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

Title	AI powered nutrition analyzer	
	for fitness enthusiasts	
College Name	AVS College of Technology	
Team Id	PNT2022TMID42147	

Technical Architecture:

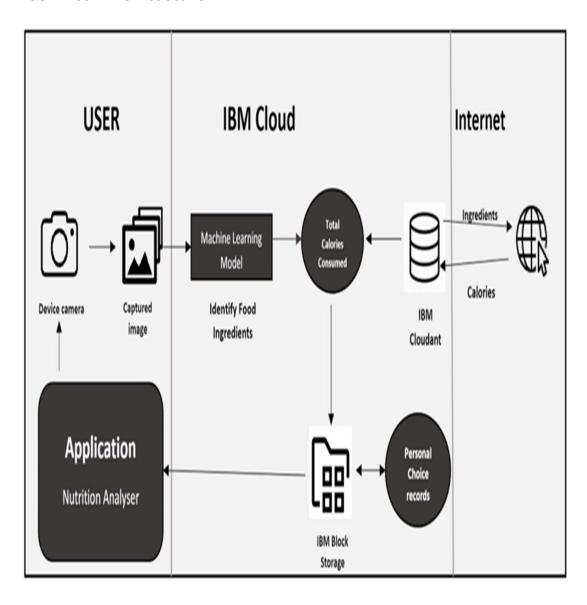


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User can able to create a profile and give their details and provide feedback about the nutrition.	HTML,CSS,JAVA SCRIPT
2.	Application Logic-1	Give the details about your health and the app will predict the nutrition values.	Python ,Pandas
3.	Application Logic-2	Provide the accurate values of the nutrition.	STT Services
4.	Application Logic-3	Give the instruction to follow your diet.	Watson Assistant
5.	Database	In Database, the user details, Nutrition values and Health Details are stored.	MySQL
6.	Cloud Database	Database service on cloud.	IBM DB2, IBM Cloudant
7.	File Storage	File system is used to store data in external device and organized.	IBM Block Storage
8.	External Application	External purpose are used to determine the nutrition and calories values.	Aadhar AP
9.	Machine Learning Model	To detect the nutrition levels, image and analysed using machine learning algorithm.	Object Recognition Model,
10.	Infrastructure	The program is deployed to cloud for use cloud server configuration.	Cloud Foundry

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Google colab,Online website	Python,Pandas,HTML,CSS,Java Script
2.	Security Implementations	Request authentication using encryption	SSL, Encryptions Algorithm
3.	Scalable Architecture	The scalability consists of user interface between input and output.	Customer feedback, reviews and rating
4.	Availability	User should increased by loads balance in cloud VPS.	IBM Cloud hosting
5.	Performance	The application should handle high speed and good quality of result.	Testing-Black, White and IMB Load Balance.