

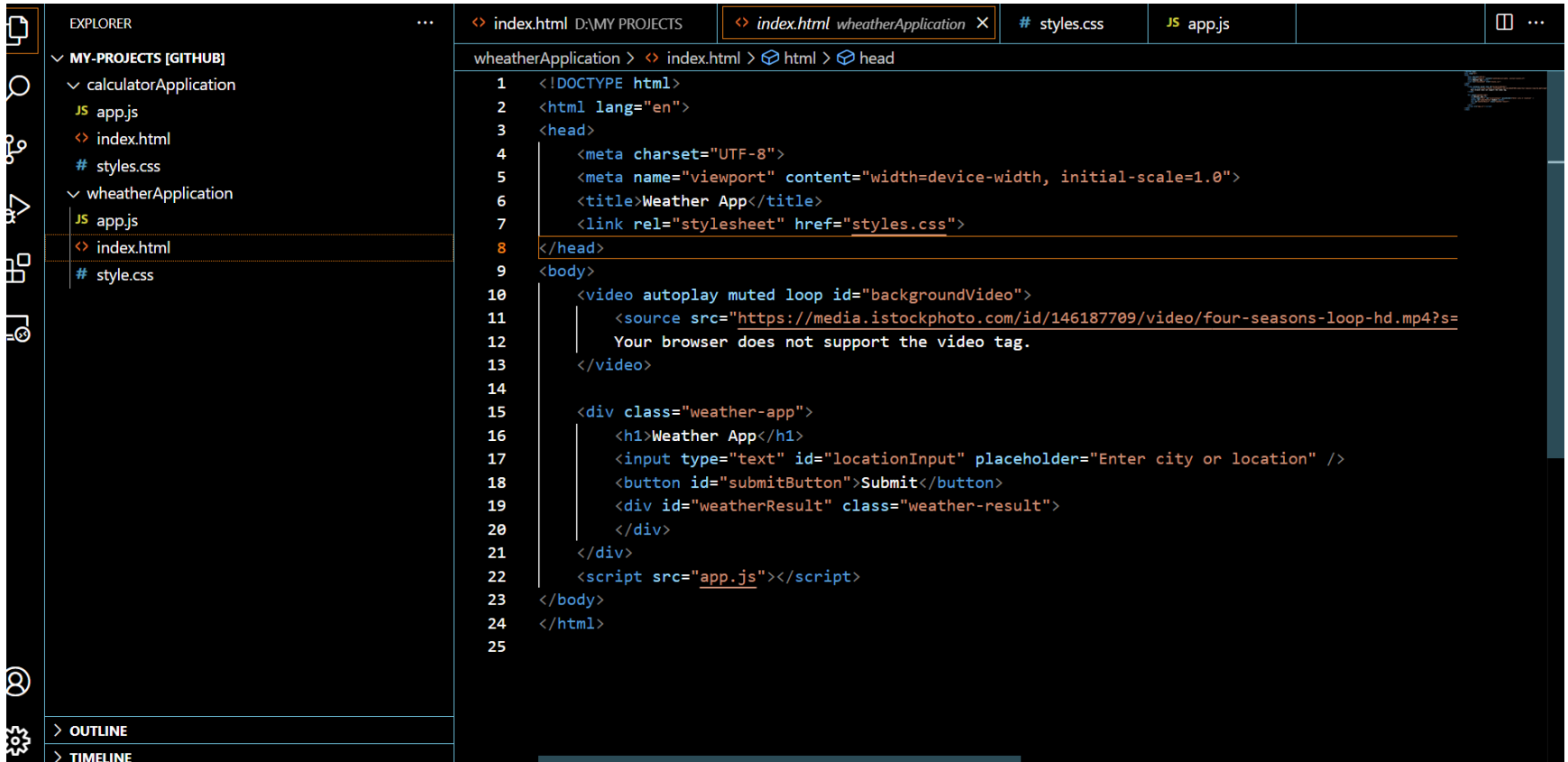
Weather Report Application

Using HTML, CSS, and JavaScript

Project Overview

- The Weather Report Application allows users to enter a city or location to retrieve current weather conditions.
- Technologies Used: HTML, CSS, JavaScript, OpenWeatherMap API.
- Features: Displays temperature, weather description, and an icon representing the current weather condition.

