

**Project Development Phase**  
**Model Performance Test**

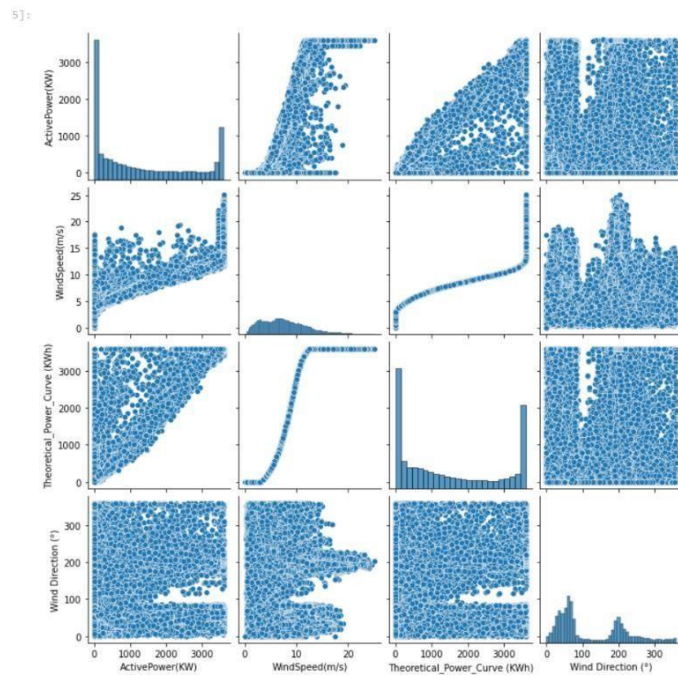
Date	17 November 2022
Team ID	PNT2022TMID21439
Project Name	Predicting the energy output of wind turbine based on weather condition
Maximum Marks	10 Marks

**Model Performance Testing:**


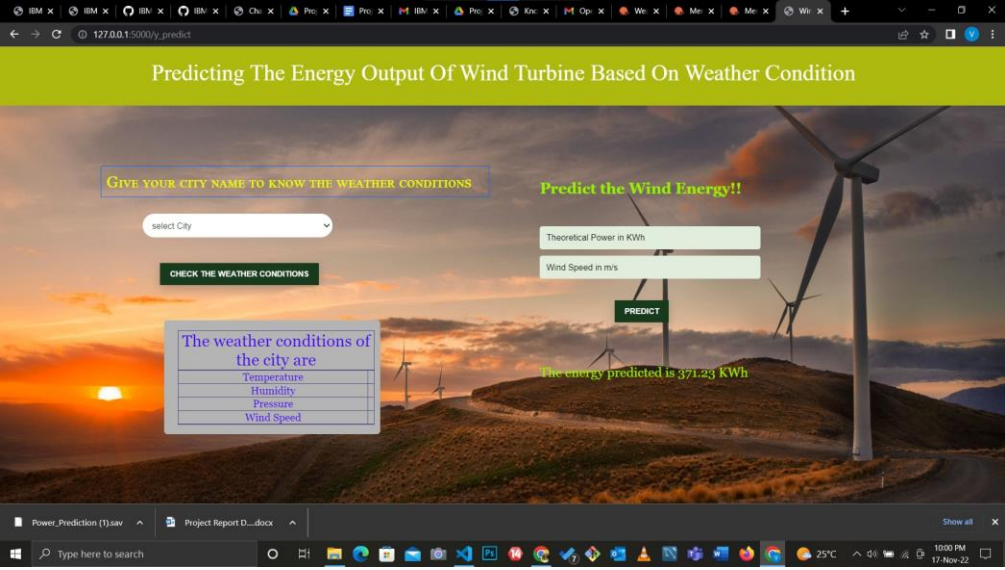
Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Screenshot / Values
-------	-----------	---------------------

## 1. Dashboard design



No of Visualizations / Graphs –

2.	Data Responsiveness	<div></div> <div></div> <p>Data responsiveness - 90%</p>
3.	Amount Data to Rendered (DB2 Metrics)	Wind Dataset.csv (1000 of data)
4.	Utilization of Data Filters	Data Filters – 2

```
ActivePower(KW)      WindSpeed(m/s) \
ActivePower(KW)      1.000000      0.912774
WindSpeed(m/s)      0.912774      1.000000
Theoretical_Power_Curve (KWh)      0.949918      0.944209
Wind Direction (°)      -0.062702      -0.077188
```

