

## Sprint-2

Date	18 November 2022
Team ID	PNT2022TMID37323
Project Name	Predicting the energy output of wind turbine based on weather condition

### predict.html

```
<html>
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <meta http-equiv="X-UA-Compatible" content="ie=edge" />
    <link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.7.2/css/all.css"
      integrity="sha384-fnmOCqbTlWIlj8LyTjo7mOUStjsKC4pOpQbqyi7RrhN7udi9RwhKkMHpvLbHG9Sr" crossorigin="anonymous" />
    <link href="https://fonts.googleapis.com/css?family=Dosis" rel="stylesheet" />
    <link rel="stylesheet" href="{{url_for('static',filename='css/main.css')}}"/>
    <link rel="stylesheet" href="{{url_for('static',filename='css/media.css')}}"/>
    <link rel="stylesheet" href="{{url_for('static',filename='css/items_grid.css')}}"/>

    <title>Wind Energy Prediction</title>
    <style>
#page {
  max-width: 80%;
  margin: auto;
}
body {
  background-image: url(https://images2.alphacoders.com/753/753985.jpg);
  width: 100%;
  height: 100%;
  background-repeat: no-repeat;
  background-attachment: fixed;
  background-size: cover;
```

```
overflow: hidden;

}
table {
  width: 100%;
  border-collapse: collapse;
}

.card {
  margin-right: auto;
  margin-left: 15%;
  width: 300px;
  box-shadow: 0 15px 25px rgba(129, 124, 124, 0.2);

  border-radius: 5px;
  backdrop-filter: blur(14px);
  background-color: rgb(180, 180, 180);
  padding: 15px;
  text-align: center;
}
.head {
  top: 0px;
  margin: 0px;
  left: 0px;
  right: 0px;
  position: fixed;
  background: #aeb90f;
  color: white;
  overflow: hidden;
  padding-bottom: 30px;
  font-size: 2.25vw;
  width: 100%;
  padding-left: 0px;
  text-align: center;
  padding-top: 20px;
}
.second{
```

```
    top:80px;
    bottom:0px;
    margin:0px;
    left: 0px;
    right: 0px;
    position: fixed;
    padding: 0px;
    width: 100%;

    font-family:Georgia, serif;
    color:black;
    font-size:20px;
}
.inside{
    top:80px;
    bottom:0px;
    margin:0px;
    left: 51%;
    right: 0%;
    position: fixed;
    padding-left: 40px;
    padding-top:8%;
    padding-right:40px;

    font-family:Georgia, serif;
    color:#96f400;
    font-size:20px;
    text-align:justify;
}
.myButton{
    border: none;
    text-align: center;
    cursor: pointer;
    text-transform: uppercase;
    outline: none;
    overflow: hidden;
```

```
        color: #fff;
        font-weight: 700;
        font-size: 12px;
        background-color: #183a1d;
        padding: 10px 15px;
        margin: 0 auto;
        box-shadow: 0 5px 15px rgba(0,0,0,0.20);
        margin-left: 17%;
    }
    input {
        width: 50%;
        margin-bottom: 10px;
        background: #e1eedd;
        border: none;
        outline: none;
        padding: 10px;
        font-size: 13px;
        color: #6c493a;
        text-shadow: white;
        border: #6c493a;
        border-radius: 4px;
        box-shadow: white;
    }
    ::placeholder {
        color: black;
        opacity: 1;
    }
    .left{
        top: 80px;
        bottom: 0px;
        margin: 0px;
        left: 0%;
        right: 45.5%;
        position: fixed;
        padding-left: 10%;
        padding-top: 5%;
```

```

padding-right:40px;

font-family:bold,Georgia, serif;
color:rgb(238, 255, 0);;
font-size:25px;
}

select {
width:50%;
margin-bottom: 10px;
background: white;
border: none;
outline: none;
padding: 10px;
font-size: 13px;
color: #183a1d;
text-shadow: white;
border: #6c493a;
border-radius: 40px;
box-shadow: white;
}

input:focus { box-shadow: inset 0 -5px 45px rgba(100,100,100,0.4), 0 1px 1px rgba(255,255,255,0.2); }


table, th, td {
border: 1px solid rgb(86, 72, 128);
border-collapse: collapse;
color: #3f00ff;
}

@media screen and (max-width: 500px) {

.left,
.second,
.third {

