WD-MAJOR-AUGUST

BY: SATISH KUMAR
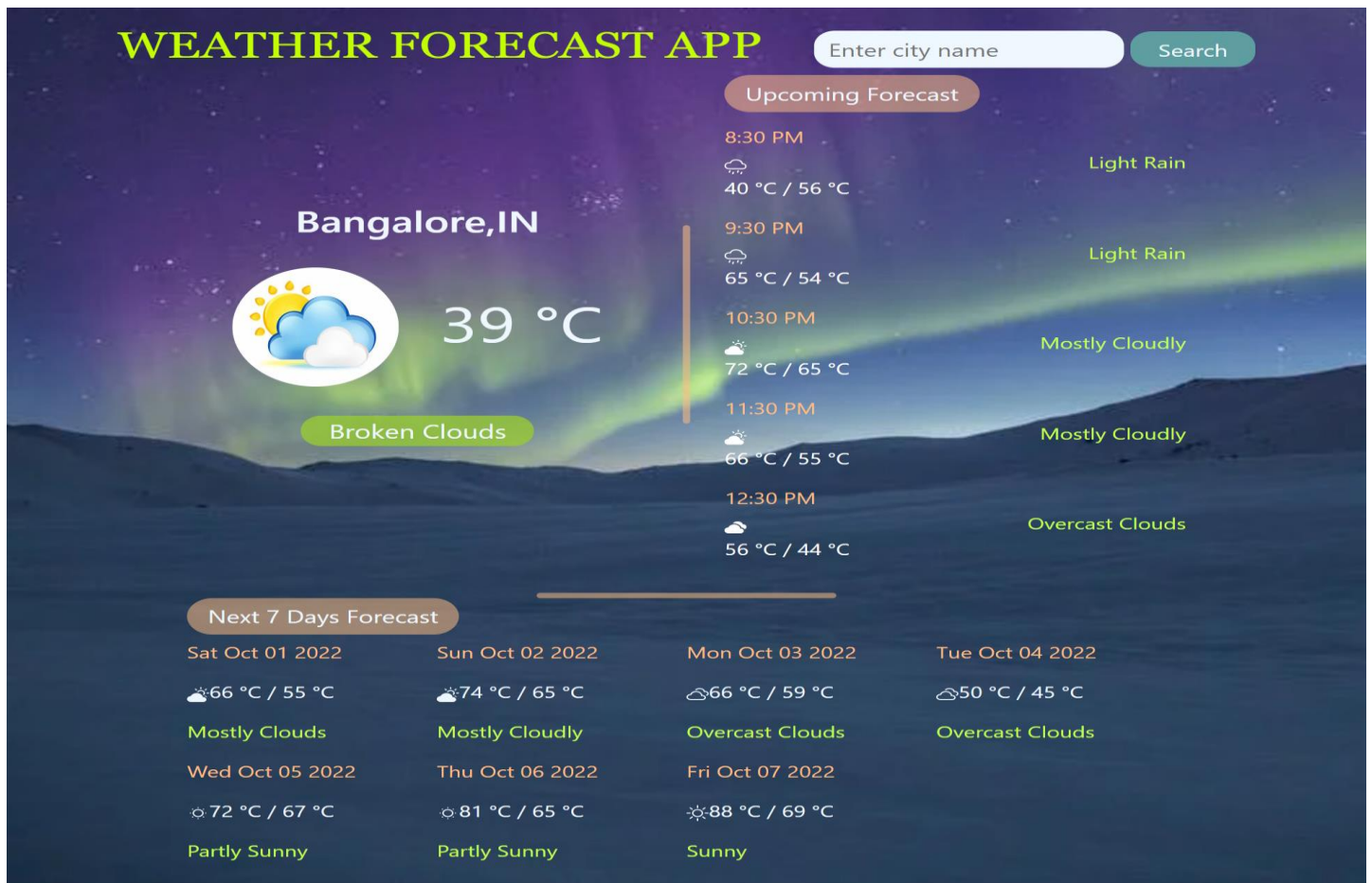
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TOPIC: WEATHER FORECAST APP

1. The Above screenshot shows the interface of Weather Forecast app using Html,Css & Js

2.HTML-

```html
<!DOCTYPE html>

<html lang="en">

<head>

<title>WEATHER APP</title>

<link rel="stylesheet" href="weather.css">

<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0/dist/css/bootstrap.min.css"
rel="stylesheet" >

</head>

<body>

<div class="header">

<h1>WEATHER FORECAST APP</h1>

<div>

<input type="text" name="" id="input" placeholder="Enter city name">

<button id="search" onclick="searchByCity()">Search</button></input>

</div>

</div>

<main>

<div class="weather">

<h2 id="city">Bangalore,IN</h2>

<div class="temp-box">

<img src="weath.jpg" alt="" id="img">

<p id="temperature">39 °C</p>

</div>

<span id="clouds">Broken Clouds</span>

</div>

<div class="divider1"></div>

<div class="forecstH">

<p class="cast-header">Upcoming forecast</p>

<div class="templist">


<div class="next">
```

```html
<div>

<p class="time">8:30 PM</p>

<p><svg xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor"
class="bi bi-cloud-drizzle" viewBox="0 0 16 16">

<path d="M4.158 12.025a.5.5 0 0 1 .316.633l-.5 1.5a.5.5 0 0 1-.948-.316l.5-1.5a.5.5 0 0 1
.632-.317zm6 0a.5.5 0 0 1 .316.633l-.5 1.5a.5.5 0 0 1-.948-.316l.5-1.5a.5.5 0 0 1 .632-
.317zm-3.5 1.5a.5.5 0 0 1 .316.633l-.5 1.5a.5.5 0 0 1-.948-.316l.5-1.5a.5.5 0 0 1 .632-
.317zm6 0a.5.5 0 0 1 .316.633l-.5 1.5a.5.5 0 1 1-.948-.316l.5-1.5a.5.5 0 0 1 .632-.317zm.747-
8.498a5.001 5.001 0 0 0-9.499-1.004A3.5 3.5 0 1 0 3.5 11H13a3 3 0 0 0 .405-5.973zM8.5 2a4 4 0
0 1 3.976 3.555.5.5 0 0 0 .5.445H13a2 2 0 0 1 0 4H3.5a2.5 2.5 0 1 1 .605-4.926.5.5 0 0 0
.596-.329A4.002 4.002 0 0 1 8.5 2z"/>

</svg><br>40 °C / 56 °C</p>

</div>

<p class="desc">Light Rain</p>

</div>

<div class="next">

<div>

<p class="time">9:30 PM</p>

<p><svg xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor"
class="bi bi-cloud-drizzle" viewBox="0 0 16 16">

<path d="M4.158 12.025a.5.5 0 0 1 .316.633l-.5 1.5a.5.5 0 0 1-.948-.316l.5-1.5a.5.5 0 0 1
.632-.317zm6 0a.5.5 0 0 1 .316.633l-.5 1.5a.5.5 0 0 1-.948-.316l.5-1.5a.5.5 0 0 1 .632-
.317zm-3.5 1.5a.5.5 0 0 1 .316.633l-.5 1.5a.5.5 0 0 1-.948-.316l.5-1.5a.5.5 0 0 1 .632-
