Model Development Phase Template

Date	18 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	**Timestamp of the measurement**	**No**	**Not considered relevant for the current analysis as temporal patterns are not the focus.**
Active Power (kW)	**Actual power output in kilowatts**	**Yes**	**The target variable for predictive modeling – is essential for the project's goal.**
Wind Speed (m/s)	**Speed of the wind in meters per second**	**Yes**	**A key factor influencing the power generation of the wind turbine.**

Theoretical Power Curve (KWh)	Theoretical power output based on wind speed	Yes	Indicates potential energy generation under ideal conditions.
Wind Direction	Direction of the wind in degrees	No	Not considered relevant for the current analysis as wind direction does not directly influence the core metrics being analyzed.