WD -MAJOR PROJECT

Name: Aaditya Raj Anand

Domain: Web Development

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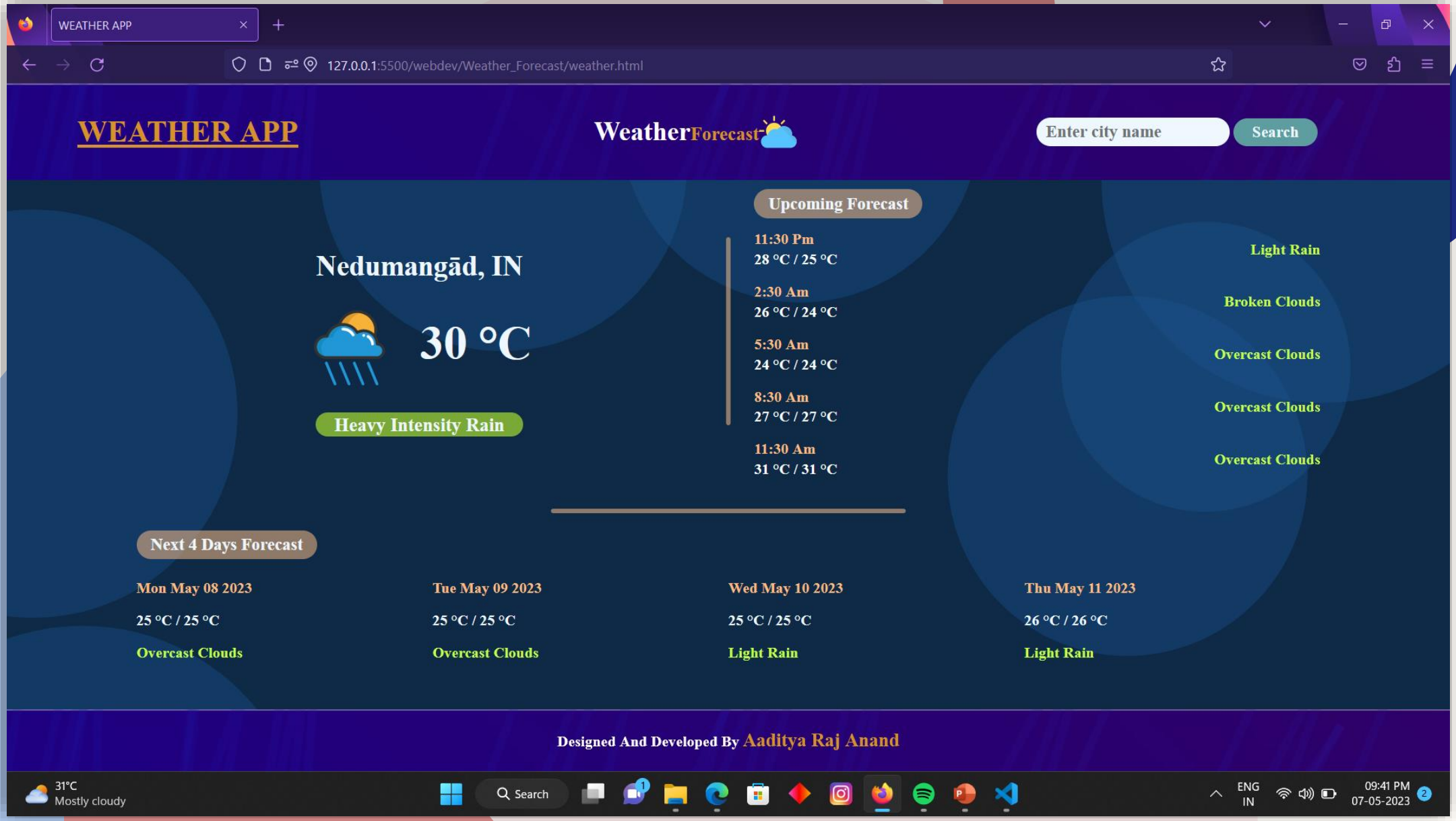
ABOUT THE WEBSITE

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 :



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 | weather.css | weather.js

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

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>WEATHER APP</title>
    <link rel="stylesheet" href="weather.css">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.1.2/css/all.min.css" />
</head>
<body>
    <header>
        <div class="App_name" style="position: relative; left:75px;">
            <h1>WEATHER APP</h1>
        </div>
        <div class="App-Logo" style="position: relative; left:390px;">
            <p id="App_Name">Weather<span>Forecast</span></p>
            <img src="./icons/Icon.svg" alt="App-icon" class="App_Icon">
        </div>
        <div style="position: relative; left:400px;">
            <input type="text" name="" id="input" placeholder="Enter city name">
            <button id="search" onclick="searchByCity()">Search</button></input>
        </div>
    </header>
    <main style="margin-top: 70px;">
        <div class="weather">
            <h2 id="city">Delhi,IN</h2>
            <div class="temp-box">
                <img src="./icons/weathericon.png" alt="" id="img">
                <p id="temperature">26 °C</p>
            </div>
            <span id="clouds">Broken Clouds</span>
        </div>
        <div class="divider1"></div>

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

Ln 13, Col 70 Spaces: 4 UTF-8 CRLF HTML Port : 5500

index.html × weather.css weather.js

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

```html
<div class="templist">

    <div class="next">
        <div>
            <p class="time">8:30 PM</p>
            <p>29 °C / 29 °C</p>
        </div>
        <p class="desc">Light Rain</p>
    </div>

    <div class="next">
        <div>
            <p class="time">8:30 PM</p>
            <p>29 °C / 29 °C</p>
        </div>
        <p class="desc">Light Rain</p>
    </div>

    <div class="next">
        <div>
            <p class="time">8:30 PM</p>
            <p>29 °C / 29 °C</p>
        </div>
        <p class="desc">Light Rain</p>
    </div>

    <div class="next">
        <div>
            <p class="time">8:30 PM</p>
            <p>29 °C / 29 °C</p>
        </div>
        <p class="desc">Light Rain</p>
    </div>

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

⊗ 0 ⚠ 0 Ln 13, Col 70 Spaces: 4 UTF-8 CRLF HTML Port : 5500

index.html × weather.css weather.js

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