.317zm6 0a.5.5 0 0 1 .316.633l-.5 1.5a.5.5 0 1 1-.948-.316l.5-1.5a.5.5 0 0 1 .632-.317zm.747-
8.498a5.001 5.001 0 0 0-9.499-1.004A3.5 3.5 0 1 0 3.5 11H13a3 3 0 0 0 .405-5.973zM8.5 2a4 4 0
0 1 3.976 3.555.5.5 0 0 0 .5.445H13a2 2 0 0 1 0 4H3.5a2.5 2.5 0 1 1 .605-4.926.5.5 0 0 0
.596-.329A4.002 4.002 0 0 1 8.5 2z"/>

</svg><br>65 °C / 54 °C</p>

</div>

<p class="desc">Light Rain</p>

</div>

<div class="next">

<div>

<p class="time">10:30 PM</p>

<p><svg xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor"
class="bi bi-cloud-sun-fill" viewBox="0 0 16 16">

<path d="M11.473 11a4.5 4.5 0 0 0-8.72-.99A3 3 0 0 0 3 16h8.5a2.5 2.5 0 0 0 0-5h-.027z"/>
```

```html
<path d="M10.5 1.5a.5.5 0 0 0-1 0v1a.5.5 0 0 0 1 0v-1zm3.743 1.964a.5.5 0 1 0-.707-.707l-
.708.707a.5.5 0 0 0 .708.708l.707-.708zm-7.779-.707a.5.5 0 0 0-.707.707l.707.708a.5.5 0 1 0
.708-.708l-.708-.707zm1.734 3.374a2 2 0 1 1 3.296 2.198c.199.281.372.582.516.898a3 3 0 1 0-
4.84-3.225c.352.011.696.055 1.028.129zm4.484 4.074c.6.215 1.125.59 1.522 1.072a.5.5 0 0 0
.039-.742l-.707-.707a.5.5 0 0 0-.854.377zM14.5 6.5a.5.5 0 0 0 0 1h1a.5.5 0 0 0 0-1h-1z"/>

</svg><br>72 °C / 65 °C</p>

</div>

<p class="desc">Mostly Cloudly</p>

</div>

<div class="next">

<div>

<p class="time">11:30 PM</p>

<p><svg xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor"
class="bi bi-cloud-sun-fill" viewBox="0 0 16 16">

<path d="M11.473 11a4.5 4.5 0 0 0-8.72-.99A3 3 0 0 0 3 16h8.5a2.5 2.5 0 0 0-5h-.027z"/>

<path d="M10.5 1.5a.5.5 0 0 0-1 0v1a.5.5 0 0 0 1 0v-1zm3.743 1.964a.5.5 0 1 0-.707-.707l-
.708.707a.5.5 0 0 0 .708.708l.707-.708zm-7.779-.707a.5.5 0 0 0-.707.707l.707.708a.5.5 0 1 0
.708-.708l-.708-.707zm1.734 3.374a2 2 0 1 1 3.296 2.198c.199.281.372.582.516.898a3 3 0 1 0-
4.84-3.225c.352.011.696.055 1.028.129zm4.484 4.074c.6.215 1.125.59 1.522 1.072a.5.5 0 0 0
.039-.742l-.707-.707a.5.5 0 0 0-.854.377zM14.5 6.5a.5.5 0 0 0 0 1h1a.5.5 0 0 0 0-1h-1z"/>

</svg><br>66 °C / 55 °C</p>

</div>

<p class="desc">Mostly Cloudly</p>

</div>

<div class="next">

<div>

<p class="time">12:30 PM</p>

<p><svg xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor"
class="bi bi-clouds-fill" viewBox="0 0 16 16">

<path d="M11.473 9a4.5 4.5 0 0 0-8.72-.99A3 3 0 0 0 3 14h8.5a2.5 2.5 0 1 0-.027-5z"/>

<path d="M14.544 9.772a3.506 3.506 0 0 0-2.225-1.676 5.502 5.502 0 0 0-6.337-4.002 4.002
