Project Development Phase

Sprint-3

Application Building
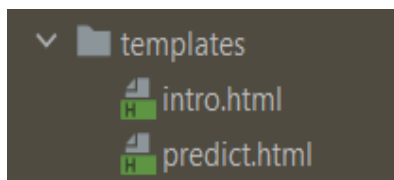
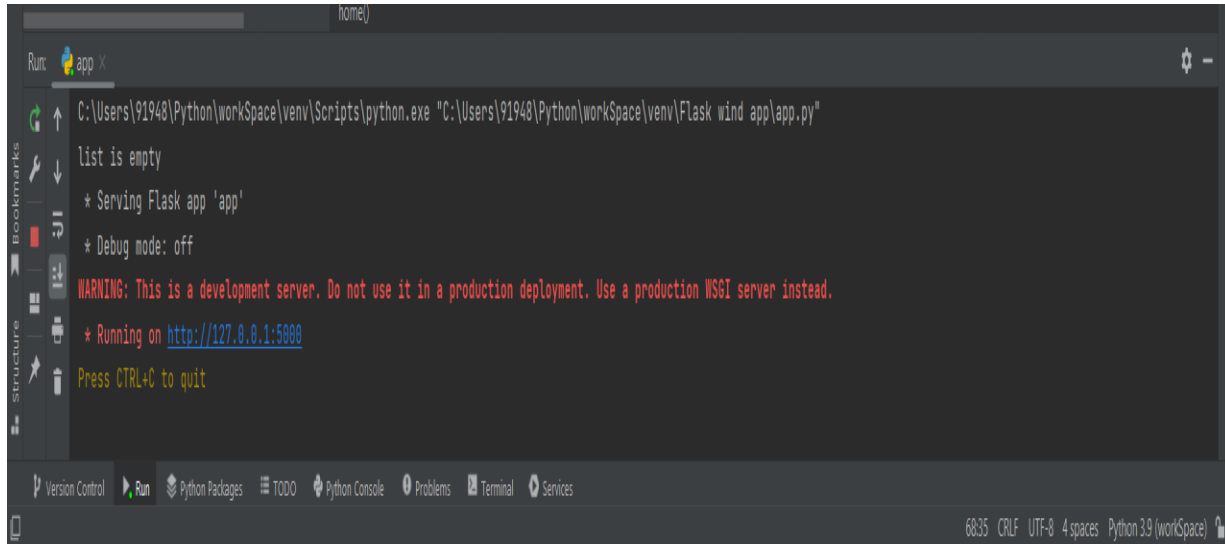| Date	12-11-2022
Team ID	PNT2022TMID34159
Project	Predictiong th energy output of wind turbine based on weather condition

Building the Python Flask App:
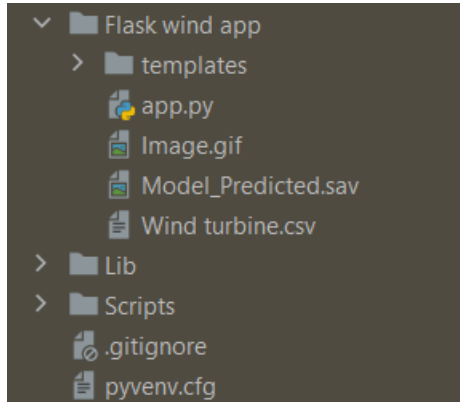
The code is uploaded in Final Deliverables

Build an HTML Page:
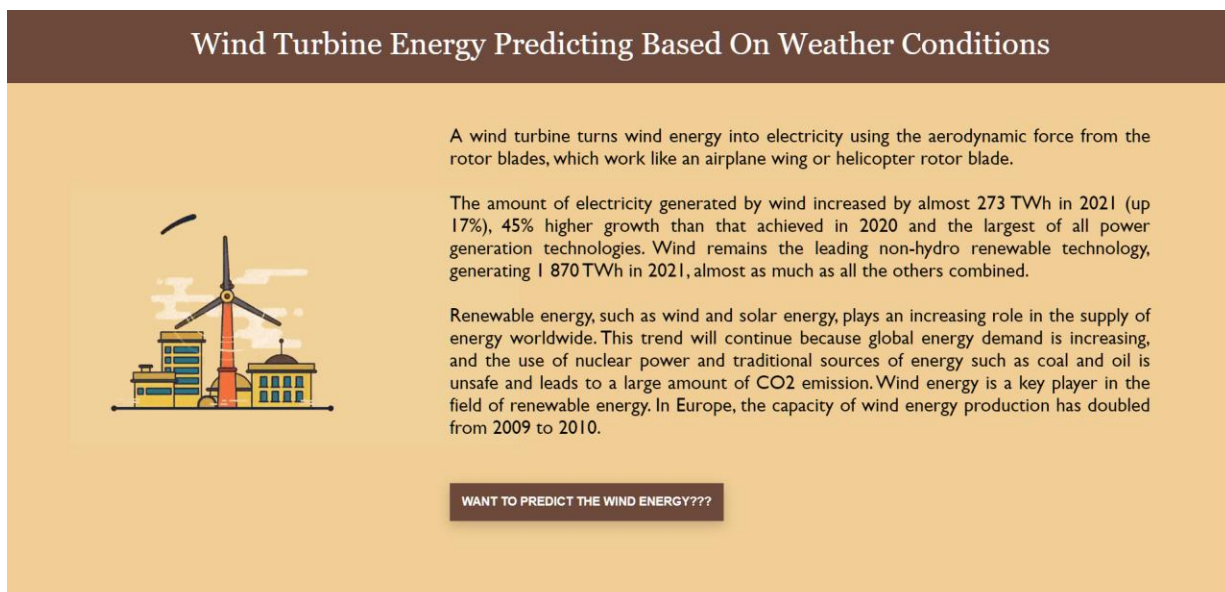

The code is uploaded in Final Deliverables

Executing the Code:


```
Run:    app ×

     C:\Users\91948\Python\workSpace\venv\Scripts\python.exe "C:\Users\91948\Python\workSpace\venv\Flask wind app\app.py"

     list is empty

      * Serving Flask app 'app'

      * Debug mode: off

     WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.

      * Running on http://127.0.0.1:5000

     Press CTRL+C to quit
```

Home page

Wind Turbine Energy Predicting Based On Weather Conditions

A wind turbine turns wind energy into electricity using the aerodynamic force from the rotor blades, which work like an airplane wing or helicopter rotor blade.

The amount of electricity generated by wind increased by almost 273 TWh in 2021 (up 17%), 45% higher growth than that achieved in 2020 and the largest of all power generation technologies. Wind remains the leading non-hydro renewable technology, generating 1 870 TWh in 2021, almost as much as all the others combined.

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.

WANT TO PREDICT THE WIND ENERGY???

Energy Predicted:

Predicting The Energy Output Of Wind Turbine Based On Weather Condition

Give your city name to know the weather conditions..

select City

CHECK THE WEATHER CONDITIONS..

The weather conditions of the city are

Temperature

Humidity

Pressure

Wind Speed

Predict the Wind Energy!!

416.32

5.311

PREDICT

The energy predicted 70.594KWh

Weather condition:

Predicting The Energy Output Of Wind Turbine Based On Weather Condition

Give your city name to know the weather conditions..

Chennai

CHECK THE WEATHER CONDITIONS..

The weather conditions of the city are

Temperature	23
Humidity	86%
Pressure	1,011 mBar
Wind Speed	5km/h

Predict the Wind Energy!!

Theoretical Power in KWh

Wind Speed in m/s

PREDICT