

**Project Design Phase-II**  
**Solution Requirements (Functional & Non-functional)**

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

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Enter the Inputs	Input get through the form and Check the input data
FR-2	User Essential	User needs the result with correct accuracy
FR-3	Data Preprocessing	Get the tested and trained data from the raw dataset
FR-4	User input Evaluation	Evaluate the input with model and predicte the efficiency of water
FR-5	Prediction	Efficient for use or not

**Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	User friendly web application
NFR-2	<b>Security</b>	Website doesn't have any harmful virus and it didn't ask any permission
NFR-3	<b>Reliability</b>	Many type of water values are trained to model so prediction accuracy high
NFR-4	<b>Performance</b>	Quickly get the results
NFR-5	<b>Availability</b>	Available at any time in internet
NFR-6	<b>Scalability</b>	<ul style="list-style-type: none"><li>• Can access the website through computer and mobile</li><li>• Lightweight web application</li></ul>