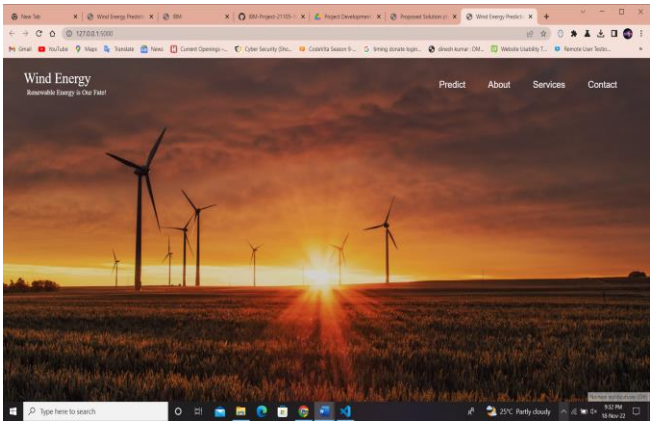
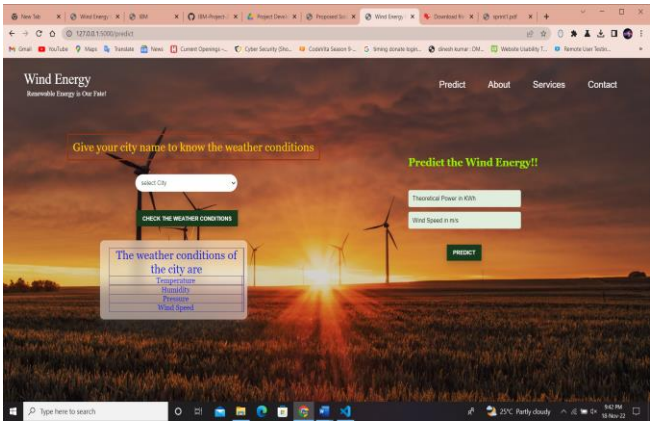
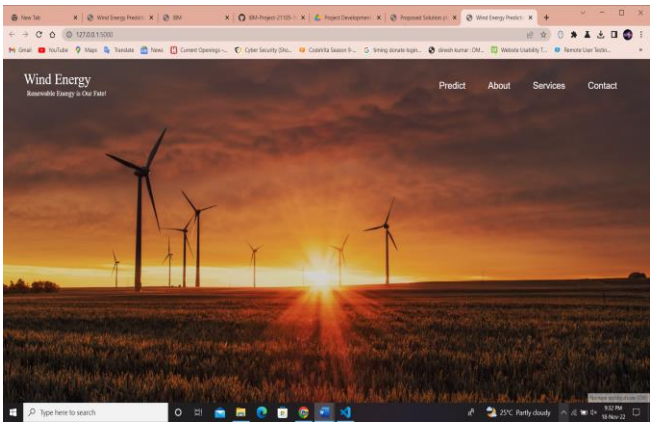
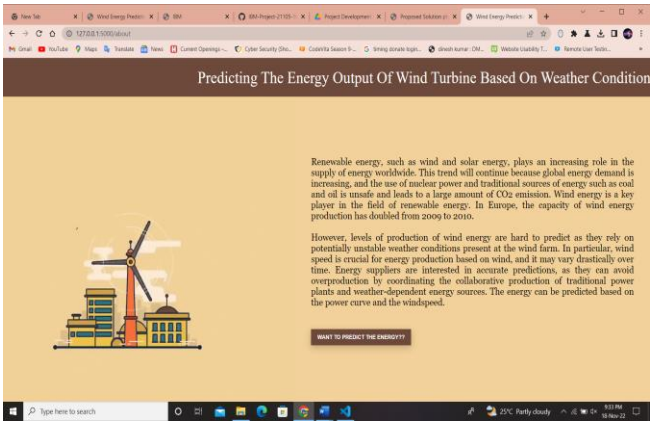
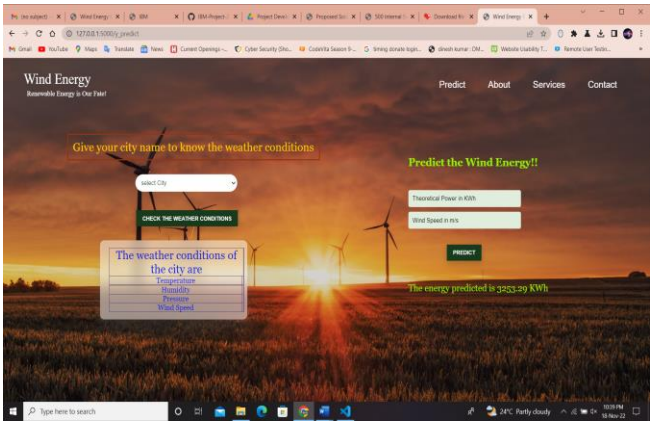
Project Development Phase
Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID15599
Project Name	Predicting the energy output of wind turbine based on weather condition
Maximum Marks	10 Marks

