Date	10 October 2022
Team ID	PNT2022TMID17876
Project Name	Project - Predicting the energy output of wind turbine based on weather condition
Maximum Marks	2 Marks

Proposed solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Energy output of the wind farm is to be predicted more accurately and avoid exploitation of resources.
1.	Idea / Solution description	1. To map weather data to energy production. 2. Random forest regression is used to make multiple decisions by analysis the weather conditions and predicts the wind energy generated by wind turbine with respect to weather conditions then predict generated wind energy by applying majority voting on the decisions. 3. Long Short Term Memory to Predict the power output of wind farm based on the weather condition . 4. Then by comparing the both model to choose the best model which yields a higher accuracy.
1.	Novelty / Uniqueness	1.Improving the prediction of the power generated using wind energy and it is achieved using LSTM and performing optimization on it.
1.	Social Impact / Customer Satisfaction	To increase the economic growth of country by predicting renewable wind source. Reduces the dependence of fossil fuels.
1.	Business Model (Revenue Model)	1.To identify the minimal subset of driving weather features that are significantly related to the wind energy output of the wind farm 2. To let these relationships in the form of explicit input-output regression models.
1.	Scalability of the Solution	Developing the product as both web and mobile application it is portable, and data can be accessed from anywhere anytime. provide a real-time monitoring and hourly prediction of energy output.