## **WD-MAJOR-PROJECT**

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**Domain: Web Development** 

**Batch:** February

### **Source Code (Github Link):**

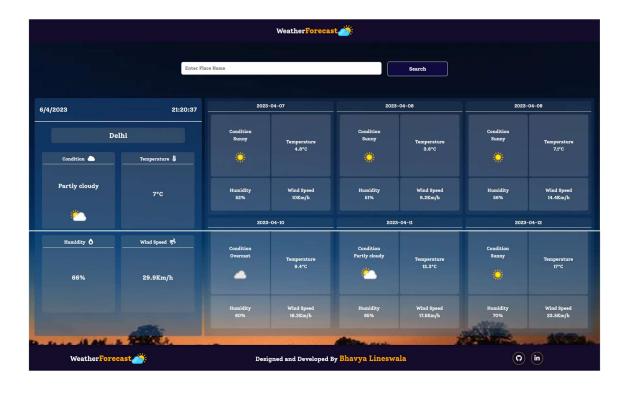
https://github.com/Bhavya0811/WeatherForecastWebApplication.git

#### **Description About Website:**

This is a Weather and WeatherForecast web application, which is made of HTML, CSS, Javascript and Weather API. This website shows the current weather information and next 6 days weather information of the place you search. By default the location set to "Delhi".

You can search any place by entering the name of the place in the search box and then click on the Search button. If the place is found, it shows the weather details, but if it's not found then the previous location weather details will continue to show in the screen. You should always try to give the correct and valid name of place otherwise it shows an error message.

# **How Website Look:**



#### **SOURCE CODE:**

#### 1. Index.html

```
!DOCTYPE html>
html lang="en">
<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 And Weather Forecast - Web Application</title>
 <link rel="icon" href="./Icon.png">
 k rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.1.2/css/all.min.css" />
 <!-- Custome Style Sheet -->
 <link rel="stylesheet" href="./App.css">
 <link rel="stylesheet" href="./MediaQuery.css">
body onload="startTime(), GetWeather(DefaultPlace)">
   <header>
     Weather<span>Forecast</span>
     <img src="./Icon.png" alt="App-icon" class="App Icon">
   <form onsubmit="event.preventDefault();">
     <div class="Search Field">
       <input type="text" id="Search Place" placeholder="Enter Place Name">
       <button id="SearchButton">Search/button>
   <div class="Weather Container">
     <div class="CurrentWeather Container">
       <div class="CurrentWeather">
         <div class="DateTime Container">
           Date
           Time
         <h3 id="Place Name">Place Name</h3>
                      <div class="Weather Details">
```

```
<div class="Weather Item" id="WeatherConditionBox">
        <h5>Condition <i class="fa-solid fa-cloud"></i></h5>

        <div id="ConditionIcon"></div>
      <div class="Weather Item">
        <h5>Temperature <i class="fa-solid fa-temperature-full"></i></h5>
        <span id="Temperature"></span>&deg;C
      <div class="Weather Item">
        <h5>Humidity <i class="fa-solid fa-fire-flame-simple"></i></h5>
        <span id="Humidity"></span>&percnt;
      <div class="Weather Item">
        <h5>Wind Speed <i class="fa-solid fa-wind"></i></h5>
        <span id="WindSpeed"></span> Km/h
<div class="WeatherForecast Container">
  <div class="WeatherForeCast">
    <div class="ForeCastItem">
      <h5 id="Day1"></h5>
      <div class="ForeCastItem-Details">
        <div id="Day1ConditionBox" class="ConditionBox"> </div>
        Temperature<span id="Day1Temperature"></span>
        Humidity<span id="Day1Humidity"></span>
        Wind Speed<span id="Day1Wind"></span>
    <div class="ForeCastItem">
      <div class="ForeCastItem-Details">
           <div id="Day2ConditionBox" class="ConditionBox"> </div>
             Temperature<span id="Day2Temperature"></span>
             Humidity<span id="Day2Humidity"></span>
             Wind Speed<span id="Day2Wind"></span>
       <div class="ForeCastItem">
```

```
<h5 id="Day3"></h5>
     <div class="ForeCastItem-Details">
        <div id="Day3ConditionBox" class="ConditionBox"> </div>
       Temperature<span id="Day3Temperature"></span>
       Humidity<span id="Day3Humidity"></span>
        Wind Speed<span id="Day3Wind"></span>
    <div class="ForeCastItem">
     <h5 id="Day4"></h5>
     <div class="ForeCastItem-Details">
        <div id="Day4ConditionBox" class="ConditionBox"> </div>
        Temperature<span id="Day4Temperature"></span>
        Humidity<span id="Day4Humidity"></span>
        Vind Speed<span id="Day4Wind"></span>
    <div class="ForeCastItem">
     <h5 id="Day5"></h5>
     <div class="ForeCastItem-Details">
       <div id="Day5ConditionBox" class="ConditionBox"> </div>
       Temperature<span id="Day5Temperature"></span>
        Humidity<span id="Day5Humidity"></span>
        Wind Speed<span id="Day5Wind"></span>
   <div class="ForeCastItem">
     <h5 id="Day6"></h5>
     <div class="ForeCastItem-Details">
        <div id="Day6ConditionBox" class="ConditionBox"> </div>
       Temperature<span id="Day6Temperature"></span>
        Humidity<span id="Day6Humidity"></span>
        Wind Speed<span id="Day6Wind"></span>
<div class="App-Logo">
  Weather<span>Forecast</span>
 <img src="./Icon.png" alt="App-icon" class="App Icon">
<div class="DesignerInfo">
 Designed and Developed By <span id="Name">Bhavya Lineswala</span>
```