```

```
width: 70%;  
}  
}  
  
</style>  
</head>  
<body>  
  
    <header id="head">  
        <div class="head">Predicting The Energy Output Of Wind Turbine Based On Weather Condition</div>  
    </header>  
  
    <div class="second">  
        <div class="left">  
  
            <p style="padding: 8px; border: 1px solid rgb(0, 110, 255); width: 575px;"> GIVE YOUR CITY NAME TO KNOW THE WEATHER  
CONDITIONS</p>  
  
            <div style="margin-left:10%">  
                <form action="{ url_for('windapi')}" method="post" >  
                    <select name="city" required >  
                        <option value="" selected>select City</option>  
                        <option value = "Ariyalur" > Ariyalur </option>  
                        <option value = "Andimadam" > Andimadam </option>  
                        <option value = "Coimbatore" > Coimbatore </option>  
                        <option value = "Chengalpattu" > Chengalpattu </option>  
                        <option value = "Cuddalore" > Cuddalore </option>  
                        <option value = "Chennai" > Chennai </option>  
                        <option value = "Dindigul" > Dindigul </option>  
                        <option value = "Dharmapuri" > Dharmapuri </option>  
                        <option value = "Erode" > Erode </option>  
                        <option value = "Karur" > Karur </option>  
                        <option value = "Kancheenuram" > Kancheenuram </option>
```

```

        <option value ="Krishnagiri"    > Krishnagiri </option>
        <option value ="Kallakurichi"  > Kallakurichi  </option>
        <option value ="Madurai"       > Madurai </option>
        <option value ="Mayiladuthurai"> Mayiladuthurai </option>
        <option value ="Nagapattinam"  > Nagapattinam  </option>
        <option value ="Kanyakumari"   > Kanyakumari </option>
        <option value ="Namakkal"      > Namakkal </option>
        <option value ="Perambalur"    > Perambalur </option>
        <option value ="Pudukottai"    > Pudukottai </option>
        <option value ="Ramanathapuram"> Ramanathapuram </option>
        <option value ="Ranipet"       > Ranipet </option>
        <option value ="Salem"         > Salem </option>
        <option value ="Sivagangai"    > Sivagangai </option>
        <option value ="Tenkasi"       > Tenkasi </option>
        <option value ="Thanjavur"     > Thanjavur </option>
        <option value ="Theni"         > Theni </option>
        <option value ="Thiruvallur"   > Thiruvallur </option>
        <option value ="Thiruvarur"    > Thiruvarur </option>
        <option value ="Tuticorin"     > Tuticorin </option>
        <option value ="Trichirapalli" > Trichirapalli </option>
        <option value ="Thirunelveli"  > Thirunelveli </option>
        <option value ="Tirupathur"    > Tirupathur </option>
        <option value ="Tiruppur"      > Tiruppur </option>
        <option value ="Tiruvannamalai"> Tiruvannamalai </option>
        <option value ="The Nilgiris"  > The Nilgiris </option>
        <option value ="Vellore"       > Vellore </option>
        <option value ="Viluppuram"    > Viluppuram </option>
        <option value ="Virudhunagar"  > Virudhunagar </option>

    </select><br><br>
    <div style="margin-left:-15%"><button type="submit" class="myButton" >Check the Weather Conditions</button></div>

</form>
</div>
<br>

<div class="card">

```

```

<table style="margin-left:2%; text-align:center; border-spacing:20px;">
  <tr>
    <td colspan="2" style="font-size:25px;">The weather conditions of the city are</td>
  </tr>
  <tr>
    <td>Temperature</td><td>{{temp}}</td>
  </tr>
  <tr>
    <td>Humidity</td><td>{{humid}}</td>
  </tr>
  <tr>
    <td>Pressure</td><td>{{pressure}}</td>
  </tr>
  <tr>
    <td>Wind Speed</td><td>{{speed}}</td>
  </tr>
</table>
</div>
</div>
<div class="inside">
<div style="font-size:23px;font-weight:bold;">Predict the Wind Energy!!</div>
<br><br>
<form action="{{ url_for('y_predict')}}"method="post">
  <input type="text" name="theo" placeholder="Theoretical Power in KWh" required="required" />
  <input type="text" name="wind" placeholder="Wind Speed in m/s" required="required" /><br><br>
  <button type="submit" class="myButton" >Predict</button>

</form>

<br>
<br>
  {{ prediction_text }}

</div>

</div>

```



```
</body>

</html>
```

# 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	{{temp}}
Humidity	{{humid}}
Pressure	{{pressure}}
Wind Speed	{{speed}}

Predict the Wind Energy!!

Theoretical Power in KWh

Wind Speed in m/s

PREDICT

{{ prediction\_text }}