Project Design Phase-II
TECHNOLOGY ARCHITECTURE

Date	16 October 2022
Team ID	PNT2022TMID29641
Project Name	EFFICIENT WATER QUALITY ANALYSIS AND PREDICTION USING MACHINE LEARNING
Maximum Marks	4 Marks

Technology Architecture:

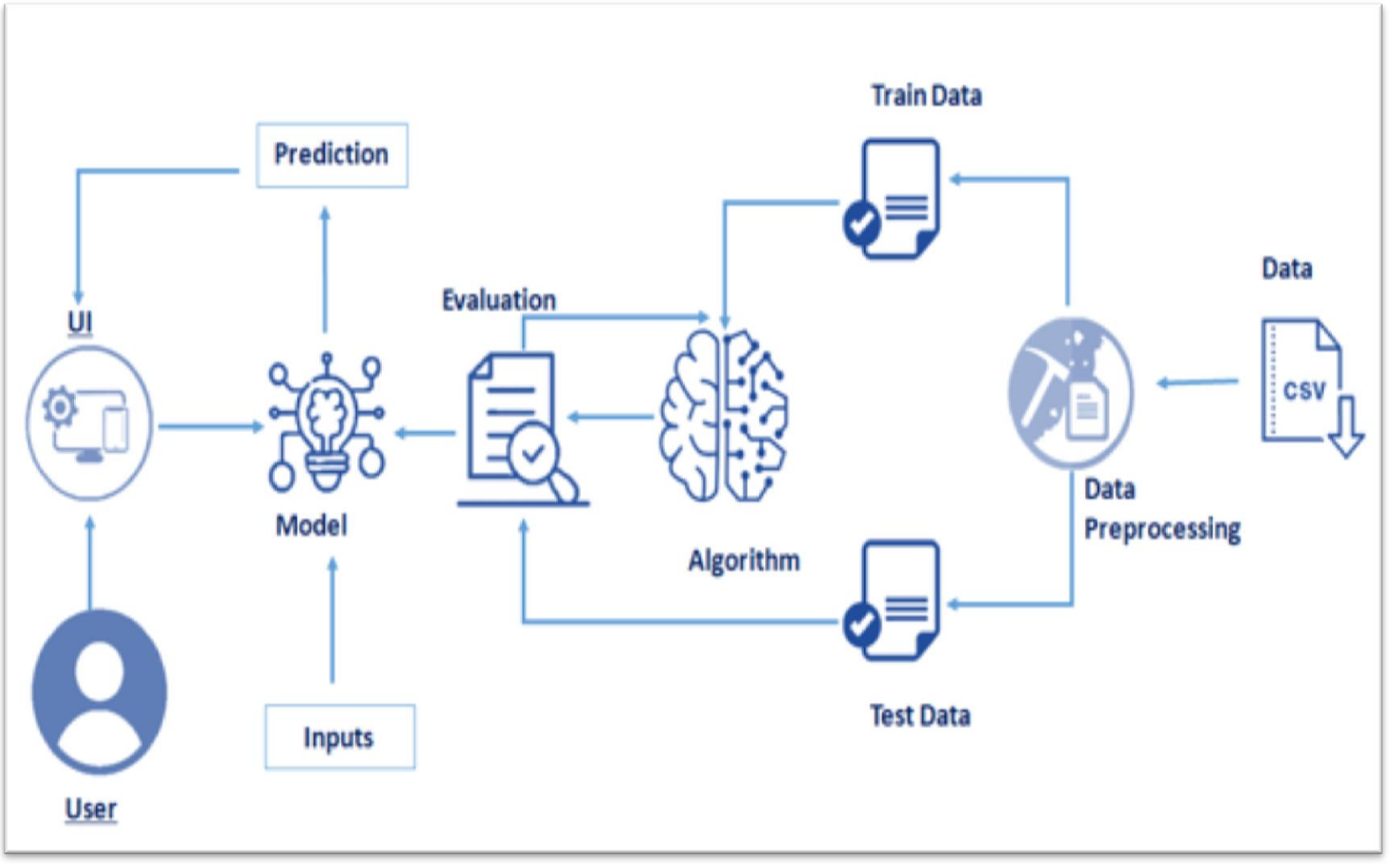

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, Python
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.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	File Storage	File storage requirements	IBM Block Storage
7.	Machine Learning Model	Purpose of Machine Learning Model	Classification and Regression model.
8.	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	List the open-source frameworks used	Angular JS
2.	Security Implementations	It is secured as each process is verified through mail.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	User can measure and analyse the quality of water. It provides pollution free and pure water.	Water Quality Index and Water Quality Classification
4.	Availability	Analysis can be made at any time through online.	Digital Twin Technology
5.	Performance	Analysing or predicting the quality of water will be easy comparing manual method..	Content Delivery Network