

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

Date	03October 2022
Team ID	PNT2022TMID38737
Project Name	Efficient Water Quality Analysis and Prediction using Machine Learning
Maximum Marks	4 Marks

TECHNICAL ARCHITECTURE

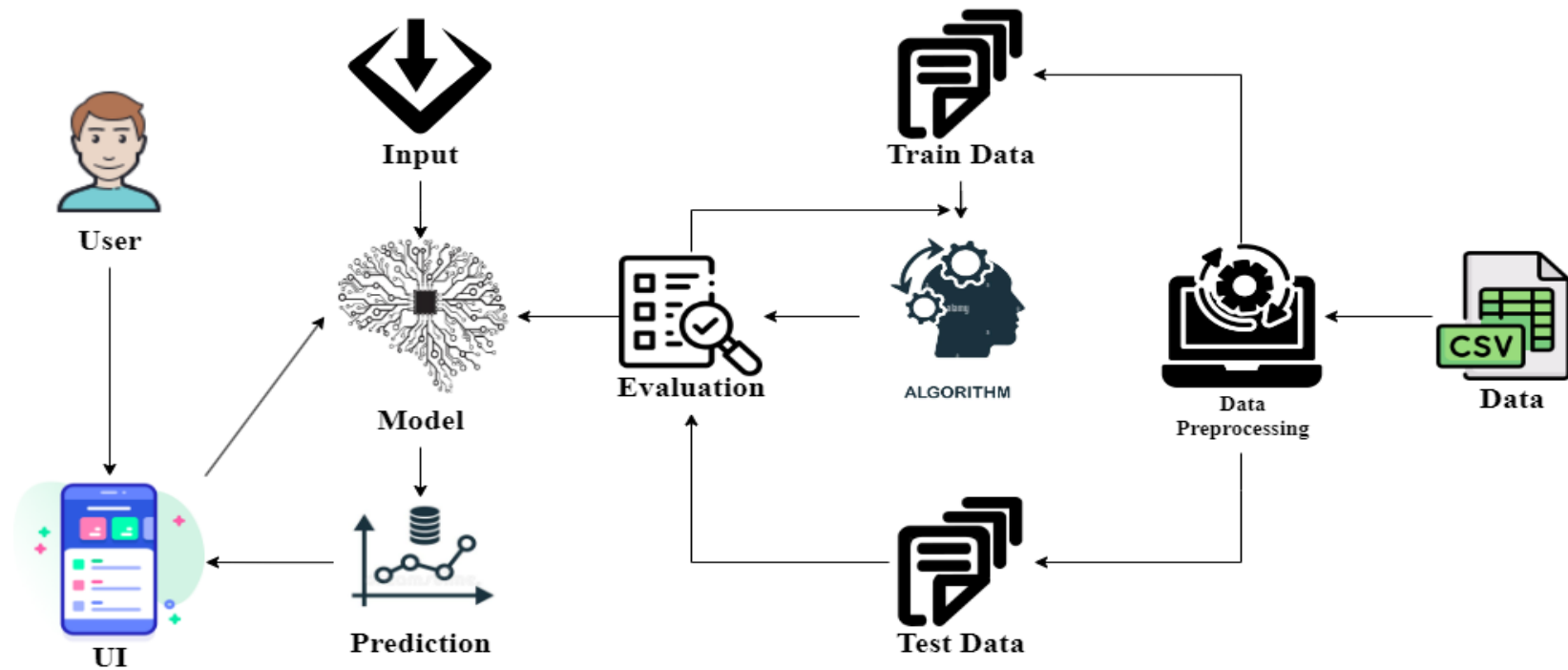


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Website UI	HTML, CSS, JavaScript / Angular Js / React Js 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.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
5.	External API-1	Purpose of External API used in the application	IBM cloud API
6.	Machine Learning Model	Purpose of Machine Learning Model	Water Quality Index Model
7.	Infrastructure (Server / Cloud)	Application Deployment on Cloud	Cloud Foundry

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Angular.JS
2.	Security Implementations	Keep Software And Plugins Up-To-Date.	IAM Controls
3.	Scalable Architecture	Use of Webpage	js and Angular
4.	Availability	Use at any time	Webpage(HTML, CSS and JavaScript)
5.	Performance	Quickly display the result	Content Delivery Network