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

Date	03 October 2022
Team ID	PNT2022TMID15932
Project Name	Project -Personal Assistance For Seniors Who Are Self-Reliant
Maximum Marks	4 Marks

Technical Architecture:

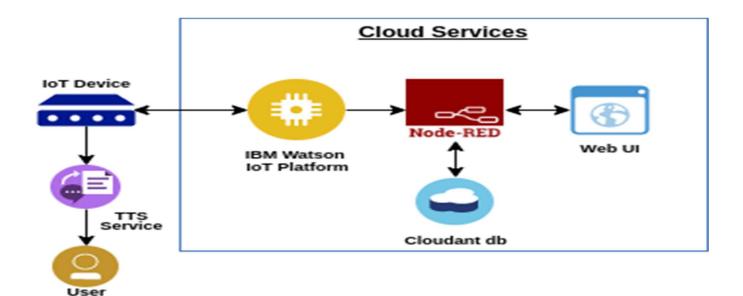The architectural diagram of the model is as below and the technology used is shown in below table.

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 etc.
2.	Application Logic-1	Updates medicine schedule.	Java / Python
3.	Application Logic-2	Create a speech notification with the medicine details at the scheduled time.	IBM Watson TSS service
4.	Application Logic-3	Interactions with the IOT device.	IBM Watson IoT platform
5.	Database	Medication schedule and doctor's appointments.	MySQL, NoSQL.
6.	Cloud Database	Database Service on Cloud	IBM DB2.
7.	File Storage	File storage requirements-App code and IoT credentials are stored	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	To get the data from the IBM cloud	REST API
9.	External API-2	To get the login credentials in IBM DB2	Login API
10.	IoT Model	Purpose of IoT Model is for generating a medicine remainder system.	IBM IoT platform.
11.	Infrastructure (Server / Cloud)	Host the server and application	Cloud Foundry, Node-Red.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Open source application used in IBM Watson	IBM Watson.
2.	Security Implementations	To secure the users login credentials and personal information.	SHA-256,OWASP
3.	Scalable Architecture	The application can load as many members as there are logged in	IBM Watson, Mit
4.	Availability	To make use the application and data available to the registered users and it is offered 24/7.	IBM Watson, Node Red, IBM Cloud, and Mit
5.	Performance	To increase the performance, the application is hosted in the high performance instance.	IBM instance