PROJECT DESIGN PHASE-II
TECHNOLOGY ARCHITECTURE

Date	03 October 2022
Team ID	PNT2022TMID19292
Project Name	AI-powered Nutrition Analyzer for Fitness Enthusiasts
Maximum Marks	4 Marks

Technical Architecture:

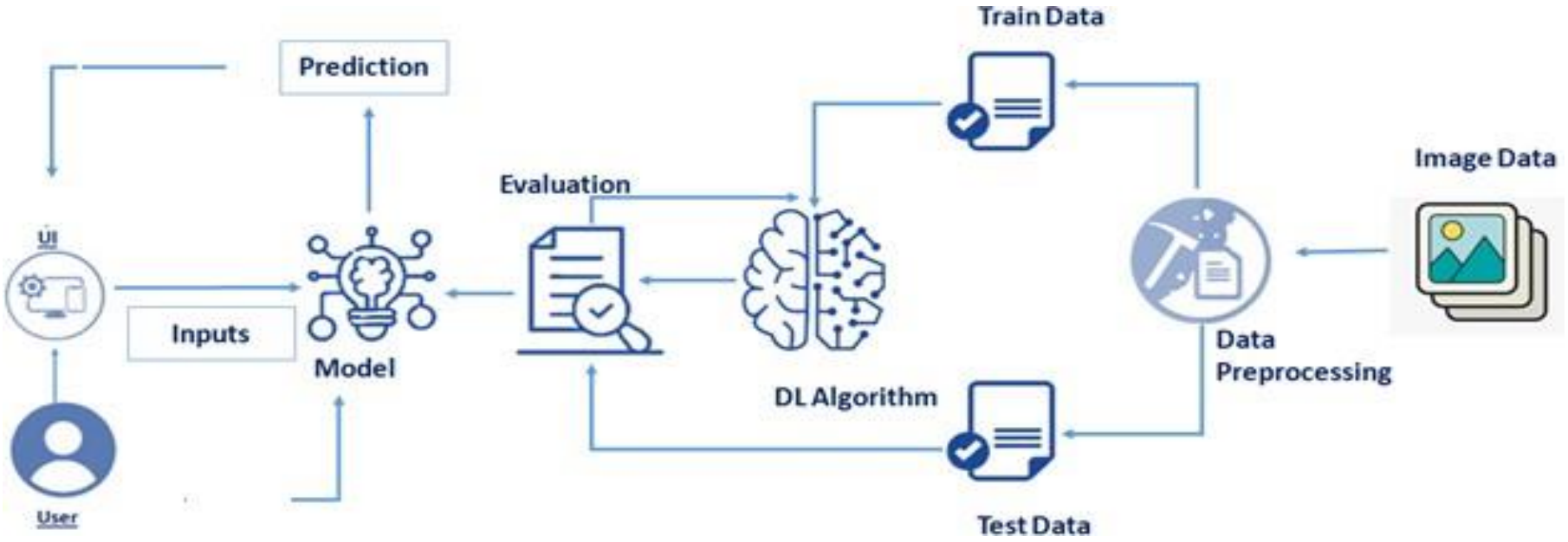

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	**User Interface**	How user interacts with application e.g., Web UI, Mobile App.	HTML, CSS, JavaScript
2.	**Database**	Data Type, Configurations and data will be stored.	MySQL, JavaScript 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 File system
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 Open source 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