Project Development Phase

Sprint 2

Team ID	PNT2022TMID15599
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/style.css') }}">

<title>Wind Energy Prediction</title>

<style>

table {

    width: 100%;

    border-collapse: collapse;

}

.card {

```css
        margin-right: auto;

        margin-left: 12%;

        width: 350px;

        box-shadow: 0 15px 25px rgba(129, 124, 124, 0.2);

        border-radius: 10px;

        backdrop-filter: blur(14px);

        background-color: rgba(255, 255, 255, 0.5);

        padding: 15px;

        text-align: center;

    }

    .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;
```

```css
        left: 60%;
    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%;
}
```

```css
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;
}
.navbar
{
    display: flex;
    align-items: center;
    padding: 20px;
    padding-left: 50px;
    padding-right: 30px;
    padding-top: 25px;
    line-height: 1.3;
```

```css
}
.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(255 204 0);;
        font-size:25px;
        align:center;
}
    select {
    width:50%;
    margin-bottom: 10px;
    background: white;
    border: none;
    outline: none;
    padding: 10px;
    font-size: 13px;
    color: #183a1d;
    text-shadow: white;
    border: #6c493a;
```

```css
    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: #000ff0;

}

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

.left,

.second,

.third {

width: 70%;

}

}
```
```html
</style>

</head>

<body>

<div class="full-page">

<div class="navbar">

<div>

<a href="{{url_for('home')}}">Wind
Energy<br><label>  Renewable Energy is Our Fate!</label></a>

</div>

<nav>
```

```html
<ul id='MenuItems'>
<li><a href="{{url_for('predict')}}">Predict</a></li>
<li><a href="{{url_for('about')}}">About</a></li>
<li><a href={{url_for('services')}}>Services</a></li>
<li><a href={{url_for('contact')}}>Contact</a></li>
 </ul>
</nav>
</div>
</div>
<div class="second">
<div class="left">
<p style="padding: 10px; border: 3px solid rgb(148, 53, 16); width: 600px;">Give
your city name to know the weather conditions</p>
<div style="margin-left:25%">
<form action="{{ url_for('windapi')}}"method="post" >
<select name="city"  required >
<option value="" selected>select City</option>
<option value ="Agartala"  >  Agartala   </option>
<option value ="Aizawl" >  Aizawl  </option>
<option value ="Bengaluru" >  Bengaluru  </option>
 <option value ="Bhopal" >  Bhopal  </option>
<option value ="Bhubaneswar"   >  Bhubaneswar </option>
<option value ="Chandigarh" >  Chandigarh  </option>
<option value ="Chennai"   >  Chennai </option>
<option value ="Daman" >  Daman   </option>
<option value ="Dehradun"  >  Dehradun   </option>
<option value ="Delhi" >  Delhi   </option>
```

```html
<option value ="Dispur" >  Dispur  </option>
<option value ="Gandhinagar"   >  Gandhinagar </option>
<option value ="Gangtok"   >  Gangtok </option>
<option value ="Hyderabad"  >  Hyderabad   </option>
<option value ="Imphal" >  Imphal  </option>
<option value ="Itanagar"  >  Itanagar   </option>
<option value ="Jaipur" >  Jaipur  </option>
<option value ="Kavaratti"  >  Kavaratti  </option>
<option value ="Kohima" >  Kohima  </option>
<option value ="Kolkata"   >  Kolkata </option>
<option value ="Lucknow"   >  Lucknow </option>
<option value ="Mumbai" >  Mumbai  </option>
<option value ="Panaji" >  Panaji  </option>
 <option value ="Patna"  >  Patna   </option>
<option value ="Pondicherry"   >  Pondicherry </option>
<option value ="Port Blair" >  Port Blair  </option>
<option value ="Raipur" >  Raipur  </option>
<option value ="Ranchi" >  Ranchi  </option>
<option value ="Shillong"  >  Shillong   </option>
<option value ="Shimla" >  Shimla  </option>
<option value ="Silvassa"  >  Silvassa   </option>
<option value ="Srinagar"  >  Srinagar   </option>
<option value ="Thiruvananthapuram"> Thiruvananthapuram   </option>
<option value ="Tirupati"  >  Tirupati   </option>
</select><br><br>
<div style="margin-left:-20%"><button type="submit" class="myButton" >Check
the Weather Conditions</button></div>
```

```html
</form>

</div>

 <br>

<div class="card">

<table style="margin-left:2%; text-align:center; border-spacing:25px;">

<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>
```

```html
<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>
```

Style.css

```css
*

{

   margin: 0;

   padding: 0;

   box-sizing: border-box;

}

.full-page

{

   height: 100%;

   width: 100%;
```

```css
    background-image: linear-
    gradient(rgba(0,0,0,0.1),rgba(0,0,0,0.2)),url("/static/images/windmill.jpg");

    background-position: center;

    background-size: cover;

    position: absolute;
}
.navbar
{

    display: flex;

    align-items: center;

    padding: 20px;

    padding-left: 50px;

    padding-right: 30px;

    padding-top: 30px;

    line-height: 0.8;
}
nav
{

    flex: 1;

    text-align: right;
}
nav ul
{

    display: inline-block;

    list-style: none;
}
nav ul li
```

```css
{
    display: inline-block;
    margin-right: 50px;
}
nav ul li a
{
    text-decoration: none;
    font-size: 20px;
    color: white;
    font-family: sans-serif;
}
nav ul li button
{
    font-size: 20px;
    color: white;
    outline: none;
    border: none;
    background: transparent;
    cursor: pointer;
    font-family: sans-serif;
}
nav ul li button:hover
{
    color: aqua;
}
nav ul li a:hover
{
```

```css
    color: aqua;
}
.navbar a:hover
{
    color: aqua;
}
.navbar a label:hover
{
    color: aqua;
}
a
{
    text-decoration: none;
    color: white;
    font-size: 30px;
}
label
{
    text-decoration: none;
    color: white;
    font-size: 15px;
}
```

Prediction Page: