

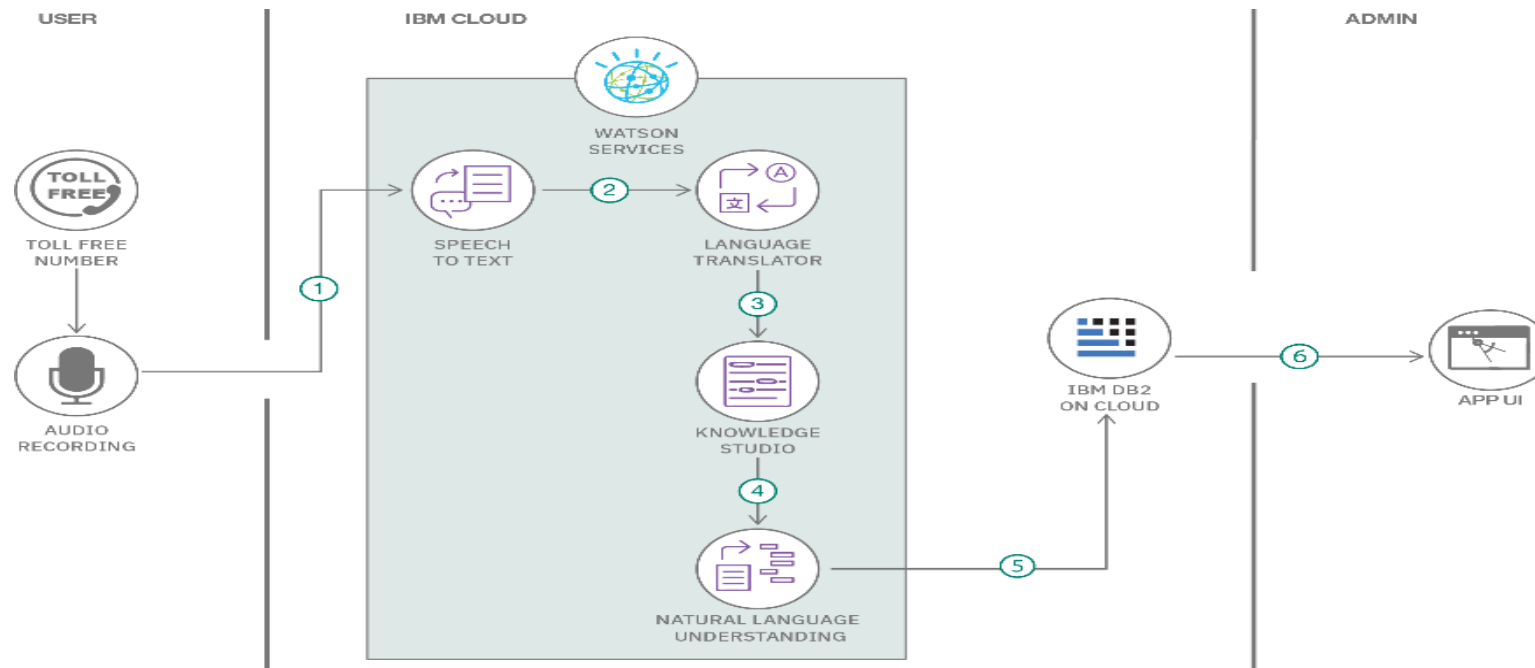
## Project Design Phase-II Technology Stack (Architecture & Stack)

Date	10 November 2023
Team ID	PNT2022TMIDxxxxxx
Project Name	Project - xxx
Maximum Marks	4 Marks

### Technical Architecture:

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

### Example: Order processing during pandemics for offline mode



**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	Web UI for user interaction	HTML, CSS, JavaScript / React Js
2.	Application Logic-1	Core business logic	Java
3.	Application Logic-2	Speech-to-Text logic using Watson service	IBM Watson Speech to Text Service
4.	Application Logic-3	Chatbot logic using Watson Assistant	IBM Watson Assistant
5.	Database	Storage and retrieval of structured data	MySQL
6.	Cloud Database	Cloud-based database service	IBM Db2 on IBM Cloud
7.	File Storage	Storage for files and documents	IBM Cloud Object Storage
8.	External API-1	Integration with weather data API	IBM Weather Company Data API
9.	External API-2	Aadhar verification API	Aadhar Authentication API
10.	Machine Learning Model	Object recognition model	Custom ML model for object recognition
11.	Infrastructure (Server / Cloud)	Deployment on Kubernetes in the cloud or locally	Local / IBM Kubernetes Service on IBM Cloud

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	React Js is used for the frontend	React Js
2.	Security Implementations	SHA-256 for data encryption, IAM controls for access	SHA-256, IAM Controls
3.	Scalable Architecture	Microservices architecture for scalability	Kubernetes for container orchestration

S.No	Characteristics	Description	Technology
4.	Availability	Load balancing for distributing server load	IBM Cloud Load Balancer
5.	Performance	Use of CDN for content delivery, caching for improved performance	IBM Cloud Content Delivery Network (CDN)

#### 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>