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

Date	17 October 2022
Team ID	PNT2022TMID00784
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.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Essentiality	1) City name 2) Wind speed 3) Wind direction 4) 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 organisations such as industries, power suppliers, governmental, etc.