

## Model Development Phase Template

Date	17 July 2024
Team ID	XXXXXX
Project Title	Predicting The Energy Output Of Wind Turbine Based On Weather Condition
Maximum Marks	5 Marks

## Feature Selection Report Template

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

Feature	Description	Selected (Yes/No)	Reasoning
Time	Time and Date	No	May not add predictive value unless analyzing temporal trends.
ActivePower (kW)	Active power (kW) is the portion of electrical power that performs useful work, like lighting or running motors.	No	An outcome, not a predictor; derived from other features.
WindSpeed (m/s)	Wind speed (m/s) measures how fast the wind is moving in meters per second.	Yes	Directly affects the amount of energy generated, as higher wind speeds generally lead to more power.

Theoretical_ Power_Curve (KWh)	Theoretical Power Curve (kWh) represents the calculated amount of energy a system could generate under ideal conditions over time.	Yes	Indicates potential energy generation under ideal conditions
Wind_Direction	Wind direction indicates the direction from which the wind is coming, usually measured in degrees from true north.	No	Less direct impact compared to wind speed and theoretical power.