4.002 0 0 1 7.392.91 2.5 2.5 0 0 1 1.17 4.769z"/>

</svg><br>56 °C / 44  °C</p>

</div>

<p class="desc">Overcast Clouds</p>

</div>
```

```html
</div>

</div>

</main>

<div class="forecstD">

<div class="divider2"></div>

<p class="cast-header"> Next 7 days forecast</p>

<div class="weekF">

<div class="dayF">

<p class="date">Sat Oct 01 2022</p>

<p><svg xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor"
class="bi bi-cloud-sun-fill" viewBox="0 0 16 16">

<path d="M11.473 11a4.5 4.5 0 0 0-8.72-.99A3 3 0 0 0 3 16h8.5a2.5 2.5 0 0 0 0-5h-.027z"/>

<path d="M10.5 1.5a.5.5 0 0 0-1 0v1a.5.5 0 0 0 1 0v-1zm3.743 1.964a.5.5 0 1 0-.707-.707l-
.708.707a.5.5 0 0 0 .708.708l.707-.708zm-7.779-.707a.5.5 0 0 0-.707.707l.707.708a.5.5 0 1 0
.708-.708l-.708-.707zm1.734 3.374a2 2 0 1 1 3.296 2.198c.199.281.372.582.516.898a3 3 0 1 0-
4.84-3.225c.352.011.696.055 1.028.129zm4.484 4.074c.6.215 1.125.59 1.522 1.072a.5.5 0 0 0
.039-.742l-.707-.707a.5.5 0 0 0-.854.377zM14.5 6.5a.5.5 0 0 0 0 1h1a.5.5 0 0 0 0-1h-1z"/>

</svg>66 °C / 55 °C</p>

<p class="desc">Mostly Clouds</p>

</div>

<div class="dayF">

<p class="date">Sun Oct 02 2022</p>

<p><svg xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor"
class="bi bi-cloud-sun-fill" viewBox="0 0 16 16">

<path d="M11.473 11a4.5 4.5 0 0 0-8.72-.99A3 3 0 0 0 3 16h8.5a2.5 2.5 0 0 0 0-5h-.027z"/>

<path d="M10.5 1.5a.5.5 0 0 0-1 0v1a.5.5 0 0 0 1 0v-1zm3.743 1.964a.5.5 0 1 0-.707-.707l-
.708.707a.5.5 0 0 0 .708.708l.707-.708zm-7.779-.707a.5.5 0 0 0-.707.707l.707.708a.5.5 0 1 0
.708-.708l-.708-.707zm1.734 3.374a2 2 0 1 1 3.296 2.198c.199.281.372.582.516.898a3 3 0 1 0-
4.84-3.225c.352.011.696.055 1.028.129zm4.484 4.074c.6.215 1.125.59 1.522 1.072a.5.5 0 0 0
.039-.742l-.707-.707a.5.5 0 0 0-.854.377zM14.5 6.5a.5.5 0 0 0 0 1h1a.5.5 0 0 0 0-1h-1z"/>

</svg>74 °C / 65 °C</p>

<p class="desc">Mostly Cloudly</p>

</div>


<div class="dayF">
```

```html
<p class="date">Mon Oct 03 2022</p>

<p><svg xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor"
class="bi bi-clouds" viewBox="0 0 16 16">

<path d="M16 7.5a2.5 2.5 0 0 1-1.456 2.272 3.513 3.513 0 0 0-.65-.824 1.5 1.5 0 0 0-.789-
2.896.5.5 0 0 1-.627-.421 3 3 0 0 0-5.22-1.625 5.587 5.587 0 0 0-1.276.088 4.002 4.002 0 0 1
7.392.91A2.5 2.5 0 0 1 16 7.5z"/>

<path d="M7 5a4.5 4.5 0 0 1 4.473 4h.027a2.5 2.5 0 0 1 0 5H3a3 3 0 0 1-.247-5.99A4.502 4.502
