

Weather-Based Prediction of Wind Turbine Energy Output: A Next-Generation Approach to Renewable Energy Management

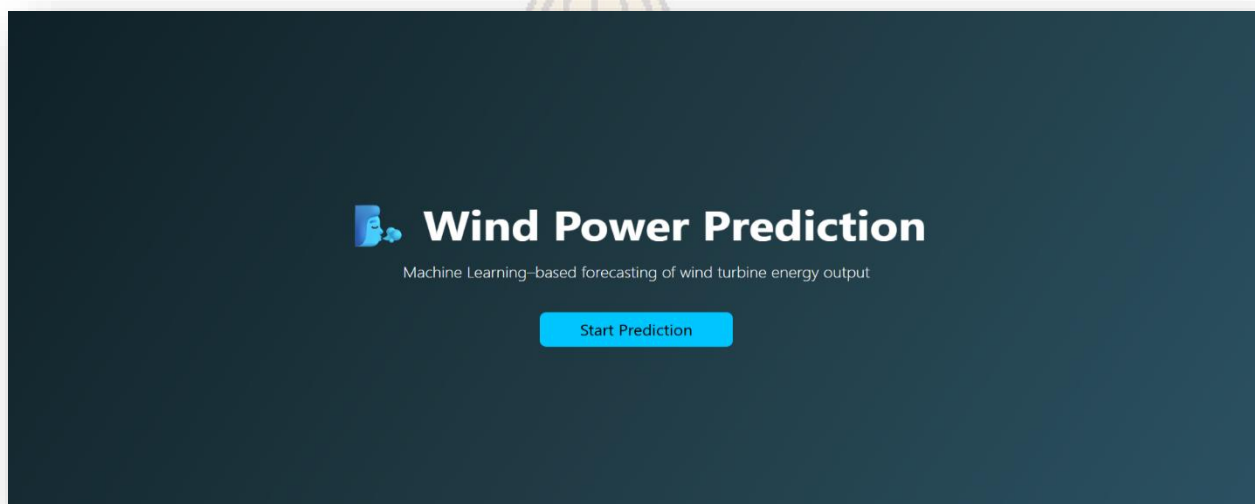
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TEAM ID	LTVIP2026TMIDS90651
PROJECT NAME	Weather-Based Prediction of Wind Turbine Energy Output: A Next-Generation Approach to Renewable Energy Management
MAXIMUM MARKS	5 MARKS

Chapter 7

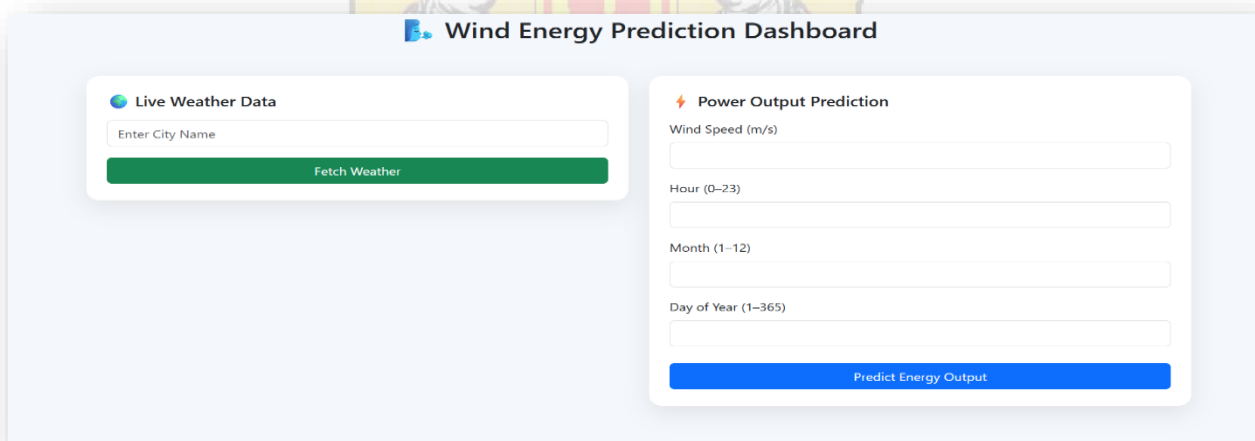
Functional and Performance Testing

7.1 - Functional and Performance Testing:

Home Screen:



Prediction Screen:



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Output Screen:

Wind Energy Prediction Dashboard

Live Weather Data

Fetch Weather

Temperature: 297.72°C

Humidity: 65%

Pressure: 1014 mmHg

Wind Speed: 2.06 m/s

Power Output Prediction

Wind Speed (m/s)

2.06

Hour (0-23)

20

Month (1-12)

2

Day of Year (1-365)

46

Predict Energy Output

Wind Energy Prediction Dashboard

Live Weather Data

Fetch Weather

Power Output Prediction

Wind Speed (m/s)

Hour (0-23)

Month (1-12)

Day of Year (1-365)

Predict Energy Output

The energy predicted is 0.18 KWh