

WD -MAJOR PROJECT

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Domain: Web Development


Batch: March 2023

ABOUT THE WEBSITE

This is a Weather and Weather forecast web application, which made with HTML, CSS, JavaScript and Weather API(www.home.openweathermap.org). This Website shows the current weather information and next 4 days weather forecast of the place you search. By default, the location is set to "Delhi". You can search your place by entering the name of your place in the search box and then click on the Search button. If the place you entered is valid, it will show the weather details and forecast for the next 4 days, but if you enter an invalid place or if the place is not found then the previous location weather details will continue to show on the screen.


WEBSITE SCREENSHOT :

WEATHER APP

WeatherForecast 

Enter city name

Nedumangād, IN

 **30 °C**

Heavy Intensity Rain

Upcoming Forecast

11:30 Pm	28 °C / 25 °C	Light Rain
2:30 Am	26 °C / 24 °C	Broken Clouds
5:30 Am	24 °C / 24 °C	Overcast Clouds
8:30 Am	27 °C / 27 °C	Overcast Clouds
11:30 Am	31 °C / 31 °C	Overcast Clouds

Next 4 Days Forecast

Mon May 08 2023	Tue May 09 2023	Wed May 10 2023	Thu May 11 2023
25 °C / 25 °C	25 °C / 25 °C	25 °C / 25 °C	26 °C / 26 °C
Overcast Clouds	Overcast Clouds	Light Rain	Light Rain

Designed And Developed By **Aaditya Raj Anand**

31°C Mostly cloudy

Search

ENG IN 09:41 PM 07-05-2023

SOURCE CODE LINK

GitHub Link :

<https://github.com/Aadityatheperfect1/Weather-Forecast-App.git>

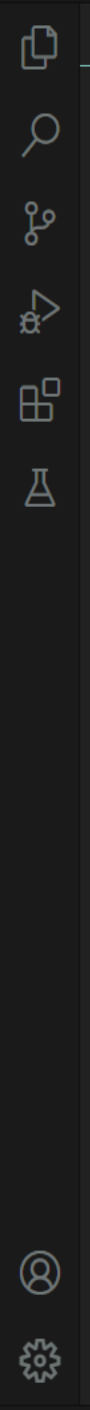
WEBSITE LINK

<https://aadityatheperfect1.github.io/Weather-Forecast-App/>

SOURCE CODE

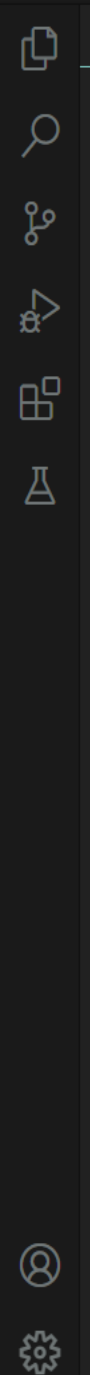
Index.html

```
index.html X weather.css JS weather.js
webdev > Weather_Forecast > index.html > html > body > header > div.App_name
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4    <meta charset="UTF-8">
5    <meta http-equiv="X-UA-Compatible" content="IE=edge">
6    <meta name="viewport" content="width=device-width, initial-scale=1.0">
7    <title>WEATHER APP</title>
8    <link rel="stylesheet" href="weather.css">
9    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.1.2/css/all.min.css" />
10 </head>
11 <body>
12   <header>
13     <div class="App_name" style="position: relative; left:75px;">
14       <h1>WEATHER APP</h1>
15     </div>
16     <div class="App-Logo" style="position: relative; left:390px;">
17       <p id="App_Name">Weather<span>Forecast</span></p>
18       
19     </div>
20     <div style="position: relative; left:400px;">
21       <input type="text" name="" id="input" placeholder="Enter city name">
22       <button id="search" onclick="searchByCity()">Search</button></input>
23     </div>
24   </header>
25   <main style="margin-top: 70px;">
26     <div class="weather">
27       <h2 id="city">Delhi,IN</h2>
28       <div class="temp-box">
29         
30         <p id="temperature">26 °C</p>
31       </div>
32       <span id="clouds">Broken Clouds</span>
33     </div>
34     <div class="divider1"></div>
35
36     <div class="forecsth">
37       <p class="cast-header">Upcoming forecast</p>
```



