

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

Date	03 October 2022
Team ID	PNT2022TMID23851
Project Name	Efficient Water Quality Analysis and Prediction using Machine Learning
Maximum Marks	4 Marks

**Functional Requirements:**

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Checking the water quality using water sample	Machine trained by decision tree algorithm to check the water quality.
FR-2	User Seeing the result	Machine Displays the result by evaluating the parameters.

**Non-functional Requirements:**

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	There is no intelligence needed for the people to use the product.
NFR-2	<b>Security</b>	Access Permission for the machine information only be changed by the system administrator.
NFR-3	<b>Reliability</b>	The database rollback all related updates when any updates fail.
NFR-4	<b>Performance</b>	The Machine must display the result not more than 5 seconds for the user.
NFR-5	<b>Availability</b>	It is readily available to check all water sample.
NFR-6	<b>Scalability</b>	It is scalable to check any water around the globe.