

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

Date	13 October 2022
Team ID	PNT2022TMID25041
Project Name	Project – Medicine Remainder
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Medicine Remainder using IOT device

Reference: <https://ieeexplore.ieee.org/document/9640866>

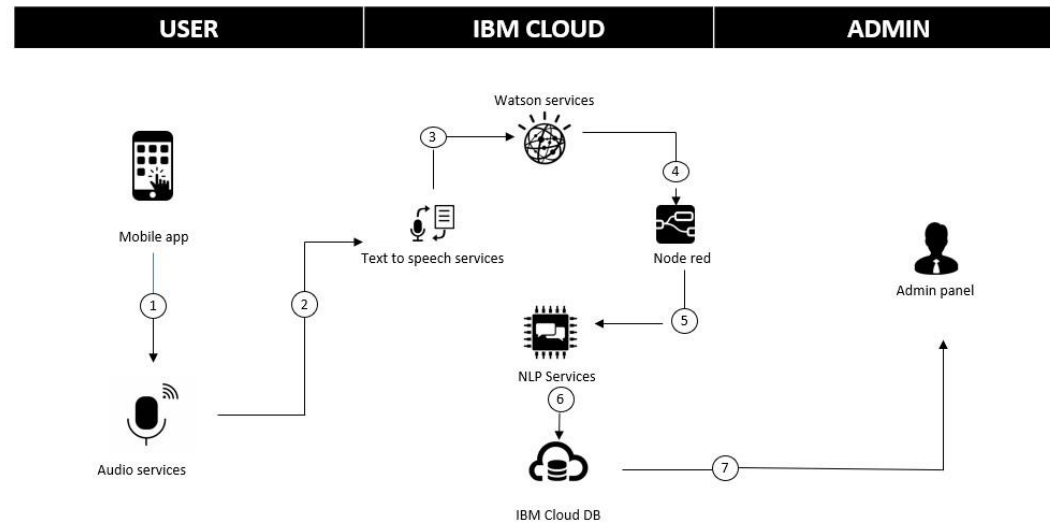


Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	Mobile App	HTML, CSS, JavaScript / Angular Js / React Js 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.	Mango DB

6.	Cloud Database	Database Service on Cloud	IBM Cloudant
7.	File Storage	File storage requirements	IBM Block Storage
8.	External API-1	Getting latest medical tips	Rapid API
9.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud	Local, Cloud Foundry.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Open Cloud, Angular JS.
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	Discretionary Access Control (DAC)
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	SOA + EDA
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Classic and VPC Load balancers
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	We are now using Lite plan, 5 request per second.

References: <https://ieeexplore.ieee.org/document/9640866>

<https://www.researchgate.net/publication/349899849> IoT Based Pill Reminder and Monitoring System

<https://www.ibm.com/cloud/architecture> <https://aws.amazon.com/architecture>

<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>