

*PROJECT NAME: WEB DEVELOPMENT
MAJOR PROJECT*

*NAME : NIVATHAA.G
BATCH : FEBRUARY 2023*

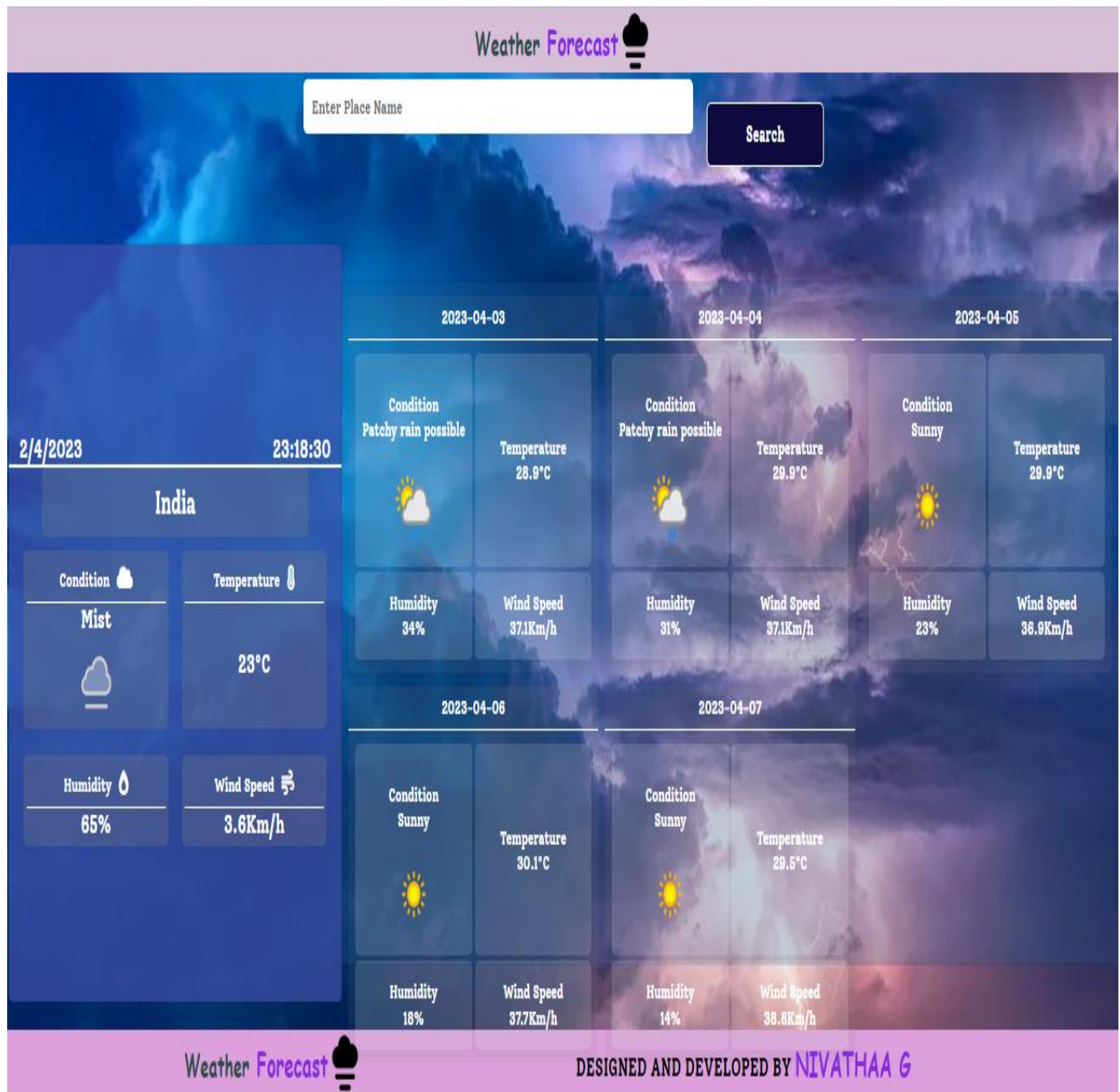
WEATHER FORECAST APPLICATION

EMAIL : nivathaa663@gmail.com

Webpage link:

D:/major/weather.html

SCREENSHOT OF MY WEBPAGE:



By default the location set to "INDIA"

SCREEN SHOT OF MY CODE:

Weather.html

```
1  <!DOCTYPE html>
2  <html lang="en">
3
4  <head>
5      <meta charset="UTF-8">
6      <meta http-equiv="X-UA-Compatible" content="IE=edge">
7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
8      <title>Weather And Weather Forecast - Web Application</title>
9      <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/font-awesome@6.1.2/css/all.min.css" />
10
11     <link rel="stylesheet" href="./cast.css">
12
13 </head>
14
15 <body onload="startTime(), GetWeather(DefaultPlace)">
16     <main>
17         <header>
18             <p id="Name">Weather<span> Forecast</span></p>
19             
20         </header>
21         <form onsubmit="event.preventDefault();">
22             <div class="Search_Field">
23                 <input type="text" id="Search_Place" placeholder="Enter Place Name">
24                 <p id="ErrorMsg"></p>
25             </div>
26             <button id="SearchButton">Search</button>
27         </form>
28
29         <div class="Weather_Con">
30
31             <div class="CurrentWeather_Con">
```

```

33     <div class="CurrentWeather">
34
35         <div class="DateTime_Container">
36             <p id="Date">Date</p>
37             <p id="Time">Time</p>
38         </div>
39
40         <h3 id="Place_Name">Place Name</h3>
41         <div class="Weather_Details">
42
43             <div class="Weather_Item" id="WeatherConditionBox">
44                 <h5>Condition <i class="fa-solid fa-cloud"></i></h5>
45                 <p id="Condition"> </p>
46                 <div id="ConditionIcon"></div>
47             </div>
48
49             <div class="Weather_Item">
50                 <h5>Temperature <i class="fa-solid fa-temperature-full"></i></h5>
51                 <p> <span id="Temperature"></span>&deg;C</p>
52             </div>
53
54             <div class="Weather_Item">
55                 <h5>Humidity <i class="fa-solid fa-fire-flame-simple"></i></h5>
56                 <p><span id="Humidity"></span>&percnt;</p>
57             </div>
58
59             <div class="Weather_Item">
60                 <h5>Wind Speed <i class="fa-solid fa-wind"></i></h5>
61                 <p><span id="WindSpeed"></span> Km/h</p>
62             </div>
63
64     </div>

```

```

65
66     </div>
67
68 </div>
69
70 <div class="WeatherForecast_Container">
71     <div class="WeatherForeCast">
72
73         <div class="ForeCastItem">
74             <h5 id="Day1"></h5>
75             <div class="ForeCastItem-Details">
76                 <div id="Day1ConditionBox" class="ConditionBox"> </div>
77                 <p>Temperature<span id="Day1Temperature"></span></p>
78                 <p>Humidity<span id="Day1Humidity"></span></p>
79                 <p>Wind Speed<span id="Day1Wind"></span></p>
80             </div>
81         </div>
82
83         <div class="ForeCastItem">
84             <h5 id="Day2"></h5>
85             <div class="ForeCastItem-Details">
86                 <div id="Day2ConditionBox" class="ConditionBox"> </div>
87                 <p>Temperature<span id="Day2Temperature"></span></p>
88                 <p>Humidity<span id="Day2Humidity"></span></p>
89                 <p>Wind Speed<span id="Day2Wind"></span></p>
90             </div>
91         </div>
92
93         <div class="ForeCastItem">
94             <h5 id="Day3"></h5>
95             <div class="ForeCastItem-Details">
96                 <div id="Day3ConditionBox" class="ConditionBox"> </div>

```

```

96         <div id="Day3ConditionBox" class="ConditionBox"> </div>
97         <p>Temperature<span id="Day3Temperature"></span></p>
98         <p>Humidity<span id="Day3Humidity"></span></p>
99         <p>Wind Speed<span id="Day3Wind"></span></p>
100     </div>
101 </div>
102
103     <div class="ForeCastItem">
104         <h5 id="Day4"></h5>
105         <div class="ForeCastItem-Details">
106             <div id="Day4ConditionBox" class="ConditionBox"> </div>
107             <p>Temperature<span id="Day4Temperature"></span></p>
108             <p>Humidity<span id="Day4Humidity"></span></p>
109             <p>Wind Speed<span id="Day4Wind"></span></p>
110         </div>
111     </div>
112
113     <div class="ForeCastItem">
114         <h5 id="Day5"></h5>
115         <div class="ForeCastItem-Details">
116             <div id="Day5ConditionBox" class="ConditionBox"> </div>
117             <p>Temperature<span id="Day5Temperature"></span></p>
118             <p>Humidity<span id="Day5Humidity"></span></p>
119             <p>Wind Speed<span id="Day5Wind"></span></p>
120         </div>
121     </div>
122 </div>
123 </div>
124
125 </div>
126
127 </div>

