

## **PROJECT DESIGN PHASE-II**

### **Solution Requirements (Functional & Non-functional)**

<b>Date</b>	<b>03 October 2022</b>
<b>Team ID</b>	PNT2022TMID29722
<b>Project Name</b>	Efficient Water Quality Analysis And Prediction Using Machine Learning
<b>Maximum Marks</b>	4 Marks

### **FUNCTIONAL REQUIREMENTS**

<b>FR No.</b>	<b>Functional Requirement (Epic)</b>	<b>Sub Requirement (Story / Sub-Task)</b>
<b>FR-1</b>	User Registration	<ul style="list-style-type: none"><li>✓ Registration through Gmail.</li><li>✓ Registration through Mobile Number.</li></ul>
<b>FR-2</b>	User Confirmation	<ul style="list-style-type: none"><li>✓ Confirmation via Email.</li><li>✓ Confirmation via OTP.</li></ul>
<b>FR-3</b>	App Installation	<ul style="list-style-type: none"><li>✓ Installation through link</li><li>✓ Installation through play store</li></ul>
<b>FR-4</b>	Log in	<ul style="list-style-type: none"><li>✓ Log in using necessary credentials.</li></ul>
<b>FR-5</b>	Authentication	<ul style="list-style-type: none"><li>✓ Ensures the users validate their identity before performing certain task in website.</li><li>✓ Ask to enter password,username etc..,</li></ul>
<b>FR-6</b>	Reporting	<ul style="list-style-type: none"><li>✓ Result Will be sent to the user through message or Email.</li></ul>
<b>FR-7</b>	User Feedback	<ul style="list-style-type: none"><li>✓ Feedback through Google Forms.</li><li>✓ Feedback through Gmails.</li></ul>

## NON FUNCTIONAL REQUIREMENTS

FR NO.	Non-Functional Requirement	Description
NFR-1	Usability	<ul style="list-style-type: none"><li>✓ User can analyse and predict the quality of water.</li><li>✓ User can enter login credentials and gets log in into the website easily.</li></ul>
NFR-2	Security	<ul style="list-style-type: none"><li>✓ The website is more secure and information of the user is also maintained confidentially.</li><li>✓ Password verification is done once in a while.</li></ul>
NFR-3	Reliability	<ul style="list-style-type: none"><li>✓ Identifies the errors and uncertainty in the water through efficient algorithms.</li></ul>
NFR-4	Performance	<ul style="list-style-type: none"><li>✓ The analysis of final output is done faster when compared to manual method.</li><li>✓ The performance of the model is efficient.</li></ul>
NFR-5	Availability	<ul style="list-style-type: none"><li>✓ Can be accessible at anytime and anywhere.</li><li>✓ The solution can be suitable for different languages and can be used in many countries.</li></ul>
NFR-6	Scalability	<ul style="list-style-type: none"><li>✓ Result is being predicted quickly.</li><li>✓ Users can measure the quality of water and it provides a pollution free water and so it is scalable.</li></ul>