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

Date	01 november 2022
Team ID	PNT2022TMID10264
Project Name	Efficient Water Quality Analysis & Prediction Using Machine Learning
Maximum Marks	4 Marks

Technical Architecture:

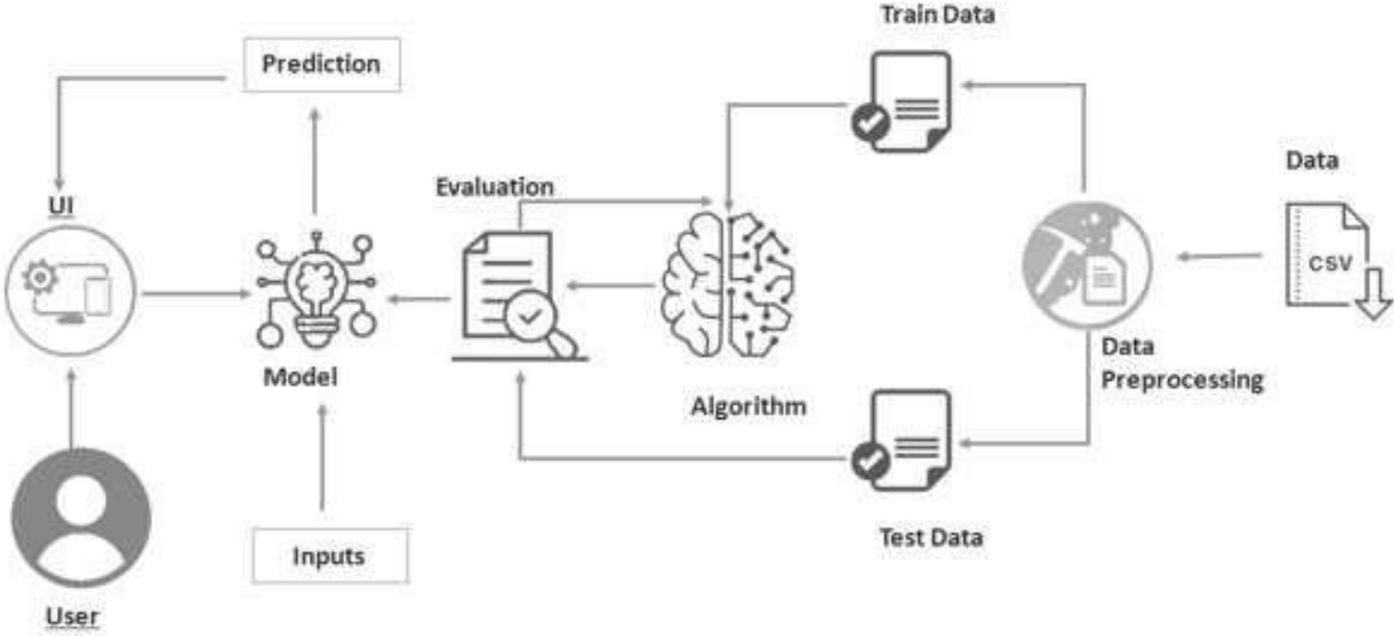

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript, etc.
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
6.	Machine Learning Model	Purpose of Machine Learning Model	Linear Regression, SVM, etc.
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration:	Local, Cloud, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Cloud Technology
2.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Three Tier Architecture
3.	Availability	Justify the availability of application (e.g., use of load balancers, distributed servers etc.)	Load Balancer
4.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Load Balancer