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

Date	21 October 2022
Team ID	PNT2022TMID22530
Project Name	Project – Nutrition Assistant Application
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

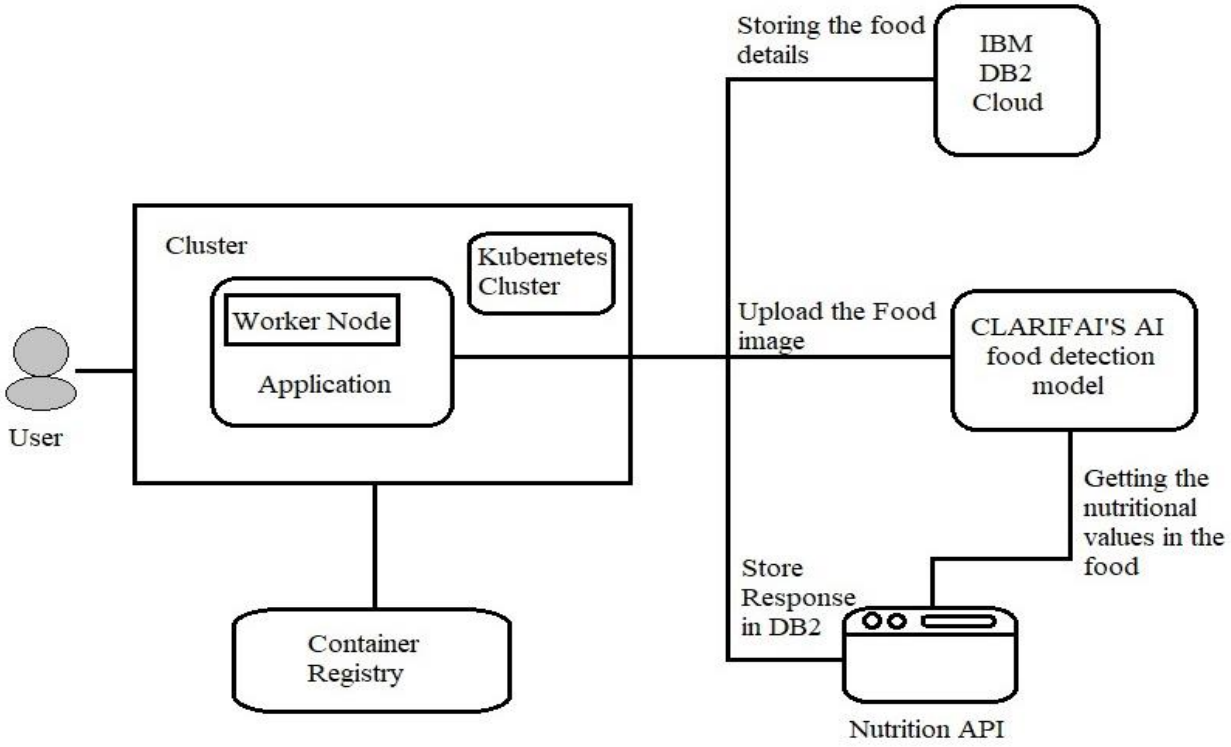

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interacts with application using website user interface	HTML, CSS, JavaScript
2.	Application Logic-1	Interaction and connecting API’s with the application	Python Flask
3.	Application Logic-2	Connecting Chat Bot with the application	IBM Watson Assistant
4.	Database	For connecting Nutrition API with the application	MySQL
5.	Cloud Database	Storing the application data	IBM DB2
6.	API - 1	The API used for identifying the food’s image	Clarifai-AI driven food detection model
7.	AP1- 2	The API used to find the nutritional contents present in the food	Nutrition API
8.	Infrastructure (Server / Cloud)	The application is deployed on the cloud	IBM Kubernetes, Docker

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask framework is used for interaction with the application	Python Flask
2.	Scalable Architecture	User interface for login and uploading meal. Analysing the food, storing the food data.	HTML, CSS, JS, Flask, Kubernetes, IBM DB2 , Clarifai's AI-Driven Food Detection Model
3.	Availability	Availability of the application is established using cloud	IBM Kubernetes, IBM DB2
4.	Performance	Performance of the application is improved by creating containers in cloud DB	IBM Kubernetes, IBM DB2