webdev > Weather_Forecast > index.html > html > body > header > div.App_name

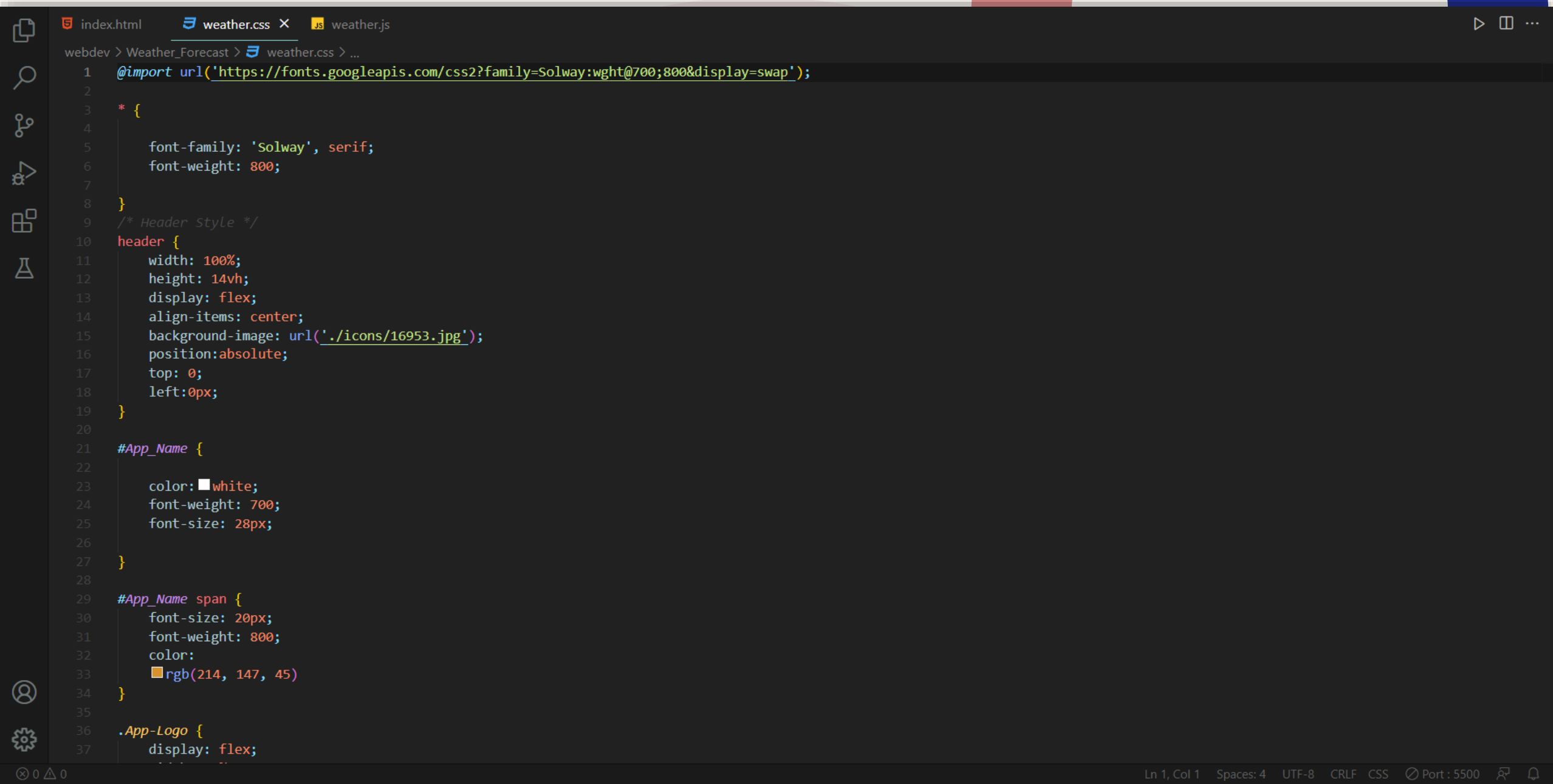
```
38 <div class="templist">
39
40     <div class="next">
41         <div>
42             <p class="time">8:30 PM</p>
43             <p>29 °C / 29 °C</p>
44         </div>
45         <p class="desc">Light Rain</p>
46     </div>
47
48     <div class="next">
49         <div>
50             <p class="time">8:30 PM</p>
51             <p>29 °C / 29 °C</p>
52         </div>
53         <p class="desc">Light Rain</p>
54     </div>
55
56     <div class="next">
57         <div>
58             <p class="time">8:30 PM</p>
59             <p>29 °C / 29 °C</p>
60         </div>
61         <p class="desc">Light Rain</p>
62     </div>
63
64     <div class="next">
65         <div>
66             <p class="time">8:30 PM</p>
67             <p>29 °C / 29 °C</p>
68         </div>
69         <p class="desc">Light Rain</p>
70     </div>
71
72     <div class="next">
73         <div>
74             <p class="time">8:30 PM</p>
```



