Project Design Phase II
Technology Architecture

Date   01 November 2022
Team ID   PNT2022TMID37024
Project Title AI Powered Nutrition Analyst for Fitness Enthusiasts
Maximum Marks 4 Marks
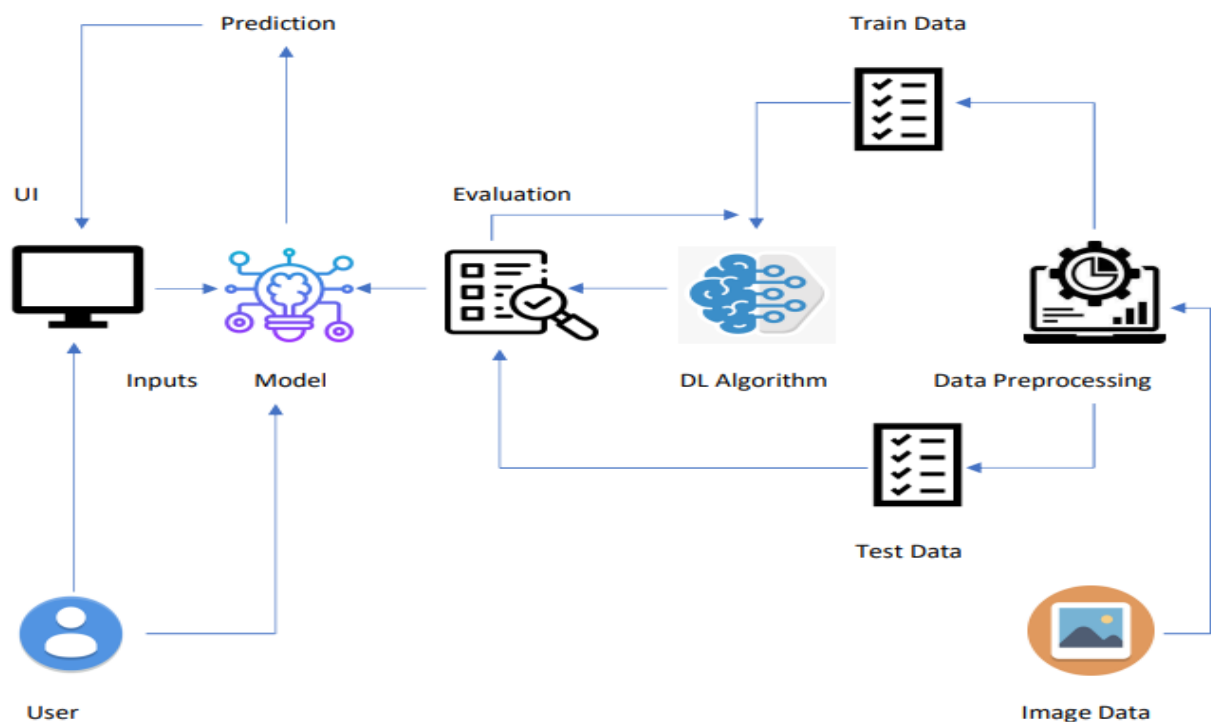
Technical Archietecture:

Table 1: Components and Technologies:

S.No	Component	Description	Technology
1	Application	Application to interact	Python, Java, Html, Android Studio.
2	Database	User Data will be stored	JavaScript, MySQL.
3	Cloud Database	Cloud Service	IBM DB2, IBM Cloudland.
4	File Storage	Stores a File	Cloud Storage (or) Local file System.
5	Notification	Notify the User	Send Grid
6	External API	To boost application	Aadhar API, Stripe.
7	Machine Learning Model	Easy Interaction	OpenCV, MATLAB, ANN, CNN, RNN.
8	Infrastructure	Server Configuration	Local, Kubernetes, etc.

Table 2: Application Characteristics:

S.No	Characteristics	Description	Technology
1	Framework	Open-Source Framework is used.	Python, SendGrid, jQuery.
2	Security	Request authentication using encryption.	Encryptions, SSL certs.
3	Scalable Architecture	3 Tiers	Web Server – HTML, CSS. Application Server – Python. Database Server – IBM Cloud.
4	Availability	Increased by Cloud VPS.	IBM Cloud Hosting.
5	Performance	Handles up to 4000 predictions per second.	IBM Load Balance.