

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

Date	15 October 2022
Team ID	PNT2022TMID10936
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

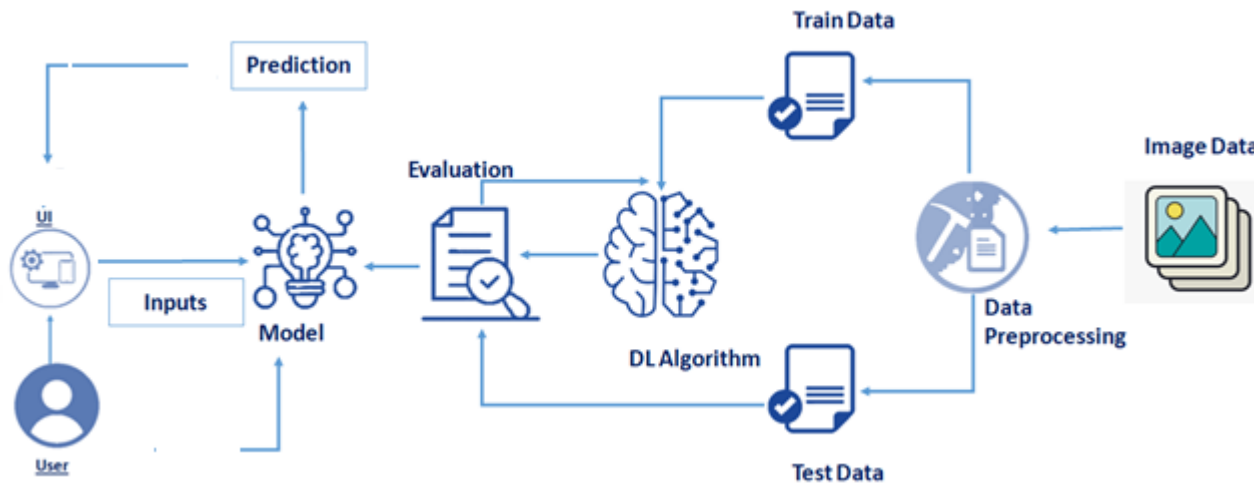


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interacts with the application using a web app or social media	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic	Login to access the application	Java / Python
3.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
4.	File Storage	Storage of user files of fruit image	IBM Block Storage or Other Storage Service or Local Filesystem
5.	Machine Learning Model	Machine learning model is used to identify the fruit image uploaded by users.	Image Recognition Model, etc.
6.	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	Used to freely access the public code	Angular JS / React JS
2.	Security Implementations	Firewall is implemented	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Availability	The application will be available in all regions	Distributed servers
4.	Performance	Higher efficiency of performance. The application can give response to requests within seconds	Testing

References:

<https://c4model.com/>

<https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/>

<https://www.ibm.com/cloud/architecture>

<https://aws.amazon.com/architecture>

<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>