**Project Design Phase-II**

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

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| Date | 30 Oct 2022 |
| Team ID | PNT2022TMID34509 |
| Project Name | Predicting The Energy Output Of Wind Turbine Based On Weather Condition |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

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| Following are the functional requirements of the proposed solution. **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | User Registration | Registration through Form |
| FR-2 | User Confirmation | Confirmation via Email |
| FR-3 | Essentiality |  City name   Wind speed   Wind direction   Weather condition |
| FR-4 | Output | Energy Predicated in KWh |

**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** |  Easy to learn   User friendly   Efficient |
| NFR-2 | **Security** | Privacy - User can have Own accounts to secure their data. |
| NFR-3 | **Reliability** | Wind Energy is reliable because it is both unlimited and domestic |
| NFR-4 | **Performance** | Accuracy is high due to combination of multiple ML models to predict the output . |
| NFR-5 | **Availability** | This is a web based application so we can access in any device that have a web browser with good Internet facility. |
| NFR-6 | **Scalability** | It can be extended further to provide API which can be used by third party organisations such as Industries, Power suppliers , Governmental ,etc. |