```

```

121
122     </div>
123 </div>
124
125 </div>
126
127 </div>
128
129
130 <footer>
131     <div class="App-Logo">
132         <p id="Name">Weather<span> Forecast</span></p>
133         
134     </div>
135     <div class="DesignerInfo">
136         <p> DESIGNED AND DEVELOPED BY <span id="Name"> NIVATHAA G</span></p>
137     </div>
138 </footer>
139 </main>
140
141
142
143
144 <script src="./open.js"></script>
145 </body>
146
147 </html>
148

```

Cast.css

```
# cast.css > ...
1  *{
2      margin: 0;
3      padding: 0;
4      box-sizing: border-box;
5      font-family: 'Solway', serif;
6      font-weight: 700;
7  }
8  }
9  main{
10     width: 100%;
11     height: fit-content;
12     color: ■ white;
13 }
14 body{
15     background-image: url(https://cdn.pixabay.com/photo/2018/08/23/07/35/thunderstorm-3625405__480.jpg);
16     background-size: cover;
17     background-repeat: no-repeat;
18 }
19
20 header{
21     width: 100%;
22     height: 6vh;
23     display: flex;
24     align-items: center;
25     justify-content: center;
26     background-color: ■ thistle;
27     position: fixed;
28     top: 0;
29 }
30
31
```

```
32 #Name{
33     font-family: cursive;
34     font-weight: 700;
35     font-size: 18px;
36     color: □ darkslategrey;
37 }
38 #Name span{
39     font-family: cursive;
40     font-size: 20px;
41     font-weight: 800;
42     color: ■ blueviolet;
43 }
44 .App_Icon{
45     width: 40px;
46 }
47
48 form{
49     margin: 5em auto 0em auto;
50     width: 70%;
51     height: 15vh;
52     display: flex;
53     align-items: center;
54     justify-content: center;
55     gap: 1em;
56 }
57 .Search_Field{
58     width: 50%;
59     display: flex;
60     justify-content: center;
61     flex-direction: column;
62 }
```

```

63 #Search_Place{
64     width: 100%;
65     padding: 0.8em;
66     border: none;
67     border-radius: 5px;
68     font-size: 12px;
69 }
70 #Search_Place:focus{
71     outline: none;
72 }
73 #ErrorMsg{
74     text-transform: capitalize;
75     font-weight: 400;
76     background-color: red;
77     font-size: 12px;
78     font-style: italic;
79     padding: 0.8em;
80     border-bottom-left-radius: 5px;
81     border-bottom-right-radius: 5px;
82     opacity: 0;
83     word-spacing: 5px;
84 }
85 #SearchButton{
86     width: 15%;
87     padding: 0.8em;
88     border: none;
89     border-radius: 5px;
90     background-color: rgba(15, 10, 63, 1);
91     color: white;
92     border: 1px solid white;
93 }

```

```

94 #SearchButton:hover{
95     cursor: pointer;
96     background-color: rgba(15, 10, 63, 0);
97 }
98
99
100 /* Weather_Container Style */
101 .Weather_Con{
102     margin: 1em 0em;
103     width: 100%;
104     height: 70vh;
105     padding: 0.1em ;
106     display: flex;
107     align-items: center;
108     justify-content: center;
109 }
110
111
112 .CurrentWeather_Con{
113     box-shadow: rgba(0, 0, 0, 0.02) 0px 1px 3px 0px, rgba(27, 31, 35, 0.15) 0px 0px 0px 1px;
114     width: 30%;
115     height: 100%;
116     background-color: #3c4ca5be;
117     display: flex;
118     align-items: center;
119     justify-content: center;
120     border-radius: 5px;
121 }