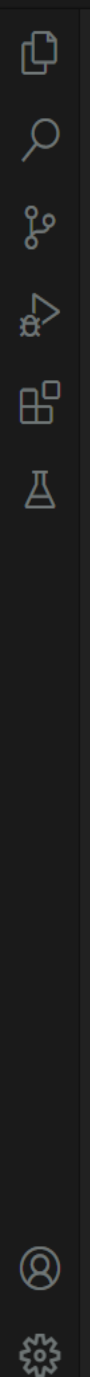
webdev > Weather_Forecast > index.html > html > body > header > div.App_name

```
75         <p>29 °C / 29 °C</p>
76     </div>
77     <p class="desc">Light Rain</p>
78 </div>
79
80 </div>
81 </div>
82 </main>
83
84 <div class="forecstD">
85     <div class="divider2"></div>
86     <p class="cast-header">Next 4 days forecast</p>
87     <div class="weekF">
88
89         <div class="dayF">
90             <p class="date">Sun Jul 03 2022</p>
91             <p>31 °C / 31 °C</p>
92             <p class="desc">Overcast Clouds</p>
93         </div>
94
95         <div class="dayF">
96             <p class="date">Sun Jul 03 2022</p>
97             <p>31 °C / 31 °C</p>
98             <p class="desc">Overcast Clouds</p>
99         </div>
100
101         <div class="dayF">
102             <p class="date">Sun Jul 03 2022</p>
103             <p>31 °C / 31 °C</p>
104             <p class="desc">Overcast Clouds</p>
105         </div>
106
107         <div class="dayF">
108             <p class="date">Sun Jul 03 2022</p>
109             <p>31 °C / 31 °C</p>
110             <p class="desc">Overcast Clouds</p>
111         </div>
```