## 2. App.css

```
@import url('https://fonts.googleapis.com/css2?family=Solway:wght@700;800&display=swap');
  margin: 0;
  padding: 0;
  box-sizing: border-box;
  font-family: 'Solway', serif;
  font-weight: 700;
main{
  width: 100%;
  height: fit-content;
  color: white;
body{
  background-image: url("weather.png");
  background-size: cover;
  background-repeat: no-repeat;
* Header Style */
header{
  width: 100%;
  height: 9vh;
  display: flex;
  align-items: center;
  justify-content: center;
  background-color: #130b2a;
  position: fixed;
  top: 0;
```

```
#App_Name{
  font-weight: 700;
  font-size: 18px;
#App_Name span {
  font-size: 20px;
  font-weight: 800;
  color: orange;
.App_Icon{
  width: 40px;
form{
  margin: 5em auto 0em auto;
  width: 70%;
  height: 15vh;
  display: flex;
  align-items: center;
  justify-content: center;
  gap: 1em;
.Search_Field{
  padding-top: 30px;
  width: 50%;
  display: flex;
  justify-content: center;
  flex-direction: column;
#Search Place{
  width: 100%;
  padding: 0.8em;
  border: none;
  border-radius: 5px;
  font-size: 12px;
#Search_Place:focus{
  outline: none;
#ErrorMsg{
  text-transform: capitalize;
  font-weight: 400;
  background-color: red;
  font-size: 12px;
  font-style: italic;
  padding: 0.8em;
  border-bottom-left-radius: 5px;
```

```
border-bottom-right-radius: 5px;
  opacity: 0;
  word-spacing: 5px;
#SearchButton {
  width: 15%;
  padding: 0.8em;
  border: none;
  border-radius: 5px;
  background-color: rgba(15, 10, 63, 1);
  color: white;
  border: 1px solid white;
#SearchButton:hover{
 cursor: pointer;
 background-color: rgba(15, 10, 63, 0);
* Weather Container Style */
.Weather Container{
  margin: 1em 0em;
 width: 100%;
  height: 90vh;
  padding: 0.5em 1em;
  display: flex;
  align-items: center;
  justify-content: center;
  gap: 0.5em;
.CurrentWeather Container{
  box-shadow: rgba(0, 0, 0, 0.02) 0px 1px 3px 0px, rgba(27, 31, 35, 0.15) 0px 0px 0px 1px;
  width: 30%;
  height: 100%;
  background-color: #1c538e79;
  display: flex;
  align-items: center;
  justify-content: center;
  border-radius: 5px;
.CurrentWeather Container .CurrentWeather{
  border-radius: 5px;
  width: 100%;
  height: 100%;
  display: flex;
  flex-direction: column;
  align-items: center;
  gap: 1em;
  text-align: center;
```

```
.CurrentWeather Container .CurrentWeather .DateTime Container{
  border-bottom: 2px solid white;
  width: 100%;
  height: 10%;
  display: flex;
  align-items: center;
  justify-content: space-between;
  padding: 0em 0.8em;
#Place Name {
  width: 80%;
  padding: 0.5em;
  border-radius: 5px;
  background-color: rgba(128, 128, 128, 0.281);
.Weather Details{
  width: 95%;
  height: 70%;
  display: grid;
  grid-template-columns: repeat(2, 1fr);
  grid-template-rows: repeat(2, 1fr);
  gap: 1em;
  padding: 0.5em;
.Weather Item {
  background-color: rgba(128, 128, 128, 0.281);