```

```

123 .CurrentWeather_Con .CurrentWeather{
124     border-radius: 5px;
125     width: 100%;
126     height: 50%;
127     display: flex;
128     flex-direction: column;
129     align-items: center;
130     text-align: center;
131 }
132
133 .CurrentWeather_Con .CurrentWeather .DateTime_Container{
134     border-bottom: 2px solid white;
135     width: 100%;
136     height: 9%;
137     display: flex;
138     align-items: center;
139     justify-content: space-between;
140     padding: 0em 0.8em;
141 }
142 #Place_Name{
143     width: 80%;
144     padding: 0.5em;
145     border-radius: 5px;
146     background-color: rgba(128, 128, 128, 0.281);
147 }
148 .Weather_Details{
149     width: 95%;
150     height: 65%;
151     display: grid;
152     grid-template-columns: repeat(2, 1fr);
153     grid-template-rows: repeat(2, 1fr);
154     gap: 1em;

```

```

156     padding: 0.5em;
157 }
158 .Weather_Item{
159     background-color: rgba(128, 128, 128, 0.281);
160     border-radius: 5px;
161     display: flex;
162     align-items: center;
163     flex-direction: column;
164     padding: 0.2em;
165 }
166 .Weather_Item p{
167     height: 80%;
168     width: 100%;
169     display: flex;
170     align-items: center;
171     justify-content: center;
172 }
173 #WeatherConditionBox {
174     display: flex;
175     align-items: center;
176     justify-content: center;
177 }
178
179 h5{
180     font-size: 12px;
181     border-bottom: 1px solid white;
182     padding: 0.5em;
183     width: 100%;
184     text-align: center;
185 }
186 h5 i{
187     font-size: 15px;

```



```

188     margin-left: 5px;
189 }
190 .WeatherForecast_Container{
191     box-shadow: 0px 0px 0px 0px, 0px 1px 3px 0px, 0px 0px 0px 1px;
192     background-color: #hsla(211, 67%, 33%, 0.267);
193     width: 70%;
194     height: 90%;
195 }
196 .WeatherForecast_Container .WeatherForeCast{
197     border-radius: 5px;
198     width: 100%;
199     height: 100%;
200     display: grid;
201     grid-template-columns: repeat(3, 2fr);
202     padding: 0.5em;
203     gap: 0.5em;
204 }
205 .WeatherForeCast .ForeCastItem{
206     background-color: #rgba(128, 128, 128, 0.116);
207     border-radius: 5px;
208     display: flex;
209     flex-direction: column;
210     align-items: center;
211 }
212 .WeatherForeCast .ForeCastItem:hover{
213     transform: scale(0.95);
214 }
215
216 .ForeCastItem .ForeCastItem-Details{
217     width: 100%;
218     height: 90%;
219     padding: 0.5em;

```

```

220     display: grid;
221     grid-template-columns: repeat(2, 1fr);
222     gap: 0.2em;
223 }
224
225 .ForeCastItem .ForeCastItem-Details p, .ConditionBox{
226     border-radius: 5px;
227     display: flex;
228     align-items: center;
229     justify-content: center;
230     font-size: 12px;
231     flex-direction: column;
232     padding: 1em 0em;
233     gap: 0.1em;
234     background-color: #rgba(249, 246, 252, 0.144);
235 }
236 .ForeCastItem .ForeCastItem-Details .ConditionBox p{
237     background-color: transparent;
238 }
239 .WeatherForeCast .ForeCastItem .ForeCastItem-Details .ConditionBox img{
240     width: 50px;
241 }
242
243 #ConditionIcon img{
244     width: 50px;
245 }
246
247 footer {
248     width: 100%;
249     height: 6vh;
250     display: flex;
251     flex-direction: row;

```

```

252     justify-content: center;
253     align-items: center;
254     gap: 2em;
255     background-color: plum;
256     padding: 0.2em;
257 }
258
259
260 footer .App-Logo {
261     font-family: cursive;
262     display: flex;
263     flex-direction: row;
264     justify-content: center;
265     align-items: center;
266     gap: 0em;
267     width: 30%;
268     height: 100%;
269     display: flex;
270     flex-direction: row;
271     justify-content: center;
272     align-items: center;
273     gap: 0em;
274 }
275
276 footer .DesignerInfo {
277     width: 50%;
278     text-align: center;
279     height: 100%;
280     display: flex;
281     flex-direction: row;
282     justify-content: center;
283     align-items: center;

```

```

276 footer .DesignerInfo {
277     width: 50%;
278     text-align: center;
279     height: 100%;
280     display: flex;
281     flex-direction: row;
282     justify-content: center;
283     align-items: center;
284     gap: 0em;
285     color: black;
286 }
287 footer .DesignerInfo #Name {
288     font-family: cursive;
289     color: blueviolet;
290     font-size: 20px;
291 }
292

