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

Date	03 October 2022
Team ID	PNT2022TMID15800
Project Name	Al-powered Nutrition Analyzer for Fitness Enthusiasts
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

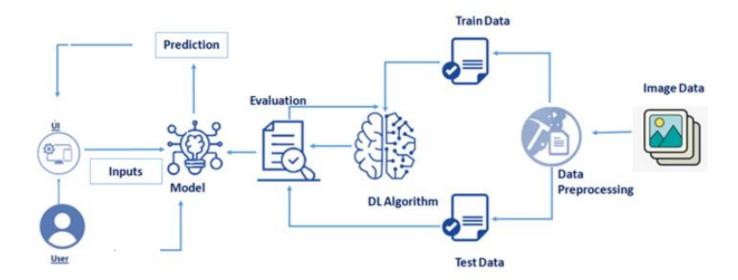


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js etc.
2.	Application Logic-1	Logic for a process in the application	Java / Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	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	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Converts from one language to another	Natural Language Processing
9.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
10.	Infrastructure (Server / AI)	Application Deployment on Local System / Al Local Server Configuration Al Server Configuration	Local, Kubernetes, etc.

Table 2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Simplifies the complexity of deep learning algorithms. It helps to upload data and train the model.	TensorFlow
2.	Security Implementations	The system authenticates all the users with their unique usernames and password.	JWT(JSON Web Tokens)
3.	Scalable Architecture	The system can adapt and grow easily with ease.	Al Technologies

S.No	Characteristics	Description	Technology
4.	Availability	The information is available only for the registered users, and user information is available only to that particular user.	NA
5.	Performance	The system performs well even when many users access it at the same time	Google Colab Pro