

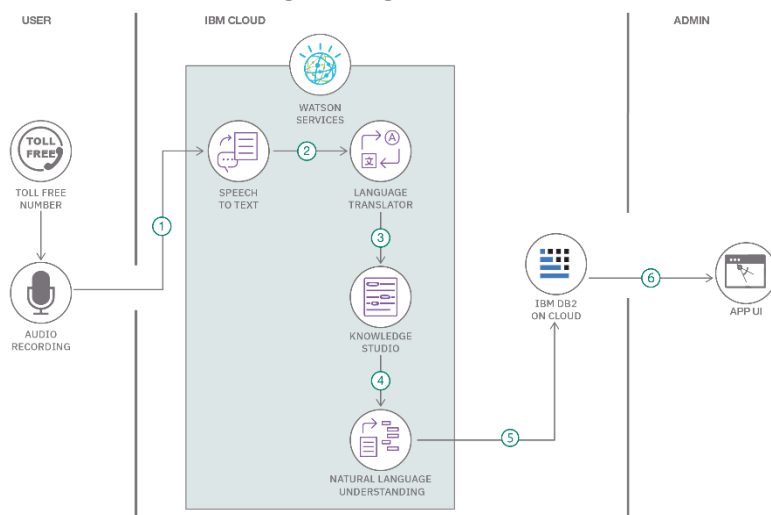
## Project Design Phase-II Technology Stack (Architecture & Stack)

<b>Date:</b>	1.07.2025
<b>Team Id:</b>	LTVIP2025TMID52456
<b>Project Name:</b>	Measuring the pulse of prosperity: An Index of economic freedom analysis
<b>Maximum Marks:</b>	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



Reference:

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

Table-1 : Components & Technologies:

Component	Description	Technology
User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
Application Logic-1	Logic for a process in the application	Java / Python
Application Logic-2	Logic for a process in the application	IBM Watson STT service
Application Logic-3	Logic for a process in the application	IBM Watson Assistant
Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.

Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
External API-1	Purpose of External API used in the application	IBM Weather API, etc.
External API-2	Purpose of External API used in the application	Aadhar API, etc.
Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Technology used
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Technology used
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Technology used