

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

Team ID	PNT2022TMID04889
Project Name	AI-powered Nutrition Analyzer for Fitness Enthusiasts

Technical Architecture

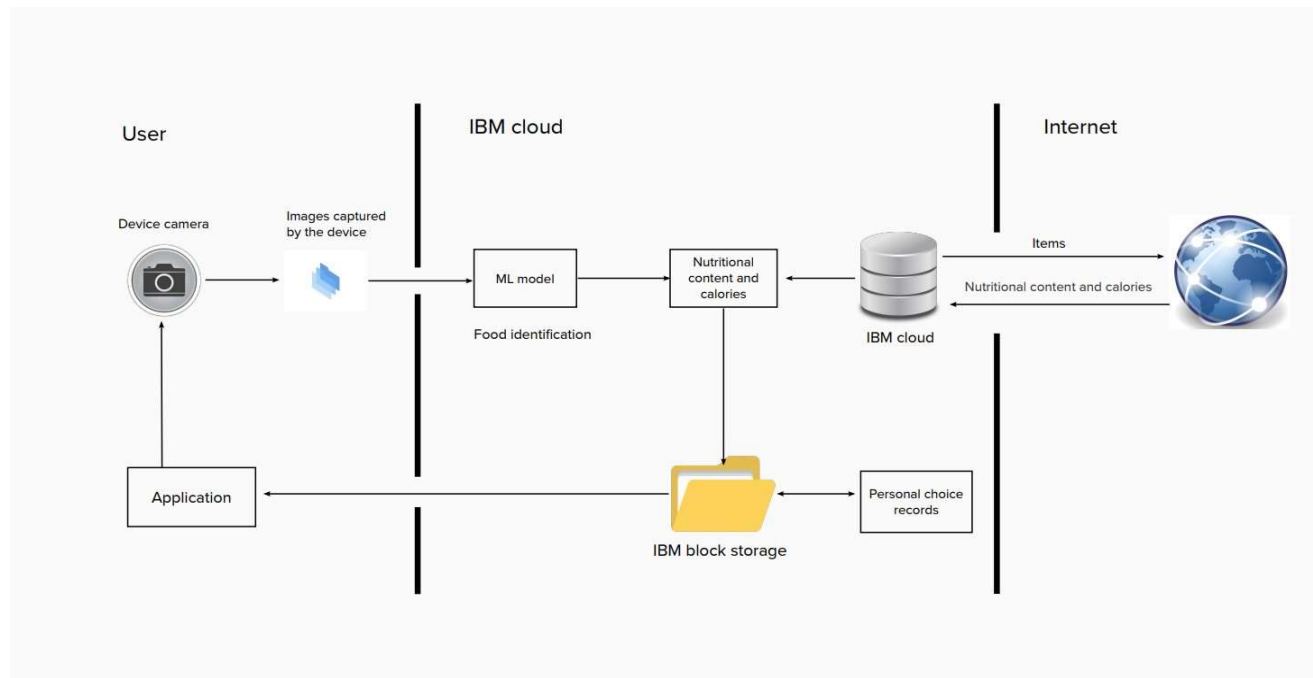


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user will be able to communicate with the application (AI-powered Nutrition Analyzer for Fitness Enthusiasts) with the help of a Web UI. The nutritional content and the calories will be given to the user	HTML, CSS, JavaScript
2.	Application Logic-1	Login form to enter into the service	Python
3.	Cloud Database	Database Service that	IBM DB2, IBM Cloudant
4.	File Storage	File storage requirements	Storage will be on cloud
5.	Machine Learning Model	To classify the given food item(fruits) and provide the nutritional content and calories present in it	RNN, CNN, OPEN CV, MATPLOT LIB
6.	Infrastructure (Server / Cloud)	Application Deployment on Cloud	IBM cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Deep Learning Framework	convolutional neural network framework
2.	Scalable Architecture	3 tier architecture	IBM cloud