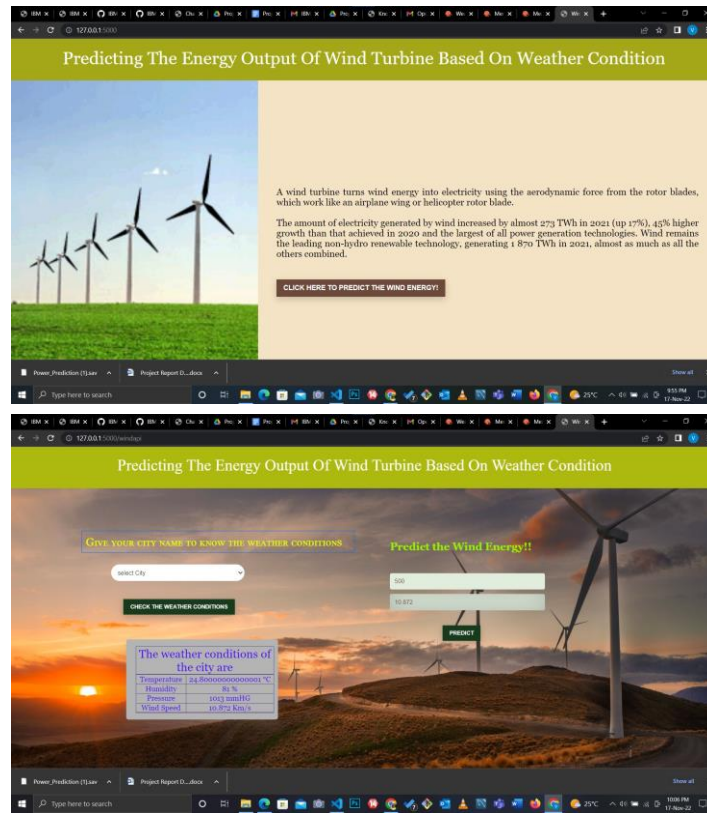
```
Theoretical_Power_Curve (KWh) \
ActivePower(KW)      0.949918
WindSpeed(m/s)      0.944209
Theoretical_Power_Curve (KWh)      1.000000
Wind Direction (°)      -0.099076
```

```
Wind Direction (°)
ActivePower(KW)      -0.062702
WindSpeed(m/s)      -0.077188
Theoretical_Power_Curve (KWh)      -0.099076
Wind Direction (°)      1.000000
```



## 5. Effective User Story

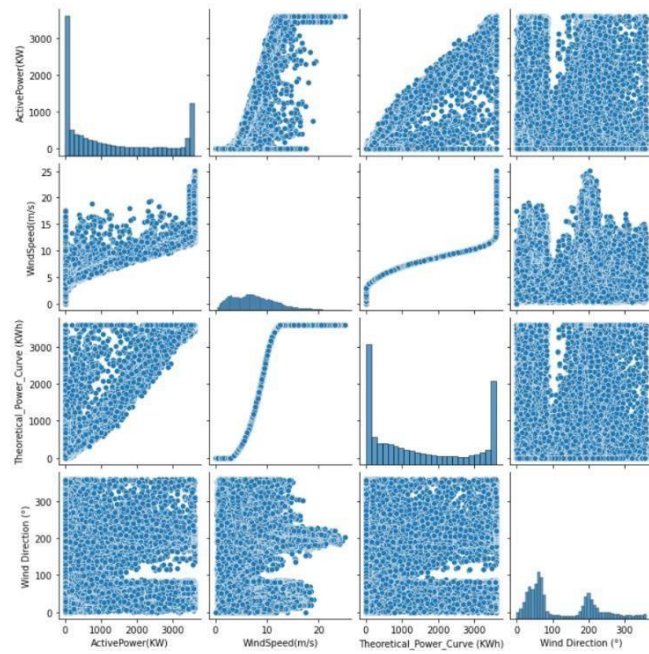
No of Scene Added –



The screenshot shows a web browser window with the address bar displaying '127.0.0.1:50000/product'. The page title is 'Predicting The Energy Output Of Wind Turbine Based On Weather Condition'. The main content area has a green header with the title. Below the header, there is a form with a text input field for 'GIVE YOUR CITY NAME TO KNOW THE WEATHER CONDITIONS.' and a dropdown menu for 'select City'. A green button labeled 'CHECK THE WEATHER CONDITIONS' is below the form. To the right, there is a section titled 'Predict the Wind Energy!!' with two input fields: 'Theoretical Power in KW' (value: 1000) and 'Wind Speed in m/s' (value: 10). A green button labeled 'PREDICT' is below these fields. The results section shows 'The energy predicted is 1315.05 KWh'. A table on the left lists weather conditions: Temperature, Humidity, Pressure, and Wind Speed. The browser's taskbar at the bottom shows the application's file path as 'Power\_Prediction (1).exe'.

## 6. Descriptive Reports

5]:



No of Visualizations / Graphs –

--	--	--