0 0 1 7 5zm3.5 4.5a3.5 3.5 0 0 0-6.89-.873.5.5 0 0 1-.51.375A2 2 0 1 0 3 13h8.5a1.5 1.5 0 1
0-.376-2.953.5.5 0 0 1-.624-.492V9.5z"/>

</svg>66 °C / 59 °C</p>

<p class="desc">Overcast Clouds</p>

</div>

<div class="dayF">

<p class="date">Tue Oct 04 2022</p>

<p><svg xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor"
class="bi bi-clouds" viewBox="0 0 16 16">

<path d="M16 7.5a2.5 2.5 0 0 1-1.456 2.272 3.513 3.513 0 0 0-.65-.824 1.5 1.5 0 0 0-.789-
2.896.5.5 0 0 1-.627-.421 3 3 0 0 0-5.22-1.625 5.587 5.587 0 0 0-1.276.088 4.002 4.002 0 0 1
7.392.91A2.5 2.5 0 0 1 16 7.5z"/>

<path d="M7 5a4.5 4.5 0 0 1 4.473 4h.027a2.5 2.5 0 0 1 0 5H3a3 3 0 0 1-.247-5.99A4.502 4.502
0 0 1 7 5zm3.5 4.5a3.5 3.5 0 0 0-6.89-.873.5.5 0 0 1-.51.375A2 2 0 1 0 3 13h8.5a1.5 1.5 0 1
0-.376-2.953.5.5 0 0 1-.624-.492V9.5z"/>

</svg>50 °C / 45 °C</p>

<p class="desc">Overcast Clouds</p>

</div>

<div class="dayF">

<p class="date">Wed Oct 05 2022</p>

<p><svg xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor"
class="bi bi-brightness-low" viewBox="0 0 16 16">

<path d="M8 11a3 3 0 1 1 0-6 3 3 0 0 1 0 6zm0 1a4 4 0 1 0 0-8 4 4 0 0 0 0 8zm.5-9.5a.5.5 0 1
1-1 0 .5.5 0 0 1 1 0zm0 11a.5.5 0 1 1-1 0 .5.5 0 0 1 1 0zm5-5a.5.5 0 1 1 0-1 .5.5 0 0 1 0
1zm-11 0a.5.5 0 1 1 0-1 .5.5 0 0 1 0 1zm9.743-4.036a.5.5 0 1 1-.707-.707.5.5 0 0 1
.707.707zm-7.779 7.779a.5.5 0 1 1-.707-.707.5.5 0 0 1 .707.707zm7.072 0a.5.5 0 1 1 .707-
.707.5.5 0 0 1-.707.707zM3.757 4.464a.5.5 0 1 1 .707-.707.5.5 0 0 1-.707.707z"/>

</svg>72 °C / 67 °C</p>

<p class="desc">Partly Sunny</p>

</div>
```

```
<div class="dayF">

<p class="date">Thu Oct 06 2022</p>

<p><svg xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor"
class="bi bi-brightness-low" viewBox="0 0 16 16">

<path d="M8 11a3 3 0 1 1 0-6 3 3 0 0 1 0 6zm0 1a4 4 0 1 0 0-8 4 4 0 0 0 0 8zm.5-9.5a.5.5 0 1
1-1 0 .5.5 0 0 1 1 0zm0 11a.5.5 0 1 1-1 0 .5.5 0 0 1 1 0zm5-5a.5.5 0 1 1 0-1 .5.5 0 0 1 0
1zm-11 0a.5.5 0 1 1 0-1 .5.5 0 0 1 0 1zm9.743-4.036a.5.5 0 1 1-.707-.707.5.5 0 0 1
.707.707zm-7.779 7.779a.5.5 0 1 1-.707-.707.5.5 0 0 1 .707.707zm7.072 0a.5.5 0 1 1 .707-
.707.5.5 0 0 1-.707.707zM3.757 4.464a.5.5 0 1 1 .707-.707.5.5 0 0 1-.707.707z"/>

</svg>81 °C / 65 °C</p>

<p class="desc">Partly Sunny</p>

</div>

<div class="dayF">

<p class="date">Fri Oct 07 2022</p>

<p><svg xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor"
