Project DesignPhase - II

Technology Architecture

Date	03 October 2022
Team Id	PNT2022TMID31307
Project name	Personel Assistance For Seniors Who Are Self-Reliant
Maximum Marks	4 Marks

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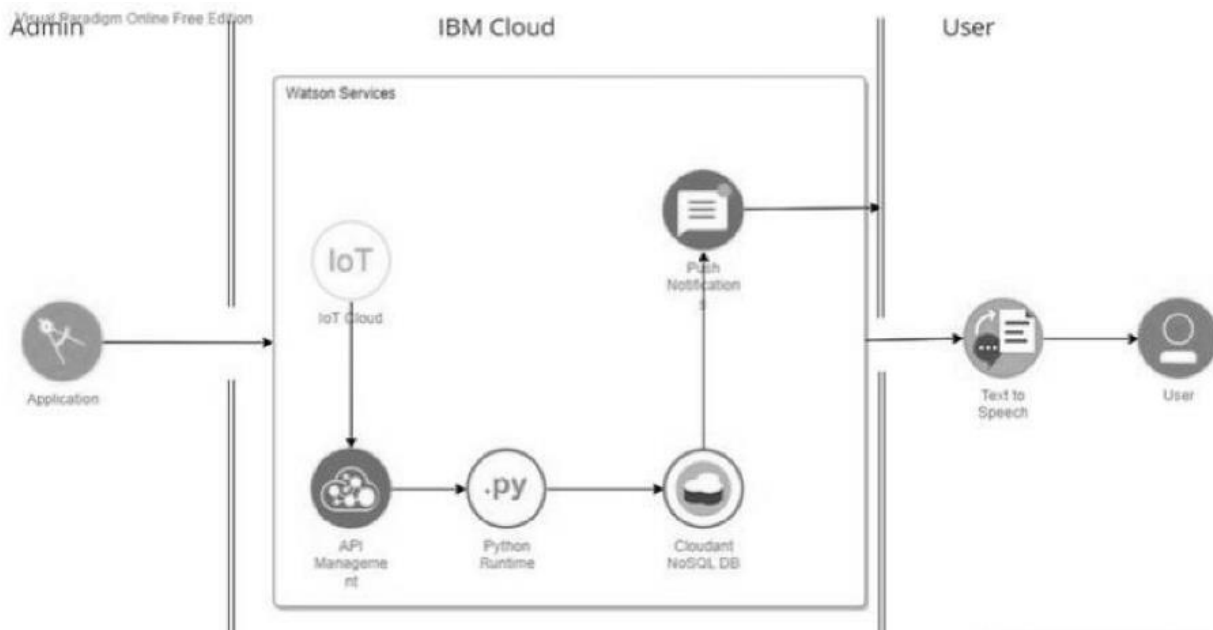**Team member:** MAHESWARI J

Technical Architecture:

Table 1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts withapplication e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, Angular Js
2.	Application Logic-1	Logic for a process in theapplication	Python
3.	Application Logic-2	Logic for a process in theapplication	IBM Watson IOT Platform
4.	Application Logic-3	Logic for a process in theapplication	Node RED
5.	Database	Data Type, Configurations etc	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudantetc.
7.	File storage	File storage requirements	IBM Cloudant
8.	External API-1	To get the me4dicine box status open or not	IBM box status API
9.	External API-2	To get the login credentials in IBMDB2	Username and Password API
10.	Machine Learning Model	To convert the text into speech for voice command tablet details.	Text to speech
11.	Infrastructure (Server / Cloud)	Application deployment on LocalSystem / Cloud Local Server configuration: Cloud Server configuration	Local, Cloud foundary, Kubernetes, etc..

Table 2: Application Characteristics:

S.No.	Characteristics	Description	Technology
1.	Open-Source Frameworks	KAA IOT, ZEETA , Thing Speak , 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