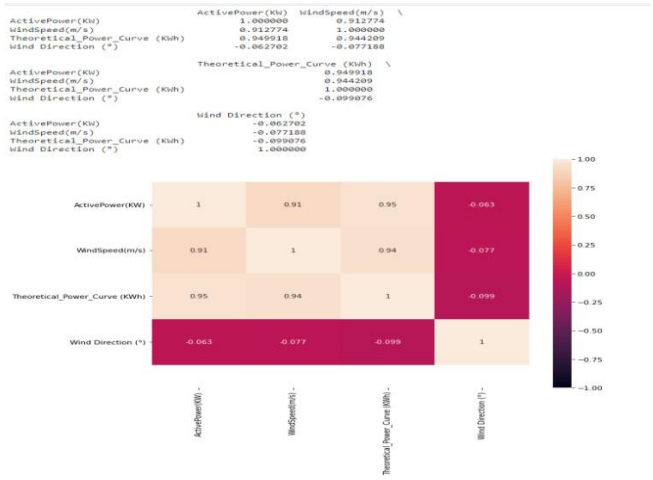
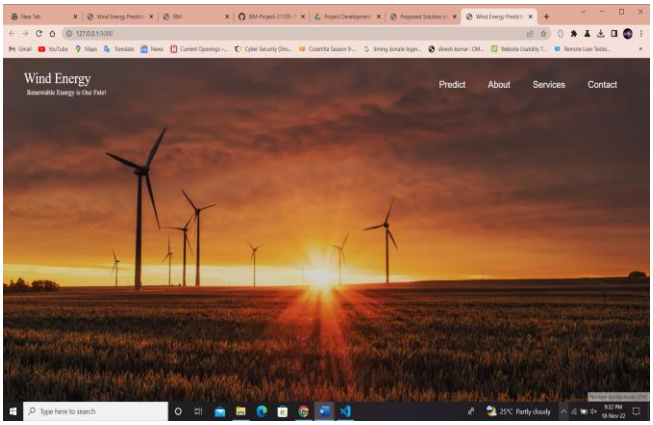
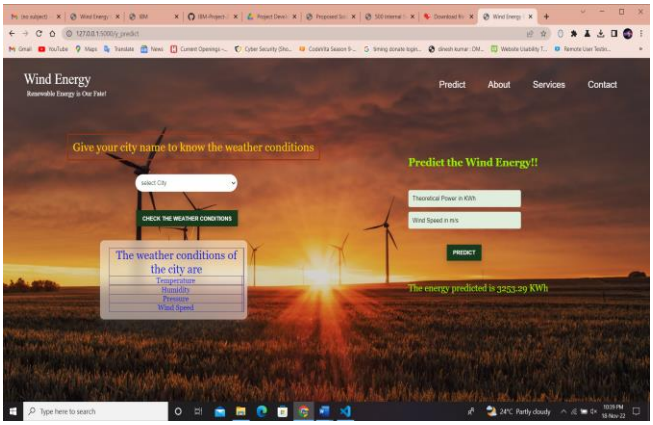
Model Performance Testing:

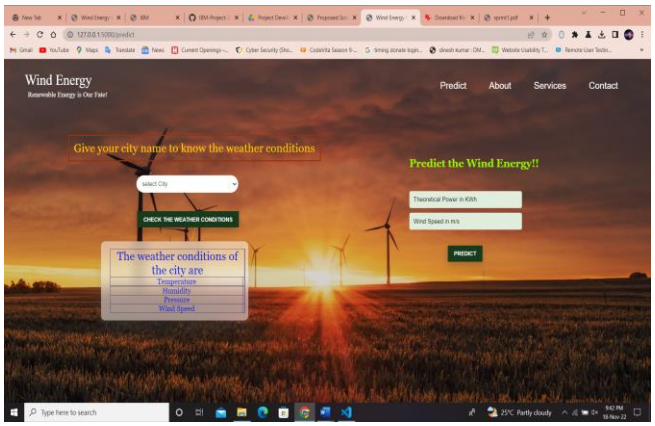
Project team shall fill the following information in model performance testing template.

