

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

Date	23 October 2022
Team ID	PNT2022TMID43392
Project Name	Project - AI-powered Nutrition Analyzer for Fitness Enthusiasts
Maximum Marks	4 Marks

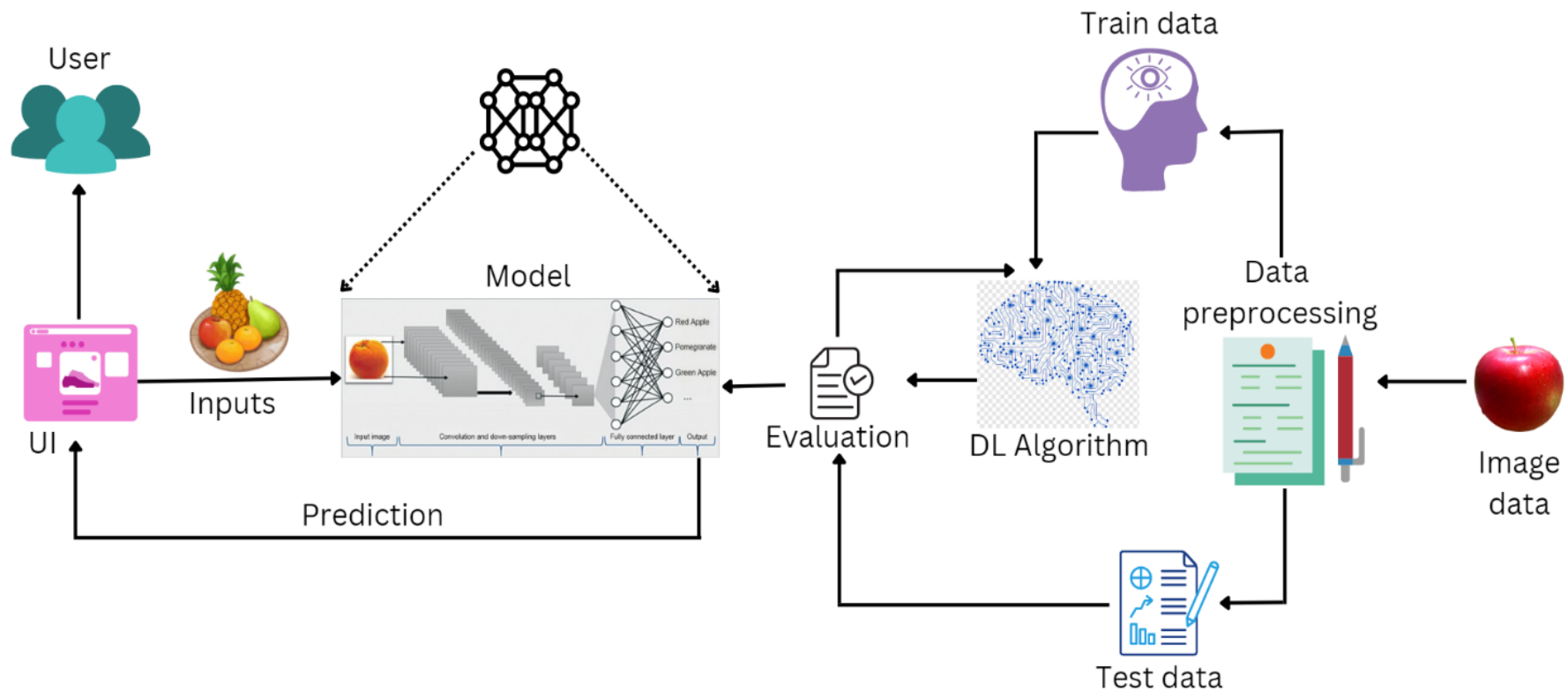


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interacts with the model via a website that was created with better UI interfaces	HTML, flask
2.	Application Logic-1	The application uses CNN model to predict the results	Python
3.	Application Logic-2	The model is connected to internet via IBM Watson	IBM Watson STT service
4.	Application Logic-3	User interfaces are also done with Watson assistant	IBM Watson Assistant
5.	Database	The data used is Nutrition analysis using image classification	MySQL etc.
6.	Cloud Database	Database Service is obtained via Cloud	IBM DB2, IBM Cloudant
7.	File Storage	The storage used in our local system is google drive	Google drive
8.	Machine Learning Model	The purpose of the created machine learning model is to serve the fitness enthusiasts by providing them with a AI based nutrition analyser	Nutrition Analyser Model
9.	Infrastructure (Server / Cloud)	The cloud is used to deploy the model	IBM Cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Open source frameworks are used for importing the libraries required and to build the machine learning model	Anaconda, Jupyter networks
2.	Scalable Architecture	The architecture is scalable and a greater number of foods can be accommodated in the dataset. Also, the model can be used as a better classifier for other applications by importing the required dataset	CNN
3.	Availability	Application is available to all	HTML, flask
4.	Performance	The application performance is robust and can serve many users at a time	Python framework