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

Date	29 October 2022
Team ID	PNT2022TMID29934
Project Name	AI-Powered Nutrition Analyser For Fitness Enthusiasts
Maximum Marks	4 Marks

Technical Architecture:

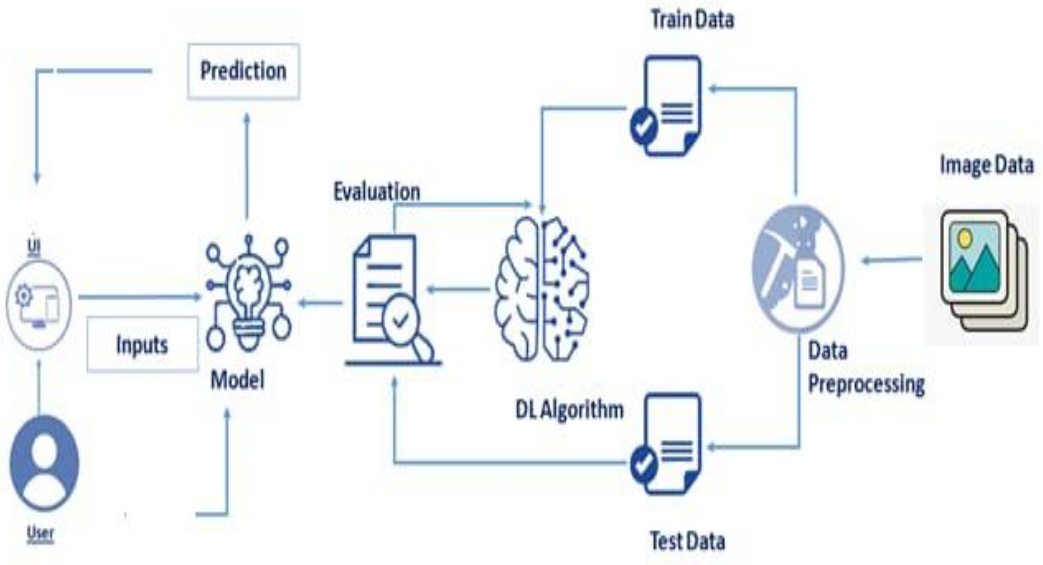

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interacts with the application through a web UI and a chatbot	HTML, CSS, python, Flask
2.	Application Logic-1	Logic for registration Registration	Python
3.	Application Logic-2	Logic for login to the application	Python
4.	Application Logic-3	Integrating machine learning model and the webpage	Flask
5.	Database	Numeric data	MySQL
6.	File Storage	To store files such as prediction report	Local Filesystem
7.	External API	Allows developers to access clients resources to give satisfied result	IBM Weather API
8.	Machine Learning Model	Predictive modeling is a statistical technique using machine learning and data mining to give customer correct diet plan and needs at a particular time	Predictive modeling
9.	Infrastructure (Server)	Application Deployment on Local System Local Server Configuration: built-in flask web server	Flask web server

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask	Micro web framework written in Python
2.	Security Implementations	Basic HTTP authentication, Session based authentication, User Registration, Login Tracking	Flask Security
3.	Scalable Architecture	Size is everything, and Flask's status as a microframework means that you can use it to grow a tech project such as a web app incredibly quickly. Its simplicity of use and few dependencies enable it to run smoothly even as it scales up and up.	Flask
4.	Availability	Higher compatibility with latest technologies and allows customization	Flask
5.	Performance	• Integrated support for unit testing. • RESTful request dispatching. • Uses Jinja templating. • Support for secure cookies (client side sessions) • 100% WSGI 1.0 compliant.	Flask