  border-radius: 5px;
  display: flex;
  align-items: center;
  flex-direction: column;
  padding: 0.2em;
.Weather Item p{
  height: 80%;
  width: 100%;
  display: flex;
  align-items: center;
  justify-content: center;
#WeatherConditionBox {
  display: flex;
  align-items: center;
  justify-content: center;
h5{
  font-size: 12px;
  border-bottom: 1px solid white;
```

```
padding: 0.5em;
  width: 100%;
  text-align: center;
h5 i{
  font-size: 15px;
  margin-left: 5px;
.WeatherForecast Container{
  box-shadow: rgba(0, 0, 0, 0.02) 0px 1px 3px 0px, rgba(27, 31, 35, 0.15) 0px 0px 0px 1px;
  background-color: hsla(211, 67%, 33%, 0.267);
  width: 70%;
  height: 100%;
.WeatherForecast Container .WeatherForeCast{
  border-radius: 5px;
  width: 100%;
  height: 100%;
  display: grid;
  grid-template-columns: repeat(3, 2fr);
  padding: 0.5em;
  gap: 0.5em;
WeatherForeCast .ForeCastItem{
  background-color: rgba(128, 128, 128, 0.116);
  border-radius: 5px;
  display: flex;
  flex-direction: column;
  align-items: center;
.WeatherForeCast .ForeCastItem:hover{
  transform: scale(0.95);
.ForeCastItem .ForeCastItem-Details{
  width: 100%;
  height: 90%;
  padding: 0.5em;
  display: grid;
  grid-template-columns: repeat(2, 1fr);
  gap: 0.2em;
ForeCastItem .ForeCastItem-Details p, .ConditionBox {
  border-radius: 5px;
  display: flex;
  align-items: center;
  justify-content: center;
  font-size: 12px;
```

```
flex-direction: column;
  padding: 1em 0em;
  gap: 0.4em;
  background-color: rgba(249, 246, 252, 0.144);
.ForeCastItem .ForeCastItem-Details .ConditionBox p{
  background-color: transparent;
.WeatherForeCast .ForeCastItem .ForeCastItem-Details .ConditionBox img{
  width: 50px;
#ConditionIcon img{
  width: 50px;
footer {
  width: 100%;
  height: 10vh;
  display: flex;
  flex-direction: row;
  justify-content: center;
  align-items: center;
  gap: 3em;
  background-color: #130b2a;
  padding: 0.5em;
 footer .App-Logo {
  display: flex;
  flex-direction: row;
  justify-content: center;
  align-items: center;
  gap: 0em;
  width: 30%;
  height: 100%;
  display: flex;
  flex-direction: row;
  justify-content: center;
  align-items: center;
  gap: 0em;
 footer .DesignerInfo {
  width: 50%;
  text-align: center;
  height: 100%;
  display: flex;
  flex-direction: row;
  justify-content: center;
  align-items: center;
```

```
gap: 0em;
footer .DesignerInfo #Name {
 color: orange;
 font-size: 20px;
footer .SocialMedia {
 display: flex;
 flex-direction: row;
 justify-content: center;
 align-items: center;
 gap: 1em;
 width: 20%;
 height: 100%;
footer .SocialMedia a {
 text-decoration: none;
 display: flex;
 flex-direction: row;
 justify-content: center;
 align-items: center;
 gap: 0em;
 border: 1px solid orange;
 border-radius: 50%;
 padding: 0.5em;
 color: white;
footer .SocialMedia a:hover i {
transform: scale(1.3);
 color: orange;
```

