# Project Design Phase-II
# Technology Stack (Architecture &Stack)
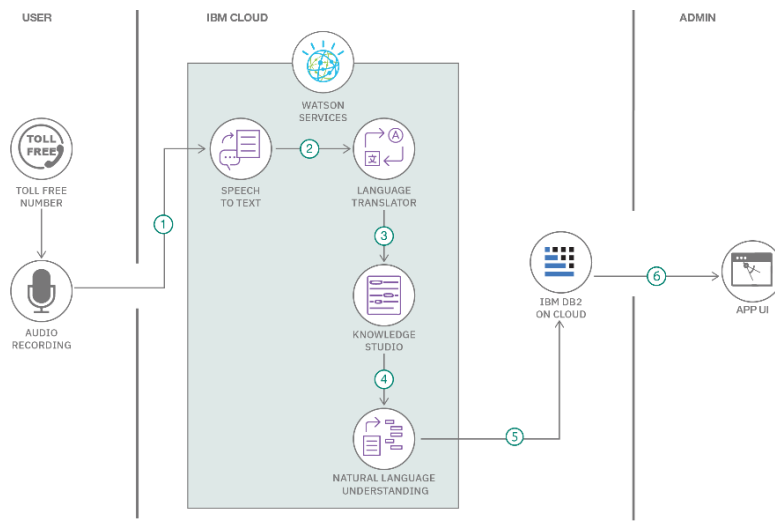
| Date | 03 November 2023 |
|---|---|
| Team ID | 1D015AF4C17E799BE114EB7CCBA26BCB |
| Project Name | Project - **Data Titans**: Unearthing Trends from LinkedIn Influencers |
| Maximum Marks | |

**Technical Architecture:**

Outlines the high-level structure and components of a system, defining how they interact to support the overall functionality and performance of the system.

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 | User interacts with application e.g.Web UI, Mobile App, Chatbot etc. | HTML, CSS, JavaScript etc. |
| 2. | Application Logic-1 | Logic for the project is already in the Project documentation | Python |
| 3. | Application Logic-2 | Logic for the project is already in the Project documentation | IBM Watson STT service |
| 4. | Application Logic-3 | Logic for the project is already in the Project documentation | IBM Watson Assistant |
| 5. | Database | Data Type, Configurations etc. | MySQL, NoSQL, etc. |
| 6. | Cloud Database | Database Service on Cloud | IBM DB2, IBM Cloudant etc. |
| 7. | File Storage | 100 MB | IBM Block Storage |
| 8. | External API-1 | Purpose of External API used in the application | IBM Weather API, etc. |
| 9. | External API-2 | Purpose of External API used in the application | Aadhar API, etc. |
| 10. | Machine Learning Model | Purpose of Machine Learning Model | Object Recognition Model, etc. |
| 11. | 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 | Bootstrap | JavaScript |
| 2. | Security Implementations | Encryptions and IAM | SHA-256, Encryptions, IAM Controls and OWASP |
| 3. | Scalable Architecture | 3 – tier andMicro-services | Flask for Python |

| S.No | Characteristics | Description | Technology |
|------|----------------|-------------|------------|
| 4. | Availability | Distributed servers and load balancers | Distributed Systems |
| 5. | Performance | Uses the Cache and CDN's | CDN |