class="bi bi-brightness-high" viewBox="0 0 16 16">

<path d="M8 11a3 3 0 1 1 0-6 3 3 0 0 1 0 6zm0 1a4 4 0 1 0 0-8 4 4 0 0 0 0 8zM8 0a.5.5 0 0 1
.5.5v2a.5.5 0 0 1-1 0v-2A.5.5 0 0 1 8 0zm0 13a.5.5 0 0 1 .5.5v2a.5.5 0 0 1-1 0v-2A.5.5 0 0 1
8 13zm8-5a.5.5 0 0 1-.5.5h-2a.5.5 0 0 1 0-1h2a.5.5 0 0 1 .5.5ZM3 8a.5.5 0 0 1-.5.5h-2a.5.5 0
0 1 0-1h2A.5.5 0 0 1 3 8zm10.657-5.657a.5.5 0 0 1 0 .707l-1.414 1.415a.5.5 0 1 1-.707-
.708l1.414-1.414a.5.5 0 0 1 .707 0zm-9.193 9.193a.5.5 0 0 1 0 .707L3.05 13.657a.5.5 0 0 1-
.707-.707l1.414-1.414a.5.5 0 0 1 .707 0zm9.193 2.121a.5.5 0 0 1-.707 0l-1.414-1.414a.5.5 0 0
1 .707-.707l1.414 1.414a.5.5 0 0 1 0 .707zM4.464 4.465a.5.5 0 0 1-.707 0L2.343 3.05a.5.5 0 1
1 .707-.707l1.414 1.414a.5.5 0 0 1 0 .708z"/>

</svg>88 °C / 69 °C</p>

<p class="desc">Sunny</p>

</div>

</div>

</div>

<script src="/weather.js"></script>

</body>

</html>
```

3.CSS-

```css
@import url('https://fonts.googleapis.com/css2?family=Concert+One:wght@300&display=swap');

@import url('https://fonts.googleapis.com/css2?family=Orbitron:wght@700&display=swap');

html{

height: 100%;

}

h1{

text-align: center;

}

body{

background: whitesmoke;

padding: 1rem 5rem;

font-family: 'Roboto', sans-serif;

text-transform: capitalize;

background: url('clouds1.webp');

background-repeat: no-repeat;

background-position: center;

background-size: cover;

}

.header{

display: flex;

justify-content: space-between;

align-items: center;

}

.header h1{

color: rgb(195, 255, 0);

text-decoration: solid;

font-family: Georgia, 'Times New Roman', Times, serif;

}

#input{

font-size: 18px;

padding: 5px 10px;
```

```css
    outline: none;

    border: none;

    border-radius: 15px;

    background: aliceblue;

}

#search{

    background: none;

    padding: 5px 20px;

    color: aliceblue;

    outline: none;

    background: cadetblue;

    font-size: 17px;

    border-radius: 15px;

    cursor: pointer;

    border: none;

}

.weather{

    text-align: center;

    color: aliceblue;

}

#city{

    font-size: 30px;

}

.weather img{

    width: 120px;

    height: 120px;

    border-radius: 50%;

    background: rgba(240, 248, 255, 0.408);

}

#temperature{

    font-size: 50px;

    margin: 0;
```

```css
    margin-left: 30px;

    margin-bottom: 10px;

}

.temp-box{

display: flex;

align-items: center;

justify-content: center;

margin: 30px 0;

}

#clouds{

font-size: 20px;

background: rgba(153, 205, 50, 0.778);

padding: 2px 20px;

border-radius: 15px;

}

main{

display: grid;

grid-column-gap: 25px;

grid-template-columns: 1fr 5px 1fr;

align-items: center;

margin: 0 50px;

color: white;

}

.next{

display: flex;

justify-content: space-between;

align-items: center;

margin: 10px 0;

}

.next p,.next h3{

margin: 3px 0;

}
```

```css
.forecstD{

margin: 20px 50px;

color: aliceblue;

}

.weekF{

display: grid;

grid-template-columns: repeat(4,1fr);

}

.cast-header{

color: aliceblue;

background: rgba(254, 189, 132, 0.539);

width: max-content;

padding: 5px 15px;

border-radius: 20px;

font-size: 18px;

margin-bottom: 5px;

}

.divider1,.divider2{

background: rgba(254, 189, 132, 0.539);

height: 200px;

border-radius: 5px;

}

.divider2{

height: 5px;

width: 30%;

margin: 0 auto;

}

.time,.date{

color: rgb(254, 189, 132);

}  .desc{

color: rgb(196, 255, 77);

}
```

4.JS-

```javascript
const apikey="YOURAPI";

window.addEventListener("load",()=>{

if(navigator.geolocation){

navigator.geolocation.getCurrentPosition((position)=>{

let lon= position.coords.longitude;

let lat= position.coords.latitude;

const url= `http://api.openweathermap.org/data/2.5/weather?lat=${lat}&` +
`lon=${lon}&appid=${apikey}`;

fetch(url).then((res)=>{

return res.json();

}).then((data)=>{

console.log(data);

console.log(new Date().getTime())

var dat= new Date(data.dt)

console.log(dat.toLocaleString(undefined,'Asia/Kolkata'))

console.log(new Date().getMinutes())

weatherReport(data);

})

})

}

})

function searchByCity(){

var place= document.getElementById('input').value;

var urlsearch= `http://api.openweathermap.org/data/2.5/weather?q=${place}&` +
`appid=${apikey}`;

fetch(urlsearch).then((res)=>{

return res.json();

}).then((data)=>{

console.log(data);

weatherReport(data);

})

document.getElementById('input').value='';
```

```javascript
}

function weatherReport(data){

var urlcast= `http://api.openweathermap.org/data/2.5/forecast?q=${data.name}&` +
`appid=${apikey}`;

fetch(urlcast).then((res)=>{

return res.json();

}).then((forecast)=>{

console.log(forecast.city);

hourForecast(forecast);

dayForecast(forecast)

console.log(data);

document.getElementById('city').innerText= data.name + ', '+data.sys.country;

