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

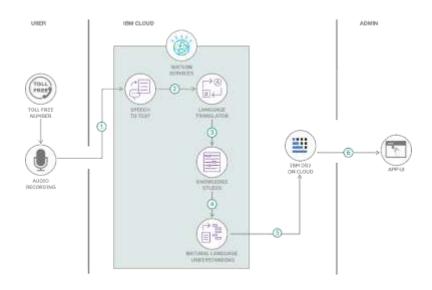
Date	03 October 2022
Team ID	PNT2022TMID08570
Project Name	Project – Customer Care Registry
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table 1 & table 2

Example: Order processing during pandemics for offline mode

Reference: https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/



Guidelines:

- 1. Include all the processes (As an application logic / Technology Block)
- 2. Provide infrastructural demarcation (Local / Cloud)
- 3. Indicate external interfaces (third party API's etc.)
- 4. Indicate Data Storage components / services
- 5. Indicate interface to machine learning models (if applicable)

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Dynamic Web UI	HTML, CSS, React Js, Jquery, Json
2.	Application Logic-1	User Registration/Login	Gmail API
3.	Application Logic-2	It helps to perform the Entire Functions and Tasks in the Application	Python
4.	Application Logic-3	Providing the virtual Assistant for Customer Queries	IBM Watson Assistant
5.	Database	Stores customer input in the database	DB2
6.	Cloud Database	Database Service on Cloud	IBM DB2
7.	File Storage	File storage requirements	IBM Block Storage and Object Storage
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Local Server Cloud Server Configuration: Online Server	Docker, Kubernetes, etc

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Many Open-Source platforms are available to create and stores data in the application	Flask-Python
2.	Security Implementations	It is the security discipline that makes it possible for right entries to use the right resources without interference	IBM Cloud and IBM DB2
3.	Scalable Architecture	Sendgrid API and Json Server	IBM Object Storage

S.No	Characteristics	Description	Technology
4.	Availability	Maximum Number of Customer Utilizes	IBM Kubernetes
5.	Performance	Fast Recovering Data From IBM DB2 and flexible request and response from cloud	IBM Cloud

References:

https://c4model.com/

https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/

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