HTML Code



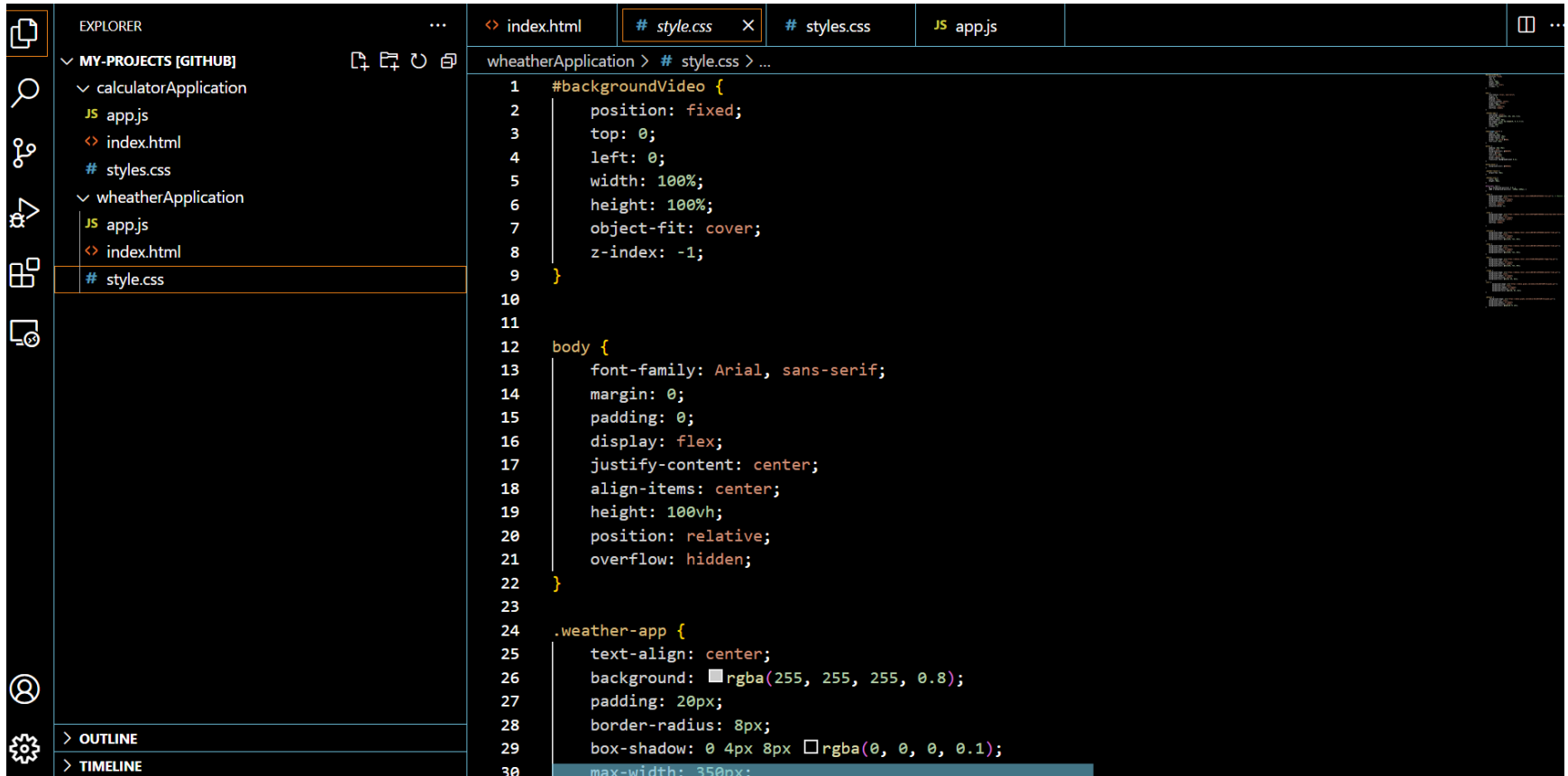
The screenshot shows a code editor with a dark theme. On the left is the Explorer sidebar showing a project structure with folders 'calculatorApplication' and 'weatherApplication'. The 'weatherApplication' folder is expanded, showing files 'app.js', 'index.html', and 'style.css'. The main editor area displays the content of 'index.html' with line numbers 1 through 25. The code is an HTML document for a 'Weather App' that includes a video background, a title, and a form with a text input, a submit button, and a result display area. The code is as follows:

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Weather App</title>
7   <link rel="stylesheet" href="styles.css">
8 </head>
9 <body>
10   <video autoplay muted loop id="backgroundVideo">
11     <source src="https://media.istockphoto.com/id/146187709/video/four-seasons-loop-hd.mp4?s=
12       Your browser does not support the video tag.
13   </video>
14
15   <div class="weather-app">
16     <h1>Weather App</h1>
17     <input type="text" id="locationInput" placeholder="Enter city or location" />
18     <button id="submitButton">Submit</button>
19     <div id="weatherResult" class="weather-result">
20
21   </div>
22   <script src="app.js"></script>
23 </body>
24 </html>
25
```

HTML Code Explanation

- The HTML code structures the basic layout of the Weather App.
- Includes an input field, button, and a div where weather results will be displayed.
- Links the external CSS file (style.css) for styling and the JavaScript file (app.js) for functionality.

CSS Code



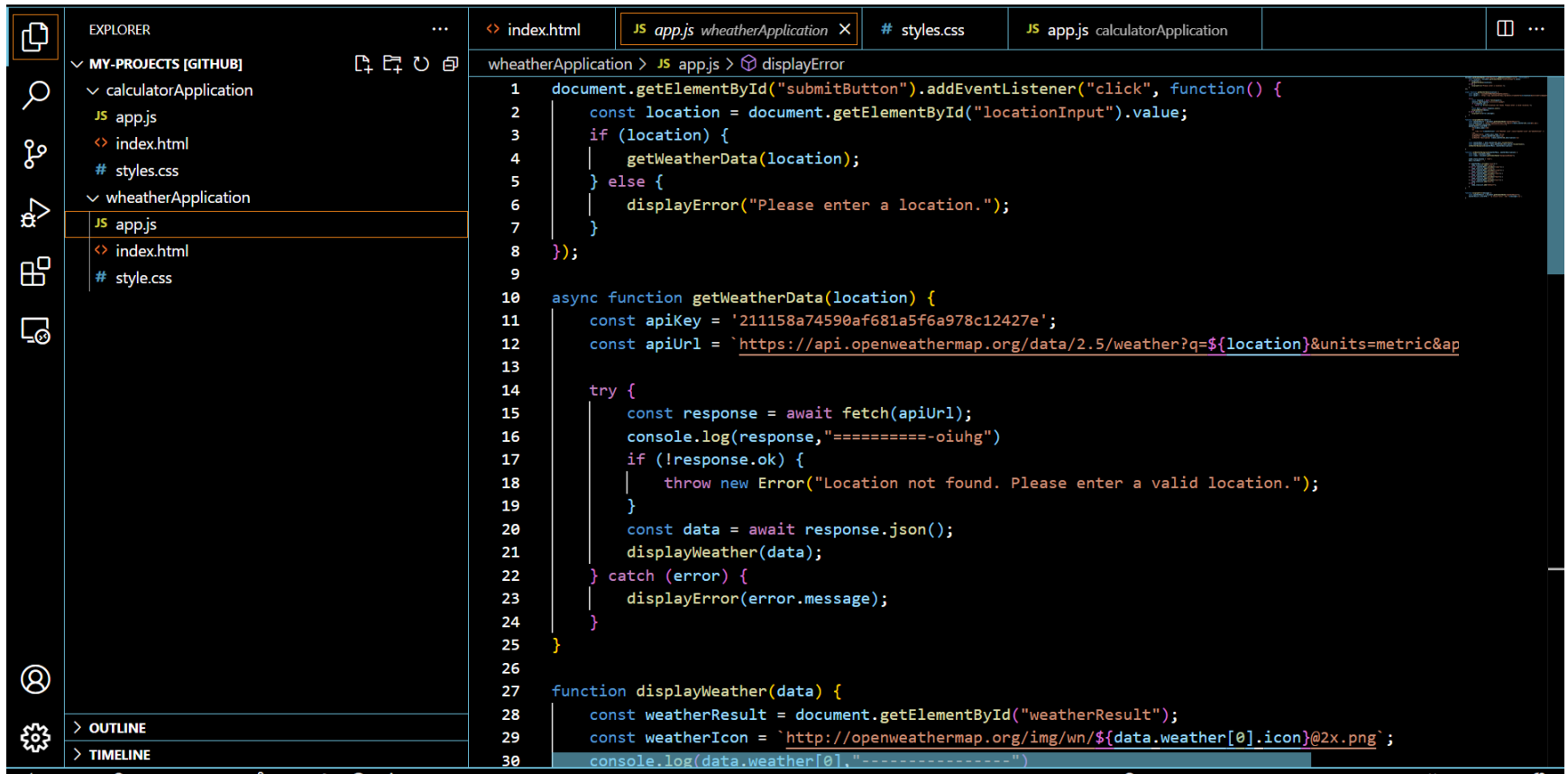
The image shows a screenshot of the Visual Studio Code editor interface. On the left, the Explorer sidebar displays a project structure with folders 'calculatorApplication' and 'weatherApplication'. The 'weatherApplication' folder is expanded, showing 'app.js' and 'index.html'. The 'index.html' file is selected, and its content is displayed in the main editor area. The code is CSS, defining styles for a weather application. The code is as follows:

```
1 #backgroundVideo {
2   position: fixed;
3   top: 0;
4   left: 0;
5   width: 100%;
6   height: 100%;
7   object-fit: cover;
8   z-index: -1;
9 }
10
11
12 body {
13   font-family: Arial, sans-serif;
14   margin: 0;
15   padding: 0;
16   display: flex;
17   justify-content: center;
18   align-items: center;
19   height: 100vh;
20   position: relative;
21   overflow: hidden;
22 }
23
24 .weather-app {
25   text-align: center;
26   background: rgba(255, 255, 255, 0.8);
27   padding: 20px;
28   border-radius: 8px;
29   box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
30   max-width: 350px;
```

CSS Code Explanation

- The CSS styles the layout and appearance of the weather application.
- Includes styling for the input field, button, and the result display section.
- Button has hover effects, and the layout uses Flexbox for centering.

JavaScript Code



The image shows a screenshot of the Visual Studio Code editor interface. The Explorer panel on the left displays a project structure with folders 'calculatorApplication' and 'wheatherApplication'. The 'wheatherApplication' folder is expanded, showing files 'app.js', 'index.html', and 'style.css'. The main editor area displays the content of 'app.js', which contains JavaScript code for a weather application. The code includes a click event listener for a submit button, a function to fetch weather data from the OpenWeatherMap API, and a function to display the weather result on the page. The code is as follows:

```
1 document.getElementById("submitButton").addEventListener("click", function() {
2     const location = document.getElementById("locationInput").value;
3     if (location) {
4         getWeatherData(location);
5     } else {
6         displayError("Please enter a location.");
7     }
8 });
9
10 async function getWeatherData(location) {
11     const apiKey = '211158a74590af681a5f6a978c12427e';
12     const apiUrl = `https://api.openweathermap.org/data/2.5/weather?q=${location}&units=metric&ap
13
14     try {
15         const response = await fetch(apiUrl);
16         console.log(response, "=====oiuhg");
17         if (!response.ok) {
18             throw new Error("Location not found. Please enter a valid location.");
19         }
20         const data = await response.json();
21         displayWeather(data);
22     } catch (error) {
23         displayError(error.message);
24     }
25 }
26
27 function displayWeather(data) {
28     const weatherResult = document.getElementById("weatherResult");
29     const weatherIcon = `http://openweathermap.org/img/wn/${data.weather[0].icon}@2x.png`;
30     console.log(data.weather[0], "-----")
```

JavaScript Code Explanation

- JavaScript fetches the weather data from OpenWeatherMap API.
- Displays weather conditions like temperature and weather description.
- Handles errors such as invalid location inputs.

Dynamic Background Based on Weather Condition

- The background of the app dynamically changes based on the current weather condition for the entered location.
- This adds an interactive and visual component to the user experience

Weather App

Submit

Location not found. Please enter a valid location.

Weather App

kuwait

Submit

Kuwait City



Temperature: 38.77 °C

Weather: Clear

Weather Description: clear sky

Weather App

Bangalore

Submit

Bengaluru



Temperature: 21.33 °C

Weather: Clouds

Weather Description: overcast clouds

Conclusion

- The Weather Report Application showcases how HTML, CSS, and JavaScript can be combined to build a dynamic web application that interacts with external APIs and delivers real-time data to users in a visually appealing format.