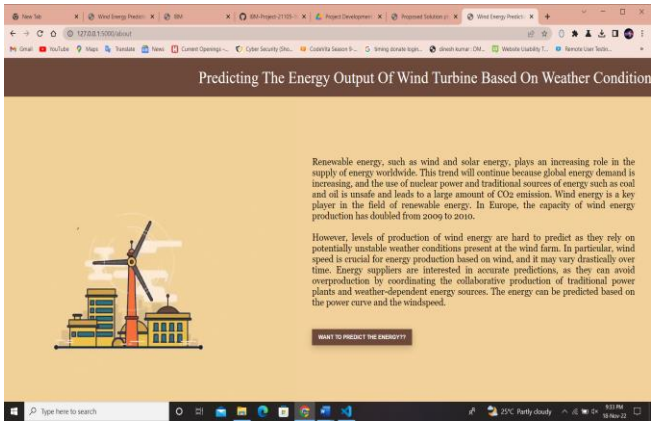
S.No.	Parameter	Screenshot / Values
1.	Dashboard design	No of Visulizations / Graphs – 2  

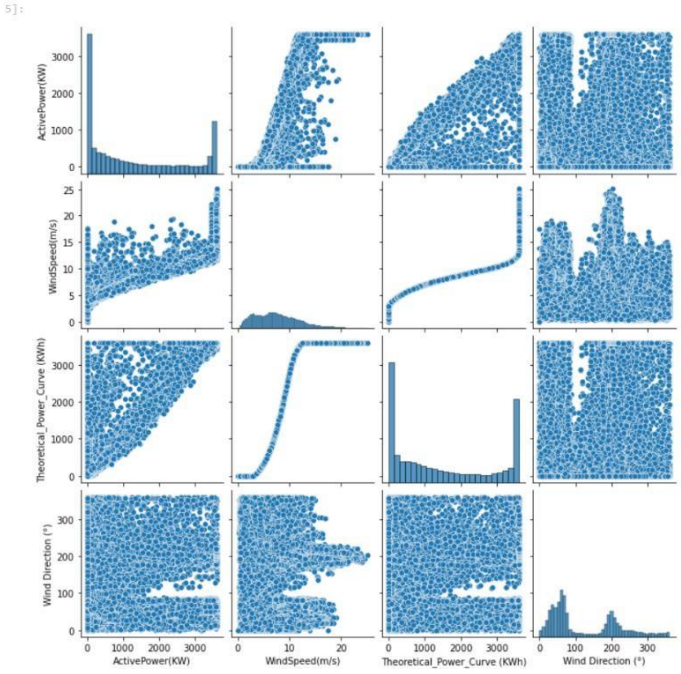
2.	Data Responsiveness	  

		   Data responsiveness - 90%
3.	Amount Data to Rendered (DB2 Metrics)	Wind_dataset.csv (1000 of data)
4.	Utilization of DataFilters	Data Filters – 1

		
5.	Effective User Story	No of Scene Added – 5  


Wind Energy
Renewable Energy is Our Fate!
Predict
About
Services
Contact
Give your city name to know the weather conditions
Predict the Wind Energy!!
CHECK THE WEATHER CONDITIONS
PREDICT
The weather conditions of the city are
Temperature
Humidity
Pressure
Wind Speed


Predicting The Energy Output Of Wind Turbine Based On Weather Condition
Renewable energy, such as wind and solar energy, plays an increasing role in the supply of energy worldwide. This trend will continue because global energy demand is increasing, and the use of nuclear power and traditional sources of energy such as coal and oil is unsafe and leads to a large amount of CO2 emission. Wind energy is a key player in the field of renewable energy. In Europe, the capacity of wind energy production has doubled from 2009 to 2010.
However, levels of production of wind energy are hard to predict as they rely on potentially unstable weather conditions present at the wind farm. In particular, wind speed is crucial for energy production based on wind, and it may vary drastically over time. Energy suppliers are interested in accurate predictions, as they can avoid overproduction by coordinating the collaborative production of traditional power plants and weather-dependent energy sources. The energy can be predicted based on the power curve and the windspeed.
WANT TO PREDICT THE ENERGY??

Predicting The Energy Output Of Wind Turbine Based On Weather Condition
Wind farm maintenance is any process used to keep wind turbines in consistent working order. Maintenance workers on wind farms lubricate moving parts—such as gearboxes and bearings—check connections within the system, and resolve any major issues that may develop.
In the U.S., the cost of operations and maintenance on wind farms in 2016 ranged between $42,000 and $48,000 per MW. As a form of power generation, it's absolutely vital that wind farms be kept in optimum working condition to streamline those costs. For this reason, regular preventive maintenance is commonly used.
WANT TO PREDICT THE ENERGY??

6.	Descriptive Reports	No of Visulizations / Graphs – 1