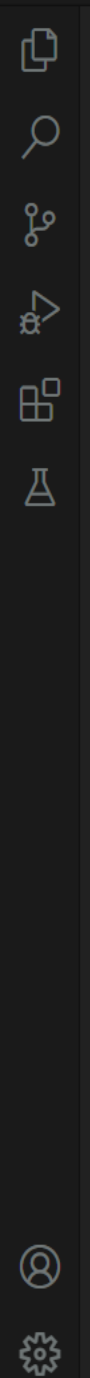

Weather.css



```
1  @import url('https://fonts.googleapis.com/css2?family=Solway:wght@700;800&display=swap');
2
3  * {
4
5      font-family: 'Solway', serif;
6      font-weight: 800;
7
8  }
9  /* Header Style */
10 header {
11     width: 100%;
12     height: 14vh;
13     display: flex;
14     align-items: center;
15     background-image: url('./icons/16953.jpg');
16     position: absolute;
17     top: 0;
18     left: 0px;
19 }
20
21 #App_Name {
22
23     color: white;
24     font-weight: 700;
25     font-size: 28px;
26
27 }
28
29 #App_Name span {
30     font-size: 20px;
31     font-weight: 800;
32     color:
33     rgb(214, 147, 45)
34 }
35
36 .App-Logo {
37     display: flex;
```



```
36  .App-Logo {
37      display: flex;
38      width: 30%;
39      height: 100%;
40      align-items: center;
41  }
42
43  .App_Icon {
44      width: 40px;
45  }
46  html{
47      height: 100%;
48  }
49  h1{
50      text-align: center;
51  }
52  body{
53      background: whitesmoke;
54      padding: 1rem 5rem;
55      font-family: 'Roboto', sans-serif;
56      text-transform: capitalize;
57      background-image: url('./icons/Cloudy-Bg.svg');
58      background-size: cover;
59      background-repeat: no-repeat;
60  }
61
62  .App_name{
63      display: flex;
64      justify-content: space-between;
65      align-items: center;
66      position: relative;
67  }
68  .App_name h1{
69      font-family: 'Solway', serif;
70      font-weight: 700;
71      color: rgb(214, 147, 45);
72      text-decoration: underline;
```

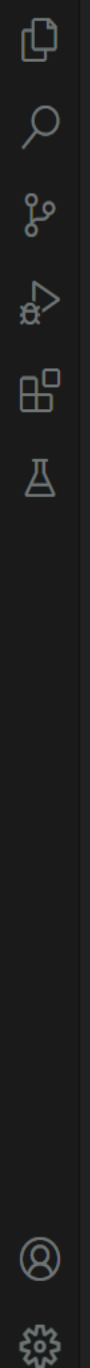


webdev > Weather_Forecast > weather.css > ...

```
73  
74 }  
75 #input{  
76     font-size: 18px;  
77     padding: 5px 10px;  
78     outline: none;  
79     border: none;  
80     border-radius: 15px;  
81     background: ■aliceblue;  
82 }  
83 #search{  
84     background: none;  
85     padding: 5px 20px;  
86     color: ■aliceblue;  
87     outline: none;  
88     background: ■cadetblue;  
89     font-size: 17px;  
90     border-radius: 15px;  
91     cursor: pointer;  
92     border: none;  
93 }  
94 .weather{  
95     text-align: center;  
96     color: ■aliceblue;  
97 }  
98  
99 #city{  
100     font-size: 30px;  
101 }  
102  
103 .weather img{  
104     width: 90px;  
105     height: 80px;  
106  
107 }  
108 #temperature{  
109     font-size: 50px;
```

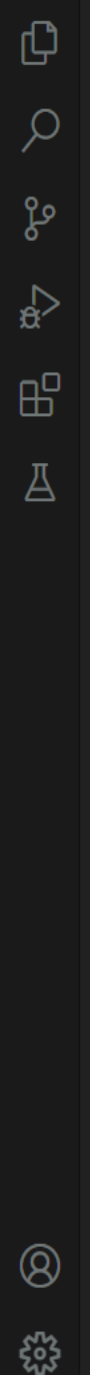
webdev > Weather_Forecast > weather.css > ...

```
108 #temperature{
109     font-size: 50px;
110     margin: 0;
111     margin-left: 30px;
112     margin-bottom: 10px;
113 }
114 .temp-box{
115     display: flex;
116     align-items: center;
117     justify-content: center;
118     margin: 30px 0;
119 }
120 #clouds{
121     font-size: 20px;
122     background: rgba(153, 205, 50, 0.778);
123     padding: 2px 20px;
124     border-radius: 15px;
125 }
126 main{
127     display: grid;
128     grid-column-gap: 25px;
129     grid-template-columns: 1fr 5px 1fr;
130     align-items: center;
131     margin: 0 50px;
132     color: white;
133 }
134 .next{
135     display: flex;
136     justify-content: space-between;
137     align-items: center;
138     margin: 10px 0;
139 }
140 .next p,.next h3{
141     margin: 3px 0;
142 }
143 .forecstD{
144     margin: 20px 50px;
```



