

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

Date	23 October 2022
Team ID	PNT2022TMID45145
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	Information about Wind energy	10 lines of information about wind energy and wind mill
FR-2	To reach next step	A rectangle box with Want to predict energy?
FR-3	Weather condition	Check weather condition for different states Select the city you want to see weather condition
FR-4	Energy prediction	Two box Theoretical Power Wind Speed After Inserting value It will predict power output

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The Website is very easy use. Everyone can use the website without even about wind energy.
NFR-2	<b>Security</b>	It has a web application firewall activated to prevent attacks and hacks.
NFR-3	<b>Reliability</b>	The Website uses API key for weather checking. So it is up to date with weather information.
NFR-4	<b>Performance</b>	The speed of the result is quite fast and reliable.It can quickly load website and display in browser.

NFR-5	<b>Availability</b>	The website is available to everyone. Anyone can use website with no restriction.
NFR-6	<b>Scalability</b>	It canhandle a growing number of users and load, without compromising on performance and causing disruptions to user experience