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

Date	03 October 2022
Team ID	PNT2022TMID28541
Project Name	Project – AI-Powerd 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 table1 & table 2

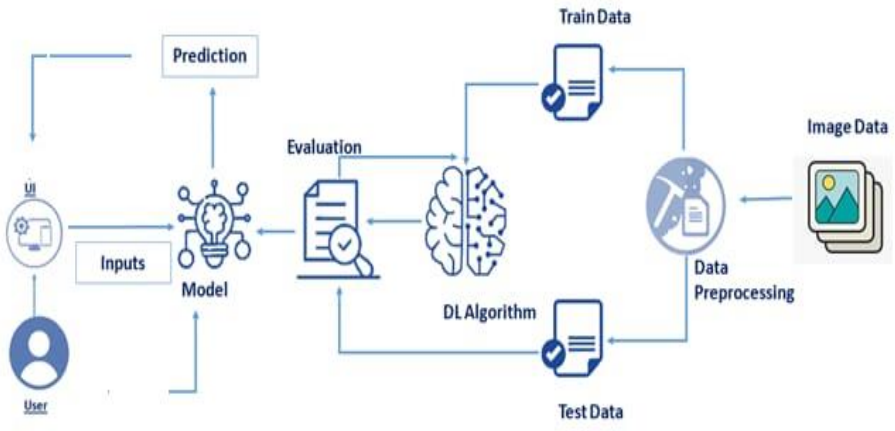

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Through a web UI, the user can engage with the application.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	It has many in built libraries which helps in machine learning	Python
3.	Application Logic-2	It helps to build machine learning model	IBM watson jupyter notebook service
4.	Application Logic-3	It is fast and accurate	IBM Watson Assistant
5.	Database	MySQL is used to store the user information and warehouse the food items	MySQL
6.	Cloud Database	IBM Db2 is reliable and scalable	IBM DB2

7.	File Storage	Maintain files easily	Local Filesystem
8.	External API-1	Aadhar and customer KYC verification takes a little amount of time	Aadhar API, etc.
9.	External API-2	To recognise the patterns and trend	Aadhar API, etc.
10.	Machine Learning Model	Purpose of Machine Learning Model	Sequential, Dense& LSTM Model
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local system and IBM watson

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Tensor flow-Implements model building and training. Flask- Can handle multiple user request simultaneously. Scikit learn-Contains model for classification, regression, clustering	Tensor flow, flash, Scikit learn.
2.	Security Implementations	SHA-256 doesn't have any known vulnerabilities	SHA-256
3.	Scalable Architecture	MySQL can store huge amount of data and it Is easily scalable	MySQL
4.	Availability	This application can be accessed from anywhere easily and it is easily scalable.	IBM Waston cloud
5.	Performance	Flask can handle multiple user request simultaneously.	Flask