

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

Date	12 October 2022
Team ID	PNT2022TMID30223
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
FR-3	Essentiality	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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.