webdev > Weather_Forecast > weather.css > ...

```
143 .forecstD{
144     margin: 20px 50px;
145     color: ■aliceblue;
146 }
147 .weekF{
148     display: grid;
149     grid-template-columns: repeat(4,1fr);
150 }
151 .cast-header{
152     color: ■aliceblue;
153     background: ■rgba(254, 189, 132, 0.539);
154     width: max-content;
155     padding: 5px 15px;
156     border-radius: 20px;
157     font-size: 18px;
158     margin-bottom: 5px;
159 }
160 .divider1,.divider2{
161     background: ■rgba(254, 189, 132, 0.539);
162     height: 200px;
163     border-radius: 5px;
164 }
165 .divider2{
166     height: 5px;
167     width: 30%;
168     margin: 0 auto;
169 }
170 .time,.date{
171     color: ■rgb(254, 189, 132);
172 }
173 .desc{
174     color: ■rgb(196, 255, 77);
175 }
176
177 footer {
178     width: 100%;
179     height:9vh;
```



webdev > Weather_Forecast > weather.css > ...

```
177 footer {
178     width: 100%;
179     height: 9vh;
180     display: flex;
181     position: fixed;
182     left: 0px;
183     bottom: 0px;
184     flex-direction: row;
185     justify-content: center;
186     align-items: center;
187     background-image: url('./icons/16953.jpg');
188 }
189
190 footer .App-Logo {
191     display: flex;
192     width: 30%;
193     height: 100%;
194     align-items: center;
195 }
196
197 footer .DeveloperInfo {
198     color: white;
199     width: 50%;
200     height: 100%;
201     display: flex;
202     flex-direction: row;
203     align-items: center;
204     justify-content: center;
205 }
206
207 footer .DeveloperInfo #Name {
208     color:
209     rgb(214, 147, 45);
210     font-size: 20px;
211 }
```

Weather.js

index.html weather.css weather.js X

webdev > Weather_Forecast > weather.js > weatherReport > then() callback

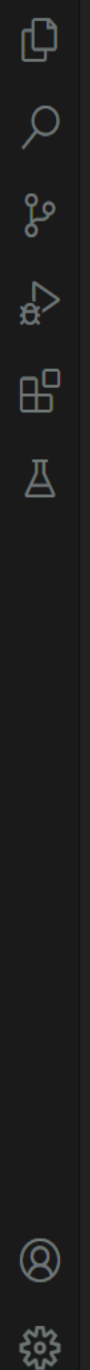
```
1  const apikey="5a20159e465c9e71ddec8a066499b1a";
2  window.addEventListener("load",()=>{
3      if(navigator.geolocation){
4          navigator.geolocation.getCurrentPosition((position)=>{
5              let lon= position.coords.longitude;
6              let lat= position.coords.latitude;
7              const url= `http://api.openweathermap.org/data/2.5/weather?lat=${lat}&` + `lon=${lon}&appid=${apikey}`;
8
9
10             fetch(url).then((res)=>{
11                 return res.json();
12             }).then((data)=>{
13                 console.log(data);
14                 console.log(new Date().getTime())
15                 var dat= new Date(data.dt)
16                 console.log(dat.toLocaleString(undefined,'Asia/Kolkata'))
17                 console.log(new Date().getMinutes())
18                 weatherReport(data);
19             })
20         })
21     }
22 })
23
24
25 function searchByCity(){
26     var place= document.getElementById('input').value;
27     var urlsearch= `http://api.openweathermap.org/data/2.5/weather?q=${place}&` + `appid=${apikey}`;
28
29     fetch(urlsearch).then((res)=>{
30         return res.json();
31     }).then((data)=>{
32         console.log(data);
33         weatherReport(data);
34     })
35     document.getElementById('input').value='';
36 }
37
```

```
37
38 function weatherReport(data){
39
40     var urlcast= `http://api.openweathermap.org/data/2.5/forecast?q=${data.name}&` + `appid=${apikey}`;
41
42     fetch(urlcast).then((res)=>{
43         return res.json();
44     }).then((forecast)=>[
45         console.log(forecast.city);
46         hourForecast(forecast);
47         dayForecast(forecast)
48
49         console.log(data);
50         document.getElementById('city').innerText= data.name + ', '+data.sys.country;
51         console.log(data.name,data.sys.country);
52
53         console.log(Math.floor(data.main.temp-273));
54         document.getElementById('temperature').innerText= Math.floor(data.main.temp-273)+ ' °C';
55
56         document.getElementById('clouds').innerText= data.weather[0].description;
57         console.log(data.weather[0].description)
58
59         const { description, id } = data.weather[0];
60         let iconurl;
61         if (id == 800) {
62             iconurl = "icons/clear.svg";
63         } else if (id >= 200 && id <= 232) {
64             iconurl = "icons/storm.svg";
65         } else if (id >= 600 && id <= 622) {
66             iconurl = "icons/snow.svg";
67         } else if (id >= 701 && id <= 781) {
68             iconurl = "icons/haze.svg";
69         } else if (id >= 801 && id <= 804) {
70             iconurl = "icons/cloud.svg";
71         } else if ((id >= 500 && id <= 531) || (id >= 300 && id <= 321)) {
72             iconurl = "icons/rain.svg";
73         }
74         document.getElementById('img').src=iconurl
```


