**Project Design Phase-II**

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

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| Date | 03 October 2022 |
| Team ID | PNT2022TMIDxxxxxx |
| Project Name | Project – Efficient Water quality analysis & prediction using Machine Learning |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

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| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | User Registration | Registration through Form  Registration through Gmail  Registration through LinkedIN |
| FR-2 | User Confirmation | Confirmation via Email  Confirmation via OTP |
| FR-3 | Entering required parameters for prediction | With existing user profile they can enter the essential parameters for prediction |
| FR-4 | Performance requirements | Support concurrent users |
| FR-5 | Logical database requirements | The user details stored and encrypted |

**Non-functional Requirements:**

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

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| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | This can be used by everyone with internet accessibility |
| NFR-2 | **Security** | Passwords and user details will be encrypted. The user’s IP will be logged |
| NFR-3 | **Reliability** | The overall reliability depends on separate components |
| NFR-4 | **Performance** | The application can support many users at a particular time |
| NFR-5 | **Availability** | The user can access it using a web browser, only restricted by the down time of the server on which the system runs. |
| NFR-6 | **Scalability** | The end-user part is fully scalable and any system using any web browser should be able to  use the features of the application. |