```

Open.js

```
JS open.js > [?] ShowWeather
1  const DefaultPlace = "India";
2  const CheckCity = /^[A-Za-z]+$;/;
3
4  let WeatherContainer = document.querySelector(".Weather_Container");
5  let CurrentDate = document.getElementById("Date");
6  let CurrentTime = document.getElementById("Time");
7  let City = document.getElementById("Place_Name");
8  let SearchCity = document.getElementById("Search_Place");
9  let SearchButton = document.getElementById('SearchButton');
10 let Temperature = document.getElementById("Temperature");
11 let Condition = document.getElementById("Condition");
12 let Humidity = document.getElementById("Humidity");
13 let WindSpeed = document.getElementById("WindSpeed");
14 let ErrorMsg = document.getElementById("ErrorMsg");
15
16
17 let Day1= document.getElementById("Day1")
18 let Day1Temperature = document.getElementById("Day1Temperature");
19 let Day1Humidity = document.getElementById("Day1Humidity");
20 let Day1Wind = document.getElementById("Day1Wind");
21 let Day1ConditionBox = document.getElementById("Day1ConditionBox");
22
23 let Day2= document.getElementById("Day2")
24 let Day2Temperature = document.getElementById("Day2Temperature");
25 let Day2Humidity = document.getElementById("Day2Humidity");
26 let Day2Wind = document.getElementById("Day2Wind");
27 let Day2ConditionBox = document.getElementById("Day2ConditionBox");
28
29 let Day3= document.getElementById("Day3")
30 let Day3ConditionBox = document.getElementById("Day3ConditionBox");
31 let Day3Temperature = document.getElementById("Day3Temperature");
32 let Day3Humidity = document.getElementById("Day3Humidity");
```

```

33 let Day3Wind = document.getElementById("Day3Wind");
34
35
36 let Day4= document.getElementById("Day4")
37 let Day4ConditionBox = document.getElementById("Day4ConditionBox");
38 let Day4Temperature = document.getElementById("Day4Temperature");
39 let Day4Humidity = document.getElementById("Day4Humidity");
40 let Day4Wind = document.getElementById("Day4Wind");
41
42
43 let Day5= document.getElementById("Day5")
44 let Day5ConditionBox = document.getElementById("Day5ConditionBox");
45 let Day5Temperature = document.getElementById("Day5Temperature");
46 let Day5Humidity = document.getElementById("Day5Humidity");
47 let Day5Wind = document.getElementById("Day5Wind");
48
49 let ConditionIconBox = document.getElementById("ConditionIcon");
50
51 SearchButton.addEventListener('click', (event)=>{
52     let len= SearchCity.value
53     if(SearchCity.value.match(CheckCity) && len.length != 0){
54         GetWeather(SearchCity.value);
55     }
56     else{
57         ErrorMsg.style.opacity = 1;
58         ErrorMsg.innerHTML = "Kindly Enter Valid Place Name !";
59         ErrorMsg.style.backgroundColor = "red";
60         HideErrorMsg();
61         SearchCity.focus();
62         SearchCity.value="";
63     }

```

```

66 })
67
68 const GetWeather = (city) =>{
69     const url = `http://api.weatherapi.com/v1/forecast.json?key=378603cebc014f298d5164956232702&q=${city}&days=6&aqi=no&alerts=no`;
70
71     fetch(url).then((resp) => resp.json())
72     .then(data =>{
73         ErrorMsg.style.opacity = 1;
74         ErrorMsg.style.backgroundColor = "green";
75         ErrorMsg.innerHTML = `${city}'s Weather Details Show`;
76         HideErrorMsg();
77         return ShowWeather(data)
78     })
79     .catch(()=>{
80         ErrorMsg.style.opacity = 1;
81         ErrorMsg.style.backgroundColor = "red";
82         ErrorMsg.innerHTML = `${city} not found`;
83         SearchCity.focus();
84         SearchCity.value = "";
85         HideErrorMsg();
86     })
87 }
88
89 const ShowWeather = (WeatherData) =>{
90
91     City.innerHTML = `${WeatherData.location.country}`;
92     Temperature.innerHTML = `${WeatherData.current.temp_c}`;
93     Condition.innerHTML = `${WeatherData.current.condition.text}`;
94     Humidity.innerHTML = `${WeatherData.current.humidity}`;
95     WindSpeed.innerHTML = `${WeatherData.current.wind_kph}`;
96     ConditionIconBox.innerHTML = ``