index.html weather.css weather.js X

webdev > Weather_Forecast > JS weather.js > weatherReport > then() callback

```
73     }
74     document.getElementById('img').src=iconurl
75 })
76
77 }
78
79 function hourForecast(forecast){
80     document.querySelector('.templist').innerHTML=''
81     for (let i = 0; i < 5; i++) {
82
83         var date= new Date(forecast.list[i].dt*1000)
84         console.log((date.toLocaleTimeString(undefined,'Asia/Kolkata')).replace(':00',''))
85
86         let hourR=document.createElement('div');
87         hourR.setAttribute('class','next');
88
89         let div= document.createElement('div');
90         let time= document.createElement('p');
91         time.setAttribute('class','time')
92         time.innerText= (date.toLocaleTimeString(undefined,'Asia/Kolkata')).replace(':00','');
93
94         let temp= document.createElement('p');
95         temp.innerText= Math.floor((forecast.list[i].main.temp_max - 273))+ ' °C' + ' / ' + Math.floor((forecast.list[i].main.temp_min - 273))+ ' °C';
96
97         div.appendChild(time)
98         div.appendChild(temp)
99
100        let desc= document.createElement('p');
101        desc.setAttribute('class','desc')
102        desc.innerText= forecast.list[i].weather[0].description;
103
104        hourR.appendChild(div);
105        hourR.appendChild(desc)
106        document.querySelector('.templist').appendChild(hourR);
107    }
108 }
109
```



webdev > Weather_Forecast > JS weather.js > weatherReport > then() callback

```
104     hourR.appendChild(div);
105     hourR.appendChild(desc)
106     document.querySelector('.templist').appendChild(hourR);
107 }
108 }
109
110 function dayForecast(forecast){
111     document.querySelector('.weekF').innerHTML=''
112     for (let i = 8; i < forecast.list.length; i+=8) {
113         console.log(forecast.list[i]);
114         let div= document.createElement('div');
115         div.setAttribute('class','dayF');
116
117         let day= document.createElement('p');
118         day.setAttribute('class','date')
119         day.innerText= new Date(forecast.list[i].dt*1000).toLocaleDateString(undefined,'Asia/Kolkata');
120         div.appendChild(day);
121
122         let temp= document.createElement('p');
123         temp.innerText= Math.floor((forecast.list[i].main.temp_max - 273))+ ' °C' + ' / ' + Math.floor((forecast.list[i].main.temp_min - 273))+ ' °C';
124         div.appendChild(temp)
125
126         let description= document.createElement('p');
127         description.setAttribute('class','desc')
128         description.innerText= forecast.list[i].weather[0].description;
129         div.appendChild(description);
130
131         document.querySelector('.weekF').appendChild(div)
132     }
133 }
134
```



THANK YOU

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6200117093