console.log(data.name,data.sys.country);


console.log(Math.floor(data.main.temp-273));

document.getElementById('temperature').innerText= Math.floor(data.main.temp-273)+ ' °C';


document.getElementById('clouds').innerText= data.weather[0].description;

console.log(data.weather[0].description)


let icon1= data.weather[0].icon;

let iconurl= "http://api.openweathermap.org/img/w/"+ icon1 +".png";

document.getElementById('img').src=iconurl

})

}

function hourForecast(forecast){

document.querySelector('.templist').innerHTML=''

for (let i = 0; i < 5; i++) {


var date= new Date(forecast.list[i].dt*1000)

console.log((date.toLocaleTimeString(undefined,'Asia/Kolkata')).replace(':00',''))


let hourR=document.createElement('div');
```

```javascript
hourR.setAttribute('class','next');

let div= document.createElement('div');
let time= document.createElement('p');
time.setAttribute('class','time')
time.innerText= (date.toLocaleTimeString(undefined,'Asia/Kolkata')).replace(':00','');

let temp= document.createElement('p');
temp.innerText= Math.floor((forecast.list[i].main.temp_max - 273))+ ' °C' + ' / ' +
Math.floor((forecast.list[i].main.temp_min - 273))+ ' °C';

div.appendChild(time)
div.appendChild(temp)

let desc= document.createElement('p');
desc.setAttribute('class','desc')
desc.innerText= forecast.list[i].weather[0].description;
hourR.appendChild(div);
hourR.appendChild(desc)
document.querySelector('.templist').appendChild(hourR);
}
}
function dayForecast(forecast){
document.querySelector('.weekF').innerHTML=''
for (let i = 8; i < forecast.list.length; i+=8) {
console.log(forecast.list[i]);
let div= document.createElement('div');
div.setAttribute('class','dayF');

let day= document.createElement('p');
day.setAttribute('class','date')
day.innerText= new Date(forecast.list[i].dt*1000).toDateString(undefined,'Asia/Kolkata');
div.appendChild(day);
```

```javascript
let temp= document.createElement('p');

temp.innerText= Math.floor((forecast.list[i].main.temp_max - 273))+ ' °C' + ' / ' +
Math.floor((forecast.list[i].main.temp_min - 273))+ ' °C';

div.appendChild(temp)


let description= document.createElement('p');

description.setAttribute('class','desc')

description.innerText= forecast.list[i].weather[0].description;

div.appendChild(description);

document.querySelector('.weekF').appendChild(div)

}

}
```