```html
                        <p>29 °C / 29 °C</p>
                    </div>
                    <p class="desc">Light Rain</p>
                </div>

            </div>
        </div>
    </main>

    <div class="forecstD">
        <div class="divider2"></div>
        <p class="cast-header"> Next 4 days forecast</p>
        <div class="weekF">

            <div class="dayF">
                <p class="date">Sun Jul 03 2022</p>
                <p>31 °C / 31 °C</p>
                <p class="desc">Overcast Clouds</p>
            </div>

            <div class="dayF">
                <p class="date">Sun Jul 03 2022</p>
                <p>31 °C / 31 °C</p>
                <p class="desc">Overcast Clouds</p>
            </div>

            <div class="dayF">
                <p class="date">Sun Jul 03 2022</p>
                <p>31 °C / 31 °C</p>
                <p class="desc">Overcast Clouds</p>
            </div>

            <div class="dayF">
                <p class="date">Sun Jul 03 2022</p>
                <p>31 °C / 31 °C</p>
                <p class="desc">Overcast Clouds</p>
            </div>
```

⊗ 0 ⚠ 0 Ln 13, Col 70 Spaces: 4 UTF-8 CRLF HTML Port : 5500

```
            </div>
        </div>
        <footer>
            <div class="DeveloperInfo" align="center">
                <p>Designed and developed by <span id="Name">Aaditya Raj Anand</span></p>
            </div>
        </footer>
        <script src="weather.js"></script>
    </body>
    </html>
```

Weather.css

index.html | weather.css | weather.js

webdev > Weather_Forecast > weather.css > ...

```css
@import url('https://fonts.googleapis.com/css2?family=Solway:wght@700;800&display=swap');

* {

    font-family: 'Solway', serif;
    font-weight: 800;

}
/* Header Style */
header {
    width: 100%;
    height: 14vh;
    display: flex;
    align-items: center;
    background-image: url('./icons/16953.jpg');
    position:absolute;
    top: 0;
    left:0px;
}

#App_Name {

    color: white;
    font-weight: 700;
    font-size: 28px;

}

#App_Name span {
    font-size: 20px;
    font-weight: 800;
    color:
    rgb(214, 147, 45)
}

.App-Logo {
    display: flex;
```

Ln 1, Col 1 Spaces: 4 UTF-8 CRLF CSS Port : 5500

```css
.App-Logo {
    display: flex;
    width: 30%;
    height: 100%;
    align-items: center;
}

.App_Icon {
    width: 40px;
}
html{
    height: 100%;
}
h1{
    text-align: center;
}
body{
    background: whitesmoke;
    padding: 1rem 5rem;
    font-family: 'Roboto', sans-serif;
    text-transform: capitalize;
    background-image: url('./icons/Cloudy-Bg.svg');
    background-size: cover;
    background-repeat: no-repeat;

}
.App_name{
    display: flex;
    justify-content: space-between;
    align-items: center;
    position: relative;
}
.App_name h1{
    font-family: 'Solway', serif;
    font-weight: 700;
    color: rgb(214, 147, 45);
    text-decoration: underline;
```

```
}
#input{
    font-size: 18px;
    padding: 5px 10px;
    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: 90px;
    height: 80px;

}
#temperature{
    font-size: 50px;
```

```css
#temperature{
    font-size: 50px;
    margin: 0;
    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;
}
.forecstD{
    margin: 20px 50px;
```

```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);
}

footer {
    width: 100%;
    height:9vh;
```

```css
footer {
    width: 100%;
    height:9vh;
    display: flex;
    position: fixed;
    left: 0px;
    bottom: 0px;
    flex-direction: row;
    justify-content: center;
    align-items: center;
    background-image: url('./icons/16953.jpg');
}

footer .App-Logo {
    display: flex;
    width: 30%;
    height: 100%;
    align-items: center;
}

footer .DeveloperInfo {
    color: white;
    width: 50%;
    height: 100%;
    display: flex;
    flex-direction: row;
    align-items: center;
    justify-content: center;
}

footer .DeveloperInfo #Name {
    color:
    rgb(214, 147, 45);
    font-size: 20px;
}
```

Weather.js

index.html weather.css weather.js

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

```
const apikey="5a20159e465c9e71ddecb8a066499b1a";
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='';
}
```

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```
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)

        const { description, id } = data.weather[0];
        let iconurl;
        if (id == 800) {
            iconurl = "icons/clear.svg";
          } else if (id >= 200 && id <= 232) {
            iconurl = "icons/storm.svg";
          } else if (id >= 600 && id <= 622) {
            iconurl = "icons/snow.svg";
          } else if (id >= 701 && id <= 781) {
            iconurl = "icons/haze.svg";
          } else if (id >= 801 && id <= 804) {
            iconurl = "icons/cloud.svg";
          } else if ((id >= 500 && id <= 531) || (id >= 300 && id <= 321)) {
            iconurl = "icons/rain.svg";
          }
        document.getElementById('img').src=iconurl
```

```
        }
        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');
        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);
}
}
```

```
            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);

            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)
        }
    }
```

THANK YOU

Aaditya Raj Anand
adityaraj912830@gmail.com
6200117093