PREDICTING THE ENERGY OUTPUT OF WIND TURBINE BASED ON WEATHER CONDITION

Solution Requirement (Functional & Non-Functional)

Date	**03 October 2022**
Team ID	**PNT2022TMID52191**
Project Name	**Project- PREDICTING THE ENERGY OUTPUT OFWIND TURBINE BASED ON WEATHER CONDITION**
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	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.

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 organizations such as Industries, Power suppliers , Governmental ,etc.