
| 1. | User Interface | How user interacts with application e.g.  Web UI, Mobile App, Chatbot etc. | HTML, CSS, JavaScript / Angular JS / React JS, Node Red, Android Studios etc. |
| 2. | Application Logic-1 | Logic for a process in the application | Python |
| 3. | Application Logic-2 | Logic for a process in the application | IBM Watson STT service |
| 4. | Application Logic-3 | Logic for a process in the application | IBM Watson Assistant |
| 5. | Database | Data Type, Configurations etc. | MySQL, NoSQL, etc. |
| 6. | Cloud Database | Database Service on Cloud | IBM DB2, IBM Cloudant etc. |
| 7. | File Storage | File storage requirements | IBM Block Storage or Other Storage Service or Local Filesystem |
| 8. | External API-1 | Purpose of External API used in the application | IBM GPS API, etc. |
| 9. | External API-2 | Purpose of External API used in the application | Mobile number API, etc. |
| 10. | Modules | Modules required for the system | WIFI module, GPS module |
| 11. | Sensors | Sensors required for the system | LM 75 Temperature sensor & MAX 30102 Heart rate Sensor |
| 12. | Wearable device | Wearable device for the child | Wear OS by Google |

**Table-2: Application Characteristics:**

| **S.No** | **Characteristics** | **Description** | **Technology** |
| --- | --- | --- | --- |
| 1. | Open-Source Frameworks | List the open-source frameworks used | Python and Node Red |
| 2. | Security Implementations | List all the security / access controls implemented, use of firewalls etc. | 256-bit AES algorithm |
| 3. | Scalable Architecture | Justify the scalability of architecture (3 – tier, Micro-services) | High accuracy GPS, temperature & heart rate sensors |
| 4. | Availability | Justify the availability of application (e.g., use of load balancers, distributed servers etc.) | Low-cost device, High battery life, User-friendly application |
| 5. | Performance | Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN’s) etc. | Akamai – CDN |