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

Date	15 October 2022
Team ID	PNT2022TMID21516
Project Name	AI-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 table1 & table 2

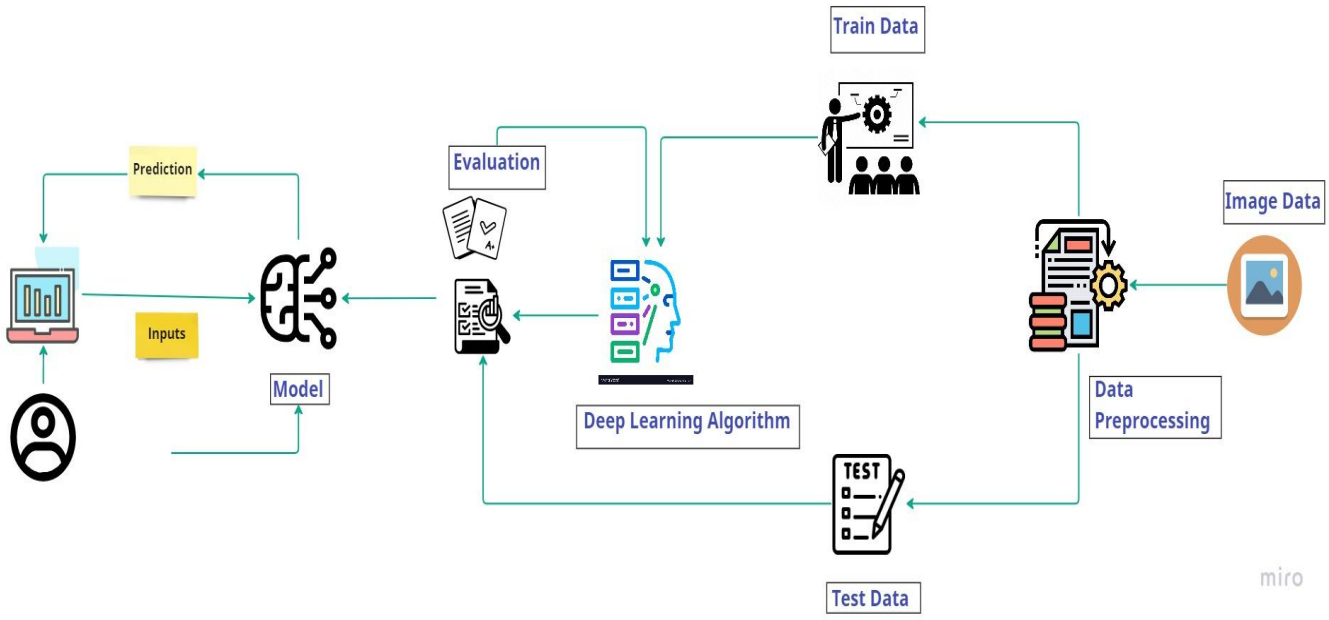

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How the user interacts with application e.g. Web UI, Mobile App, Chat box etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Analysis of food using algorithms.	Python
3.	Application Logic-2	Logic for a process in the application	Flask Framework
4.	Application Logic-3	Logic for a process in the application	IBM Cloud
5.	Database	String, Numeric and date/time data types Configurations etc.	MySQL, NoSQL, etc.

6.	Cloud Database	A set of predefined values for the health monitors.	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local File system
8.	External API-1	Purpose of External API used in the application	Functional API
9.	External API-2	Purpose of External API used in the application	Rapid API
10.	Machine Learning Model	To detect and classify multiple objects within an image with high accuracy	Object Recognition Model, etc.
11.	Infrastructure (Server/ Cloud)	Application Deployment on Local System / Cloud Local Server Configuration:127.0.0.1 Cloud Server Configuration : 128.0.01	Local, Cloud Foundry, Kubernetes, etc.

Table-2 : Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask framework in python	Anaconda Navigator
2.	Security Implementations	Data integrity, evidence of security-rich DNA	IAM Controls, OWASP etc.
3.	Scalable Architecture	It supports higher workloads without any fundamental changes to it	HTML, Python
4.	Availability	Justify the availability of applications (e.g., use of load balancers, distributed servers etc.)	HTTP
5.	Performance	The application effectively use cache and CDNs	Cloudfare