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

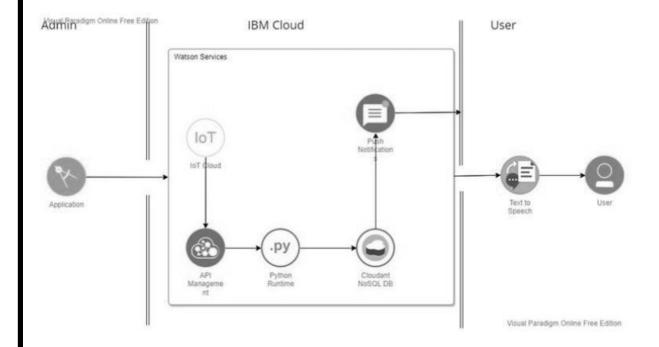| Team ID	PNT2022TMID38119
Project Name	Personal Assistance for Seniors Who Are Self-Reliant
Maximum Marks	4 Marks

Ïechnical Aíchitectuíe :

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Mobile App	HTML, CSS, JavaScript
2.	Application Logic-1	Mobile App to enter the Medicine Details weekly	Python
3.	Application Logic-2	Gets the medication data fromdatabase	IBM Watson IoT APICall data
4.	Application Logic-3	Converts the text to speech topronunciation for the user	IBM Watson Assistant
5.	Database	Medication time and tablets nameondaily and	MySQL
6.	Cloud Database	Call the data IBM Cloudant is usedanduser login credentials	IBM DB2, IBM Cloudant
7.	File Storage	App code and IoT credentials arestored and API keys	IBM Block Storage
8.	External API-1	To get the medicine box statusOpen ornot	IBM box status API
9.	External API-2 IBMDB2	To get the login credentials in	Username and Password API
10.	Machine Learning Model	To convert the text intospeech for voice command the tablet details	Text to speech
11.	**Infrastructure Foundry,(Server / Cloud) Node Red**	**To host the server and**	**Cloud application**

Table-2: Application Characteristics:

S.N	Characteristicso	Description	Technology
1. 2. 3. 4.	Open-Source Frameworks Security Implementations Scalable Architecture Availability	To develop the application interface,we use **MIT App Inventor**To secure the users logincredentials and personal information To scale the application databaseTo make use the application and dataare available24/7	**MIT APP INVENTOR** **SHA-256, OWASP** **IBM Auto scaling** **IBM Cloud load balancer**
5.	**Performance**	**To increase the performance theapplication In hosted in thehigh-performanc einstance**	**IBM instance**