

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

Date	09 November 2022
Team ID	PNT2022TMID18885
Project Name	Project – Personal Assistance For Seniors Who Are Self-Reliant
Maximum Marks	4 Marks

Technical Architecture:

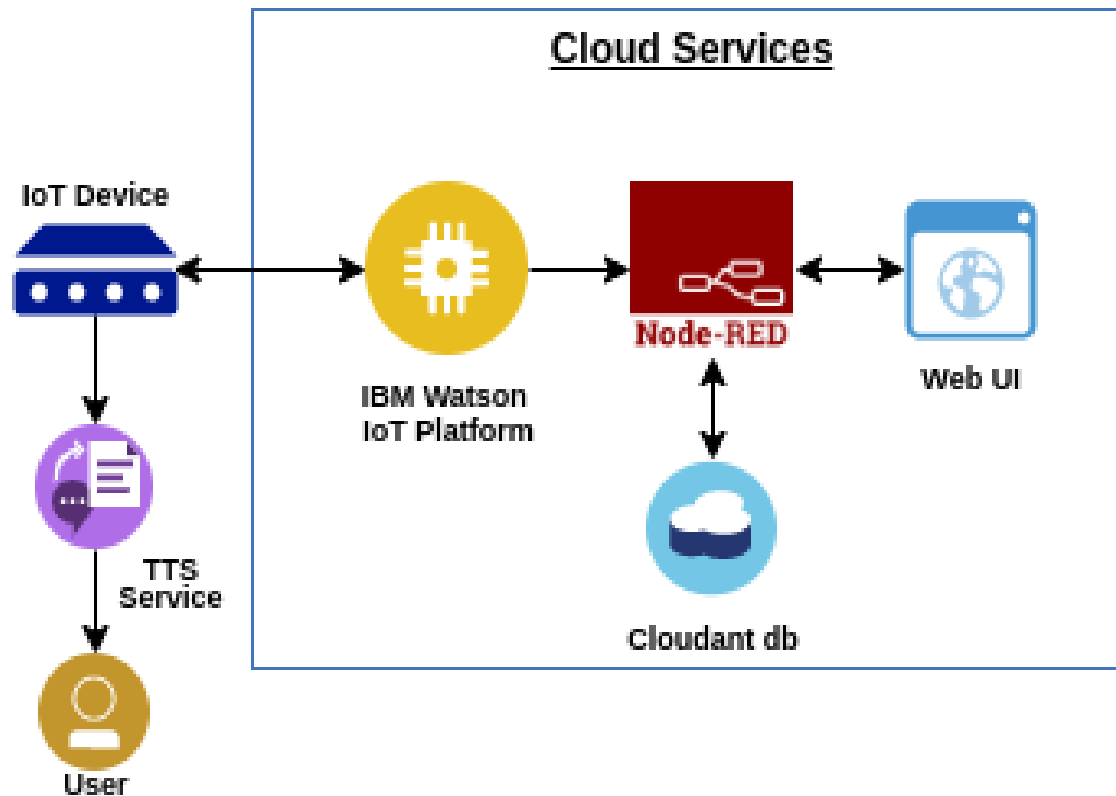


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interacts with application i.e., Mobile App, Web UI	MIT App Inventor(blocks coding)
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 services
5.	Application Logic-4	Logic for a process in the application	Text To Speech(TTS) Services
6.	Database	Data Type, Configurations etc.	NoSQL
7.	Cloud Database	Database Service on Cloud	IBM Cloudant
8.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
9.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Cloud Foundry, Kubernetes

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	IBM Watson
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	Encryptions, ISO 27001
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Cloud Services
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Software services
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Number of time and medicine settings