

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

Date	20 th October 2022
Team ID	PNT2022TMID35762
Project Name	DEMANDEST-AI POWERED FOOD DEMANDFORECASTER
Maximum Marks	4 Marks

TECHNICAL ARCHITECTURE:

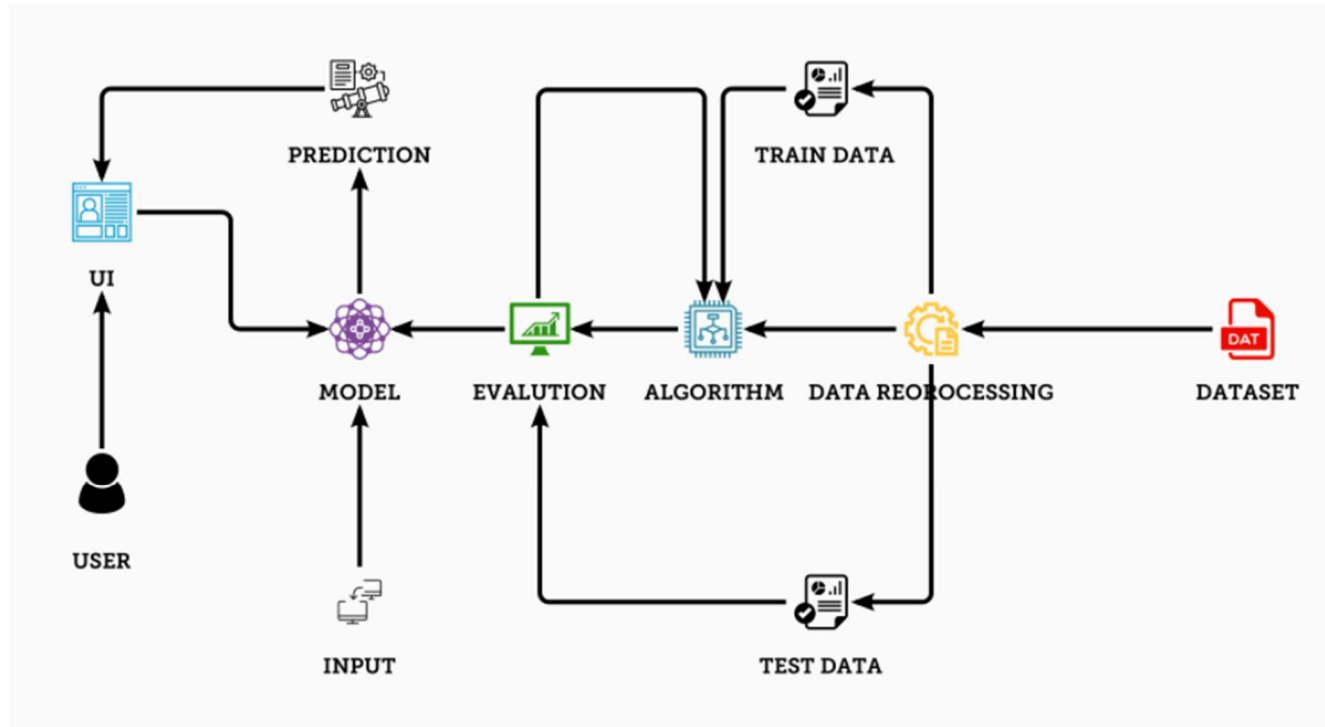


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Creating an application interface	Python / Java
3.	Application Logic-2	Creating an AI assistant that gives food service to the user	IBM Watson Assistance
4.	Application Logic-3	Files are stored in the local storage and stored in the cloud	IBM Watson Assistant
5.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
6.	External API-1	Purpose of External API used in the application	IBM Location REST API, etc.
7.	Deep Learning Model	Creating an algorithm to calculate case information provides by the fulfillment center	Object Recognition Model, etc.
8.	Infrastructure (Server / Cloud)	IBM Cloud App Configuration is a centralized feature-management and configuration service on IBM Cloud.	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	This application has no open-source frameworks.	Python
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Web server – HTML ,CSS ,JavaScript, Flask Application server – Python Database server –IBM DB2
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	IBM Watson Assistant / load balancer
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	IBM Content Delivery Network