```

```

99 Day1.innerHTML = `${WeatherData.forecast.forecastday[1].date}`;
100 Day1ConditionBox.innerHTML = `

Condition<span>${WeatherData.forecast.forecastday[1].day.condition.text}</span> </p>


101 `
102 Day1Temperature.innerHTML = `${WeatherData.forecast.forecastday[1].day.avgtemp_c}` + "&deg;C" ;
103 Day1Humidity.innerHTML = `${WeatherData.forecast.forecastday[1].day.avghumidity}` + "&percnt;";
104 Day1Wind.innerHTML = `${WeatherData.forecast.forecastday[1].day.maxtemp_c}` + "Km/h";
105
106 Day2.innerHTML = `${WeatherData.forecast.forecastday[2].date}`;
107 Day2ConditionBox.innerHTML = `

Condition<span>${WeatherData.forecast.forecastday[2].day.condition.text}</span> </p>


108 `
109 Day2Temperature.innerHTML = `${WeatherData.forecast.forecastday[2].day.avgtemp_c}` + "&deg;C" ;
110 Day2Humidity.innerHTML = `${WeatherData.forecast.forecastday[2].day.avghumidity}` + "&percnt;";
111 Day2Wind.innerHTML = `${WeatherData.forecast.forecastday[2].day.maxtemp_c}` + "Km/h";
112
113 Day3.innerHTML = `${WeatherData.forecast.forecastday[3].date}`;
114 Day3ConditionBox.innerHTML = `

Condition<span>${WeatherData.forecast.forecastday[3].day.condition.text}</span> </p>


115 `
116 Day3Temperature.innerHTML = `${WeatherData.forecast.forecastday[3].day.avgtemp_c}` + "&deg;C" ;
117 Day3Humidity.innerHTML = `${WeatherData.forecast.forecastday[3].day.avghumidity}` + "&percnt;";
118 Day3Wind.innerHTML = `${WeatherData.forecast.forecastday[3].day.maxtemp_c}` + "Km/h";
119
120 Day4.innerHTML = `${WeatherData.forecast.forecastday[4].date}`;
121 Day4ConditionBox.innerHTML = `

Condition<span>${WeatherData.forecast.forecastday[4].day.condition.text}</span> </p>


122 `
123 Day4Temperature.innerHTML = `${WeatherData.forecast.forecastday[4].day.avgtemp_c}` + "&deg;C" ;
124 Day4Humidity.innerHTML = `${WeatherData.forecast.forecastday[4].day.avghumidity}` + "&percnt;";
125 Day4Wind.innerHTML = `${WeatherData.forecast.forecastday[4].day.maxtemp_c}` + "Km/h";
126
127 Day5.innerHTML = `${WeatherData.forecast.forecastday[5].date}`;
128 Day5ConditionBox.innerHTML = `

Condition<span>${WeatherData.forecast.forecastday[5].day.condition.text}</span> </p>


129 `
130 Day5Temperature.innerHTML = `${WeatherData.forecast.forecastday[5].day.avgtemp_c}` + "&deg;C" ;

```

```

131     Day5Humidity.innerHTML = `${WeatherData.forecast.forecastday[5].day.avghumidity}` + "&percnt;";
132     Day5Wind.innerHTML = `${WeatherData.forecast.forecastday[5].day.maxtemp_c}` + "Km/h";
133
134
135 };
136
137 let SystemDate = new Date();
138 CurrentDate.innerHTML = SystemDate.getDate()+"/"+ (SystemDate.getMonth()+1) +"/"+ SystemDate.getFullYear();
139 function startTime() {
140     const today = new Date();
141     let h = today.getHours();
142     let m = today.getMinutes();
143     let s = today.getSeconds();
144     m = checkTime(m);
145     s = checkTime(s);
146     CurrentTime.innerHTML = h + ":" + m + ":" + s;
147     setTimeout(startTime, 1000);
148 }
149 function checkTime(i) {
150     if (i < 10) {
151         i = "0" + i
152     }
153     return i;
154 }
155
156 function HideErrorMsg() {
157     setTimeout(() => {
158         ErrorMsg.style.opacity = 0;
159     }, 5000);
160 }
161 }

```
