Project Design Phase II

Technology Stack(Architecture & Stack)

Date	16 October 2022
Team Id	PNT2022TMID39906
Project Name	AI-powered nutrition analyzer for fitness enthusiasts
Marks	4marks

Data Processing   **User**
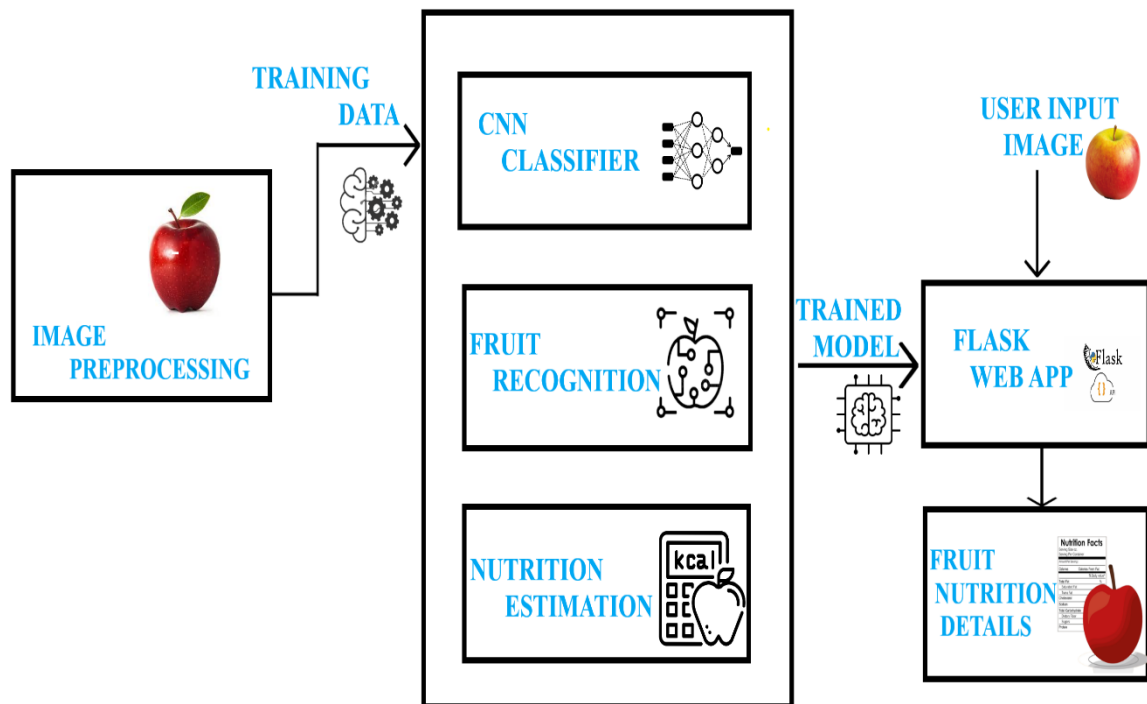
Table-1: Components & Technologies

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application for predicting the nutrition	HTML,CSS,Javascript
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic -2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic -3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQI,NoSQL
6.	Cloud Database	Database Service on Cloud	IBM DB2,IBM Cloudant et
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	External API-2	Purpose of External API used in the application	Aadhar API
10.	Machine Learning Model	Purpose of Machine Learning Model	OpenCV,MATLAB
11.	Infrastructure (server/cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	The open-source frameworks used	SendGrid,python,jQuery
2.	Security Implementations	All the security / access controls implemented, use of firewalls etc.	Encryption,SSL certs
3.	Scalable Architecture	The scalability of architecture (3 – tier, Micro-services)	Web Server – HTML, CSS, JavaScript Application Server – Python Flask Database Server – IBM Cloud
4.	Availability	Availability of application (e.g. use of load balancers, distributed servers etc.)	IBM Cloud hosting
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	IBM Load Balance