# 3. MediaQuery.css

```
@media screen and (max-width: 768px) and (min-width: 120px) {
    form{
        width: 100%;
        padding:0.5em;
        flex-direction: column;
        height: 25vh;
    }
    .Search_Field{
        width: 90%;
    }
    #SearchButton{
        width: 40%;
    }
```

```
.Weather Container{
  height: 320vh;
  flex-direction: column;
  padding: 0.5em 0em;
.CurrentWeather Container{
  width: 100%;
  height: 35%;
.WeatherForecast Container{
  width: 100%;
  height: 65%;
.WeatherForeCast {
  grid-template-columns: repeat(2, 1fr);
  grid-template-rows: repeat(3, 2fr);
.ForeCastItem .ForeCastItem-Details{
  grid-template-columns: repeat(1, 1fr);
footer {
  height: 25vh;
  flex-direction: column;
  padding: 1em 0em;
  gap: 1em;
footer .App-Logo {
  width: 100%;
  height: 30%;
footer .App-Logo #App-Name {
  font-weight: 700;
  font-size: 16px;
footer .App-Logo #App-Name span {
  font-weight: 600;
  font-size: 15px;
  color: orange;
footer .DesignerInfo {
  width: 90%;
  height: 30%;
  font-size: 15px;
footer .SocialMedia {
  width: 100%;
  height: 30%;
```

```
@media screen and (max-width: 1023px) and (min-width: 769px) {
  header{
    width: 100%;
    height: 5vh;
    display: flex;
    align-items: center;
    justify-content: center;
    background-color: #1c538efd;
    position: fixed;
    top: 0;
  form{
    margin-top: 5em;
    width: 100%;
    padding:0.5em;
    flex-direction: column;
    height: 15vh;
  .Search_Field{
    width: 70%;
  #SearchButton{
    width: 50%;
  .CurrentWeather Container{
    width: 40%;
  .Weather Details{
    grid-template-columns: repeat(1, 1fr);
  .WeatherForecast Container{
    width: 60%;
  .WeatherForecast_Container .WeatherForeCast{
    grid-template-columns: repeat(2, 2fr);
  footer {
    height: 20vh;
    flex-direction: column;
    padding: 1em 0em;
    gap: 1em;
  footer .App-Logo {
    width: 100%;
    height: 30%;
```

```
footer .App-Logo #App-Name {
    font-weight: 700;
    font-size: 16px;
}

footer .App-Logo #App-Name span {
    font-weight: 600;
    font-size: 15px;
    color: orange;
}

footer .DesignerInfo {
    width: 90%;
    height: 30%;
    font-size: 15px;
}

footer .SocialMedia {
    width: 100%;
    height: 30%;
}
```

