# Project Design Phase-II
# Technology Stack (Architecture & Stack)

| Date | 20 October 2022 |
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| Team ID | PNT2022TMID39437 |
| Project Name | Personal Assistance for seniors Who are Self Reliant |
| Maximum Marks | 4 Marks |

**Technical Architecture:**

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2
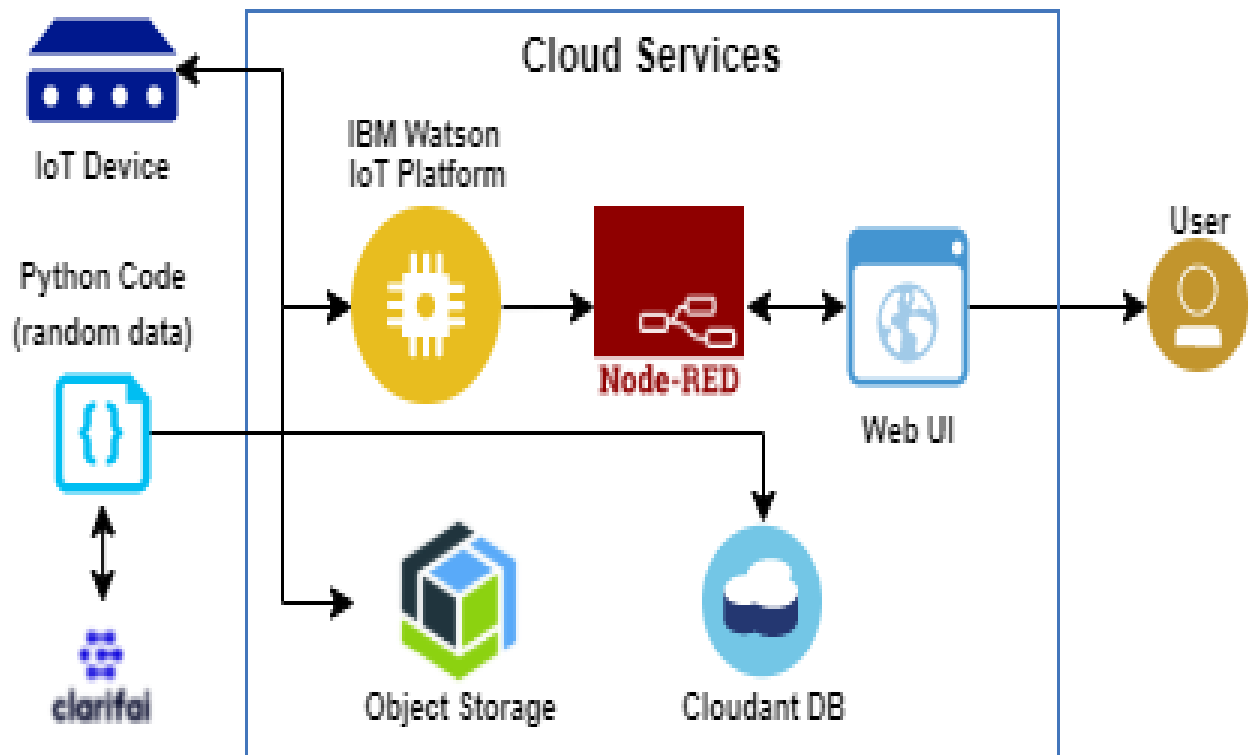
**Table-1 : Components & Technologies:**

| S.No | Component | Description | Technology |
|------|-----------|-------------|------------|
| 1. | User Interface | How user interacts with application e.g. Web UI, Mobile App, Chatbot etc. | HTML, CSS, Angular Js |
| 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 IOT Platform |
| 4. | Application Logic-3 | Logic for a process in the application | Node RED |
| 5. | Database | Data Type, Configurations etc. | MySQL, NoSQL, etc. |
| 6. | Cloud Database | Database Service on Cloud | IBM DB2, IBM Cloudant etc. |
| 7. | Infrastructure (Server / Cloud) | Application deployment on Local System / Cloud Local Server configuration: Cloud Server configuration: | Local, Cloud foundary, Kubernetes,etc |
| 8. | File storage | File storage requirements | IBM Cloudant |

**Table-2: Application Characteristics:**

| S.No | Characteristics | Description | Technology |
|------|-----------------|-------------|------------|
| 1. | Open-Source Frameworks | KAA IOT, ZEETA,ThingSpeak,Open connectivity Foundation | RFID,NFC,WIFI-Direct, Low energy bluetooth |
| 2. | Security Implementations | Sensors used for tracking real time location of medical equipment like wheelchairs,nebulizers,oxygen pumps and other monitoring equipment | OPTIGA Trust M is an IOT device |
| 3. | Scalable Architecture | Scalable IOT systems should use separate systems is web workers where it stores for grow data storage and analysis | Sensors, Actuators, and Cloud |
| 4. | Availability | Remote monitoring health devices, seniors can easily track their medical conditions while going about their lives | DOT Watch, Robot helpers |
| 5. | Performance | In seniors it can help improve cognition and memory skills | GPS storage |