

PROJECT DESIGN PHASE-II

TECHNOLOGY ARCHITECTURE

Date	03 October 2022
Team ID	PNT2022TMID19347
Project Name	AI-powered Nutrition Analyzer for Fitness Enthusiasts
Maximum Marks	4 Marks

Technical Architecture:

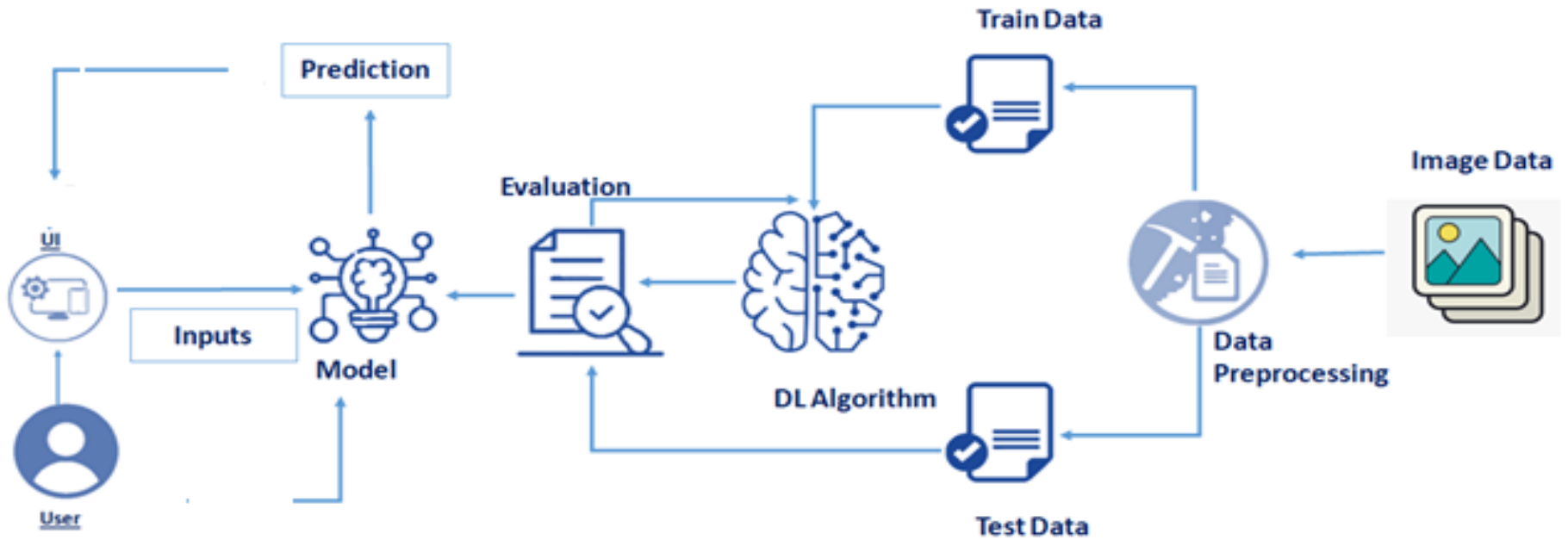


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g., Web UI, Mobile App, Chatbot etc. Web UI	HTML, CSS, JavaScript
2.	Database	Data Type, Configurations and data will be stored.	MySQL, Js etc.
3.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloud ant etc.
4.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
5.	Machine Learning Model	Purpose of Machine Learning Model CNN model for identification and classification of data from users.	ANN, CNN, RNN Object Recognition and image classification Model, suggestion and recommendation. [CNN, Open CV]

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask List the open-source frameworks used	Technology of Opensource framework NEXT, DJANGO, TENSORFLOW, OPENCV
2.	Security Implementations	Data protection List all the security / access controls implemented, use of firewalls etc.	Authorized APIs Only SHA-256, Encryptions, IAM Controls, OWASP etc. Django's default security management
3.	Scalable Architecture	Micro-services Scalability of architecture (3 – tier, Micro-services)	Micro web application by Flask IBM Cloud

S.No	Characteristics	Description	Technology
4.	Availability	Distributed servers Justify the availability of applications (e.g., use of load balancers, distributed servers etc.)	Android IBM Cloud
5.	Performance	High Flexibility, Quick accessibility Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Framework IBM Cloud