

**PROJECT DESIGN PHASE -
TECHNOLOGY STACK(ARCHITECTURE &
STACK)**

Date	8 October 2022
Team ID	PNT2022TMID21781
Project Name	Personal Assistance for Seniors Who Are Self-Reliant
Maximum Marks	4 Marks

Technical Architecture :

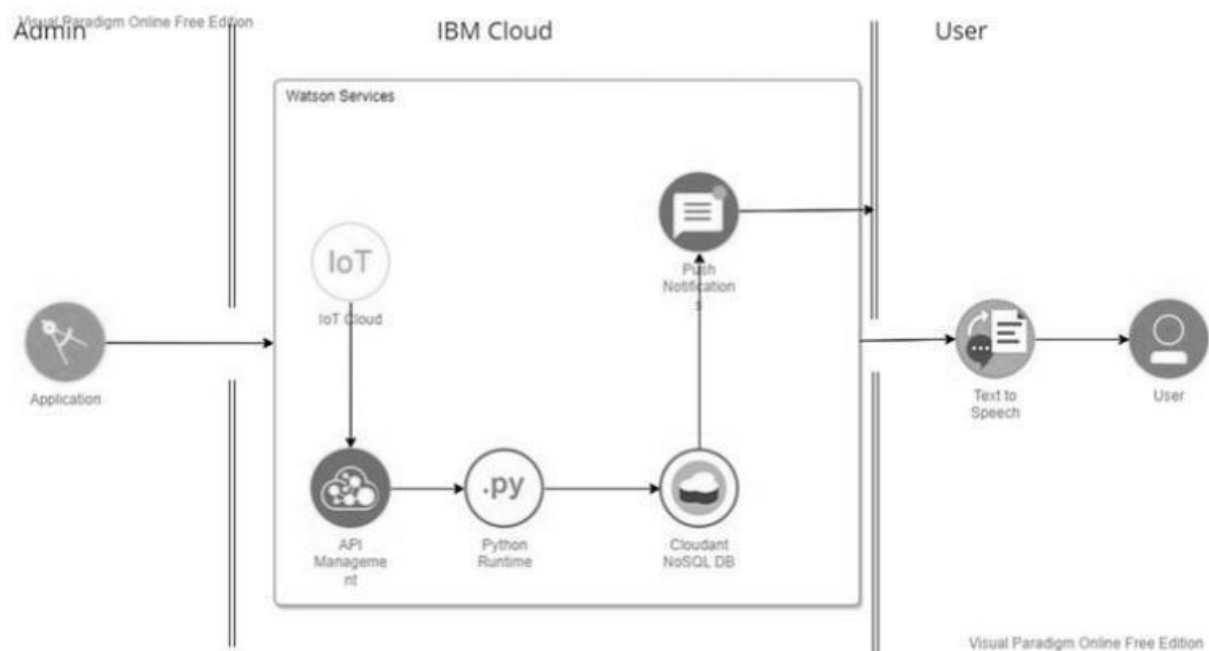


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Mobile App	

				HTML, CSS, JavaScript, Python
2.	Application Logic-1	Mobile App to enter the Medication Details weekly		Python
3.	Application Logic-2	Gets the medication data from database		IBM Watson API Call d
4.	Application Logic-3	Converts the text to speech to pronunciation for the user		IBM Watson Assist
5.	Database	Medication time and tablets name on daily and		MySQL
6.	Cloud Database	Call the data IBM Cloudant is used and user login credentials		IBM I IBM Cloud
7.	File Storage	App code and IoT credentials are stored and API keys		IBM I Storage
8.	External API-1	To get the medicine box status Open or not		IBM I status
9.	External API-2	To get the login credentials in IBM DB2		Usern and Passw API
10.	Machine Learning	To convert the text		Text t speech

	Model	into speech for voice commandthe tablet details	
11.	To host the server and application	Cloud Foundry, (Server / Node Red	
Infrastructure Cloud)			

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	To develop the application interface, we use MITApp Inventor	MIT APP INVENTOR
2.	Security Implementations	To secure the users login credentials and personalinformation	SHA-256, OWASP
3.	Scalable Architecture	To scale the application database	IBM Auto scaling
4.	Availability	To make use the application and data areavailable 24/7	IBM Cloud load balancer

5.	Performance	To increase the performance the application inhosted in the high- performance instance	IBM instance
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