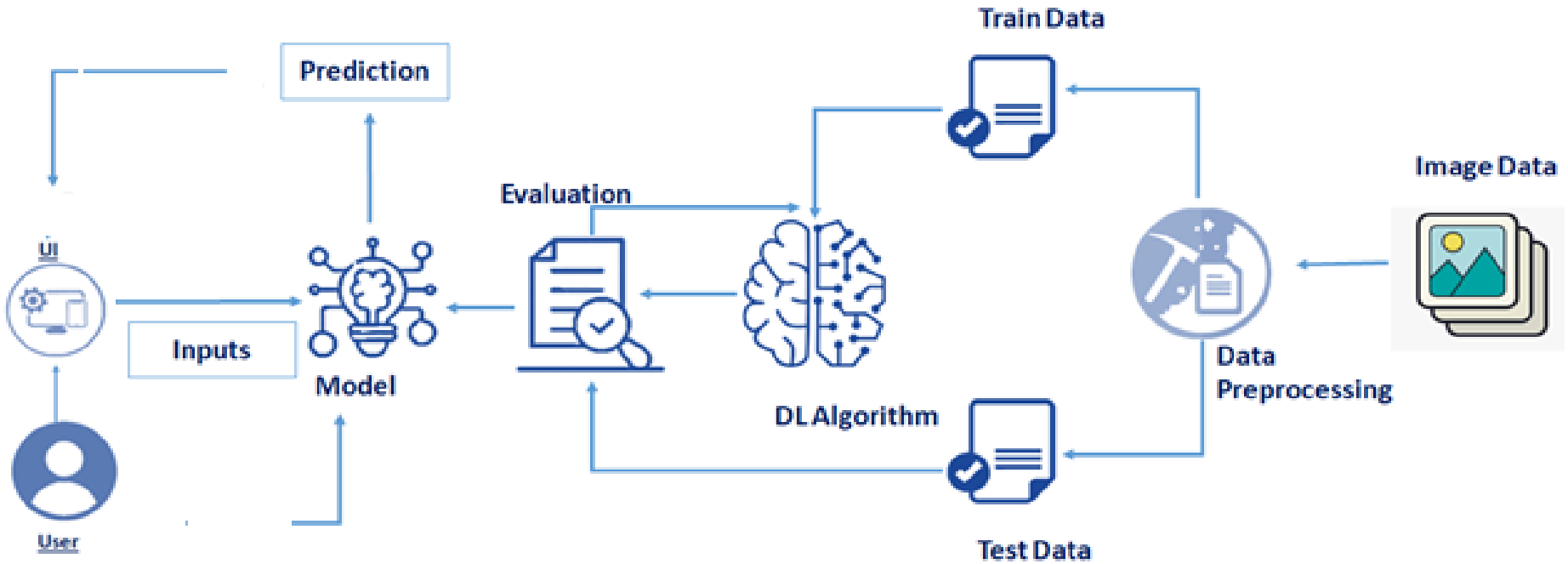
Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	04 AUGUST 2022
Team ID	PNT2022TMID30612
Project Name	AI POWERED NUTRITION ANALYZER FOR FITNESS ENTHUSIASTS
Maximum Marks	4 Marks

Technical Architecture:



Reference: https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/

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.	HTML, CSS ,Python etc.
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	IBM Cognos Analytics
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2,IBM Pak etc.
7.	File Storage	File storage requirements	Use Professional Records Storage, IBM Block Storage or Other Storage Services.
8.	External API-1	Purpose of External API used in the application	IBM SPSS, etc.
9.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Personal Server ,IBM Cloud Server etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Open-source frameworks used	Technology of Opensource framework - Django or Flask in Python.
2.	Security Implementations	Security / access controls implemented, use of firewalls etc.	e.g. SHA-256, Encryptions, IBM Security Manager etc.
3.	Scalable Architecture	Scalability of architecture (3 – tier, Micro-services)	Technology used - IaaS, PaaS, SaaS (IBM Cloud).
4.	Availability	Availability of application (e.g. use of load balancers, distributed servers etc.)	Technology used - The Availability of getting used to this software or product design is through by accessing IBM cognos Analytics and IBM cloud.
5.	Performance	Performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Technology used - The performance should be fast relaying. This prediction system should be made available in cloud to ensure better accessibility and setting a milestone in providing good quality affordable healthcare.

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