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

Date	15 October 2022
Team ID	PNT2022TMID35860
Project Name	Project – Personal assistance for senior citizens who are self-reliant
Maximum Marks	4 Marks

Technical Architecture:

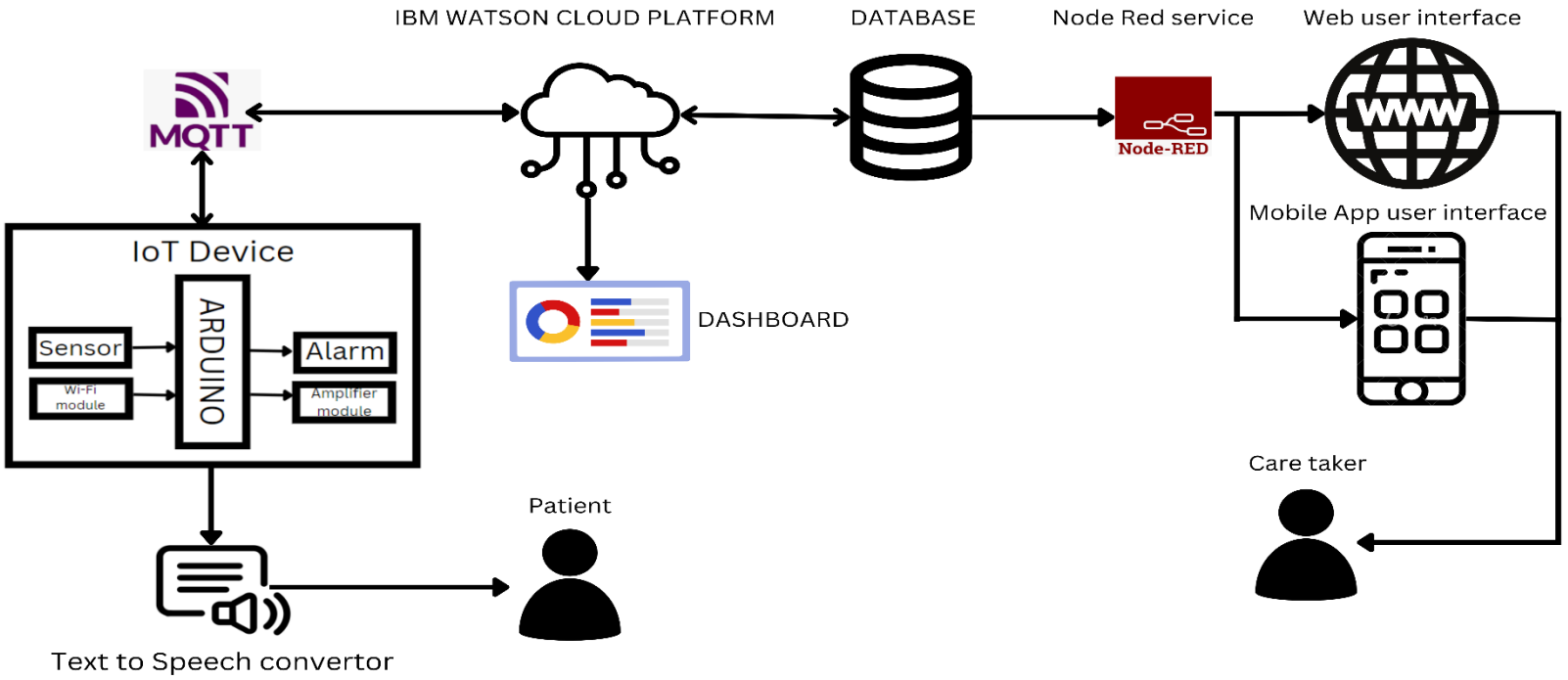

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	MIT app inventor
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 TTS service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Cloud , Node Red
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM Cloudant DB.
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	DailyMed API
9.	External API-2	Purpose of External API used in the application	GoodRx API
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	 IBM HTTP web server IaaS(Infrastructure as a Service)

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	MIT app inventor
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	Obfuscation block implementation level in MIT app inventor
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	IBM Watson, TTS service
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	As the product needs to remind the medicine via IoT, we need Cloud services which is available
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Microcontroller (arduino) controls the entire process and repeats the procedure on a daily basis