

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

Date	03 November 2022
Team ID	PNT2022TMID20552
Project Name	Nutrition Assistant Application
Maximum Marks	4 Marks

Technical Architecture:

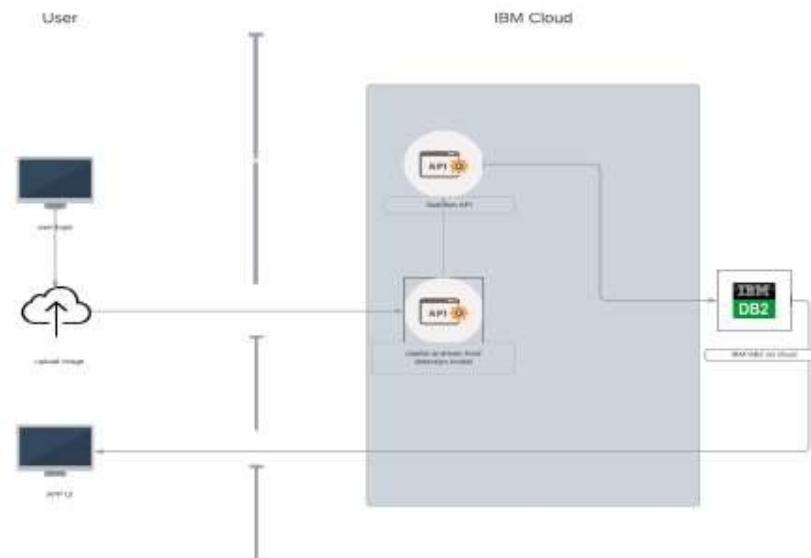


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript
2.	Application Logic-1	Logic for a process in the application	Python
3.	Database	Data Type, Configurations etc.	SQL
4.	Cloud Database	Database Service on Cloud	IBM DB2
5.	External API-1	To identify food ingredients	Clarify's AI-Driven Food Detection Model
6.	External API-2	To calculate nutrition	Nutrition API
7.	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	Cloud stack, Eucalyptus. Open Nebula, App Scale, Docker	Docker
2.	Security Implementations	To enhance security using cryptography	e.g. SHA-256, Encryptions, Secure Authorization
3.	Scalable Architecture	Handle large number of user on demand	Container registry, Kubernetes
4.	Availability	The application can be accessed from anywhere at any	Docker

S.No	Characteristics	Description	Technology
		time.	
5.	Performance	Deploy clusters closer to users to reduce latency. Use optimized images with the minimal components needed to run your workload. Run multiple Kubernetes masters to improve performance and availability	Kubernetes