#### 4. App.js

```
const DefaultPlace = "Delhi";
const CheckCity = /^[A-Za-z]+$/;
let WeatherContainer = document.querySelector(".Weather Container")
let CurrentDate = document.getElementById("Date");
let CurrentTime = document.getElementById("Time");
let City = document.getElementById("Place Name");
let SearchCity = document.getElementById("Search Place");
let SearchButton = document.getElementById('SearchButton');
let Temperature = document.getElementById("Temperature");
let Condition = document.getElementById("Condition");
let Humidity = document.getElementById("Humidity");
let WindSpeed = document.getElementById("WindSpeed");
let ErrorMsg = document.getElementById("ErrorMsg");
let Day1= document.getElementById("Day1")
let Day1Temperature = document.getElementById("Day1Temperature");
let Day1Humidity = document.getElementById("Day1Humidity");
let Day1Wind = document.getElementById("Day1Wind");
let Day1ConditionBox = document.getElementById("Day1ConditionBox");
let Day2= document.getElementById("Day2")
let Day2Temperature = document.getElementById("Day2Temperature");
let Day2Humidity = document.getElementById("Day2Humidity");
let Day2Wind = document.getElementById("Day2Wind");
let Day2ConditionBox = document.getElementById("Day2ConditionBox");
```

```
let Day3= document.getElementById("Day3")
let Day3ConditionBox = document.getElementById("Day3ConditionBox");
let Day3Temperature = document.getElementById("Day3Temperature");
let Day3Humidity = document.getElementById("Day3Humidity");
let Day3Wind = document.getElementById("Day3Wind");
let Day4= document.getElementById("Day4")
let Day4ConditionBox = document.getElementById("Day4ConditionBox");
let Day4Temperature = document.getElementById("Day4Temperature");
let Day4Humidity = document.getElementById("Day4Humidity");
let Day4Wind = document.getElementById("Day4Wind");
let Day5= document.getElementById("Day5")
let Day5ConditionBox = document.getElementById("Day5ConditionBox");
let Day5Temperature = document.getElementById("Day5Temperature");
let Day5Humidity = document.getElementById("Day5Humidity");
let Day5Wind = document.getElementById("Day5Wind");
let Day6= document.getElementById("Day6")
let Day6ConditionBox = document.getElementById("Day6ConditionBox");
let Day6Temperature = document.getElementById("Day6Temperature");
let Day6Humidity = document.getElementById("Day6Humidity");
let Day6Wind = document.getElementById("Day6Wind");
let Day7= document.getElementById("Day7")
let Day7ConditionBox = document.getElementById("Day7ConditionBox");
let Day7Temperature = document.getElementById("Day7Temperature");
let Day7Humidity = document.getElementById("Day7Humidity");
let Day7Wind = document.getElementById("Day7Wind");
let ConditionIconBox = document.getElementById("ConditionIcon");
SearchButton.addEventListener('click', (event)=>{
  let len= SearchCity.value
  if(SearchCity.value.match(CheckCity) && len.length != 0){
    GetWeather(SearchCity.value);
  else {
    ErrorMsg.style.opacity = 1;
    ErrorMsg.innerHTML ="Kindly Enter Valid Place Name!";
    ErrorMsg.style.backgroundColor ="red";
    HideErrorMsg();
    SearchCity.focus();
    SearchCity.value="";
const GetWeather = (city) =>{
 const url =
http://api.weatherapi.com/v1/forecast.json?key=378603cebc014f298d5164956232702&q=${city}&days=7
&aqi=no&alerts=no`;
  fetch(url).then((resp) => resp.json())
  .then(data =>{
    ErrorMsg.style.opacity = 1;
    ErrorMsg.style.backgroundColor ="green";
```

```
ErrorMsg.innerHTML =`${city}'s Weather Details Show`;
   HideErrorMsg();
    return ShowWeather(data)
 .catch(()=>{
    ErrorMsg.style.opacity = 1;
    ErrorMsg.style.backgroundColor ="red";
    ErrorMsg.innerHTML =`${city} not found`;
    SearchCity.focus();
    SearchCity.value = "";
   HideErrorMsg();
 })
const ShowWeather = (WeatherData) =>{
 console.log(WeatherData);
 City.innerHTML = `${WeatherData.location.name}`;
 Temperature.innerHTML = `${WeatherData.current.temp c}';
 Condition.innerHTML = `${WeatherData.current.condition.text}`;
