

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

Date	03 October 2022
Team ID	PNT2022TMID12909
Project Name	Predicting the energy output of Wind Turbine based on Weather conditions
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 Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via meeting Confirmation via mail
FR-3	User Requirements	Knowledge about inputting the data Teaching on using the ML Model
FR-4	User Infrastructure	A system to support ML data modelling A Suitable GPU and CPU
FR-5	User Network	Network infrastructure to connect the wind mill to the Control station
FR-6	User Cost	User has to spend only for attaining the software, additional components are not required

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	It can be used for various Wind mill and trained for specific models.
NFR-2	Security	The data can be stored in a secure cloud.
NFR-3	Reliability	The predicted will be accurate and can be relied upon.
NFR-4	Performance	The performance of the model depends on the Computer it runs on the accuracy of the data it is fed with.
NFR-5	Availability	It is available as a software package.
NFR-6	Scalability	It can be scaled up and interconnected with other Wind Mills to create a connected Wind Form.