 Humidity.innerHTML = `${WeatherData.current.humidity}`;
 WindSpeed.innerHTML = `${WeatherData.current.wind kph}`;
 ConditionIconBox.innerHTML = '<i style="line" | SweatherData.current.condition.icon | " alt="Condition-
Icon">
 Day1.innerHTML = `${WeatherData.forecast.forecastday[1].date}`;
 Day1ConditionBox.innerHTML =
Condition<span>${WeatherData.forecast.forecastday[1].day.condition.text}</span> 
  <img src="${WeatherData.forecast.forecastday[1].day.condition.icon}" alt="Condition-Icon">
 Day1Temperature.innerHTML = `${WeatherData.forecast.forecastday[1].day.avgtemp_c}`+"°C";
 Day1Humidity.innerHTML = `${WeatherData.forecast.forecastday[1].day.avghumidity}` + "%";
 Day 1 Wind.innerHTML = `${WeatherData.forecast.forecastday[1].day.maxtemp c}` + "Km/h";
 Day2.innerHTML = `${WeatherData.forecast.forecastday[2].date}`;
 Day2ConditionBox.innerHTML =
 Condition<span>${WeatherData.forecast.forecastday[2].day.condition.text}</span> 
 <img src="${WeatherData.forecast.forecastday[2].day.condition.icon}" alt="Condition-Icon">`
    Day2Temperature.innerHTML
 `${WeatherData.forecast.forecastday[2].day.avgtemp_c}`+"°C";
 Day2Humidity.innerHTML = `${WeatherData.forecast.forecastday[2].day.avghumidity}` + "%";
 Day2Wind.innerHTML = `${WeatherData.forecast.forecastday[2].day.maxtemp c}` + "Km/h";
 Day3.innerHTML = `${WeatherData.forecast.forecastday[3].date}`;
 Day3ConditionBox.innerHTML =
 Condition<span>${WeatherData.forecast.forecastday[3].day.condition.text}</span> 
 <img src="${WeatherData.forecast.forecastday[3].day.condition.icon}" alt="Condition-Icon">
    Day3Temperature.innerHTML
`${WeatherData.forecast.forecastday[3].day.avgtemp c}`+"°C";
 Day3Humidity.innerHTML = `${WeatherData.forecast.forecastday[3].day.avghumidity}` + "%";
  Day3Wind.innerHTML = `${WeatherData.forecast.forecastday[3].day.maxtemp_c}` + "Km/h";
 Day4.innerHTML = `${WeatherData.forecast.forecastday[4].date}`;
```

```
Day4ConditionBox.innerHTML =
 Condition<span>${WeatherData.forecast.forecastday[4].day.condition.text}</span> 
  <img src="${WeatherData.forecast.forecastday[4].day.condition.icon}" alt="Condition-Icon">`
  Day4Temperature.innerHTML = `${WeatherData.forecast.forecastday[4].day.avgtemp c}`+"°C";
  Day4Humidity.innerHTML = `${WeatherData.forecast.forecastday[4].day.avghumidity}` + "%";
  Day4Wind.innerHTML = `${WeatherData.forecast.forecastday[4].day.maxtemp_c}` + "Km/h";
  Day5.innerHTML = `${WeatherData.forecast.forecastday[5].date}`;
  Day5ConditionBox.innerHTML =
 Condition<span>${WeatherData.forecast.forecastday[5].day.condition.text}</span> 
  <img src="${WeatherData.forecast.forecastday[5].day.condition.icon}" alt="Condition-Icon">`
  Day5Temperature.innerHTML = `${WeatherData.forecast.forecastday[5].day.avgtemp c}`+"°C";
  Day5Humidity.innerHTML = `${WeatherData.forecast.forecastday[5].day.avghumidity}` + "&perent;";
  Day5Wind.innerHTML = `${WeatherData.forecast.forecastday[5].day.maxtemp e}` + "Km/h";
  Day6.innerHTML = `${WeatherData.forecast.forecastday[6].date}`;
  Day6ConditionBox.innerHTML =
 Condition<span>${WeatherData.forecast.forecastday[6].day.condition.text}</span> 
  <img src="${WeatherData.forecast.forecastday[6].day.condition.icon}" alt="Condition-Icon">
  Day6Temperature.innerHTML = `${WeatherData.forecast.forecastday[6].day.avgtemp_c}`+"°C";
  Day6Humidity.innerHTML = `${WeatherData.forecast.forecast.forecast.day[6].day.avghumidity}` + "&perent;";
  Day6Wind.innerHTML = `${WeatherData.forecast.forecastday[6].day.maxtemp_c}` + "Km/h";
let SystemDate = new Date();
CurrentDate.innerHTML = SystemDate.getDate()+"/"+ (SystemDate.getMonth()+1) +"/"+
SystemDate.getFullYear();
function startTime() {
  const today = new Date();
  let h = today.getHours();
  let m = today.getMinutes();
  let s = today.getSeconds();
  m = checkTime(m);
  s = checkTime(s);
  CurrentTime.innerHTML = h + ":" + m + ":" + s;
  setTimeout(startTime, 1000);
 function checkTime(i) {
 if (i < 10) {
 return i;
function HideErrorMsg() {
  setTimeout(() \Rightarrow \{
    ErrorMsg.style.opacity = 0;
  }, 5000);
```