STUDY ON WEATHER APP USING HTML, CSS & JAVASCRIPT

MINI PROJECT VIVA

- DATE :
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CONTENT

INTRODUCTION

- The Weather App is a simple web-based application developed using HTML, CSS, and JavaScript. It helps users to check real-time weather information of any location by accessing a weather API. The project focuses on understanding how web development interacts with external API services to provide live data.

ABSTRACT

- The purpose of this mini project is to design and develop a model Weather Forecast application using basic web technologies. The system allows users to enter a location and get real-time temperature, humidity, and overall weather conditions instantly. The application retrieves live weather data through an API key and displays it in an interactive webpage.

EXISTING SYSTEM

- Users generally rely on big platforms like Google Weather, AccuWeather, etc.
- These systems do not allow customization or integration into personal websites.
- Beginners find it difficult to understand how weather applications work internally.

PROPOSED SYSTEM

- A simple, customizable weather application.
- Displays weather data for any location entered by the user.
- Uses API calls to fetch real-time temperature and humidity.
- User-friendly and responsive website.

OBJECTIVES

- To design a simple weather predictor model.
- To understand API integration in web applications.
- To display real-time weather information.
- To help beginners learn basic web development.

SOFTWARE REQUIREMENTS

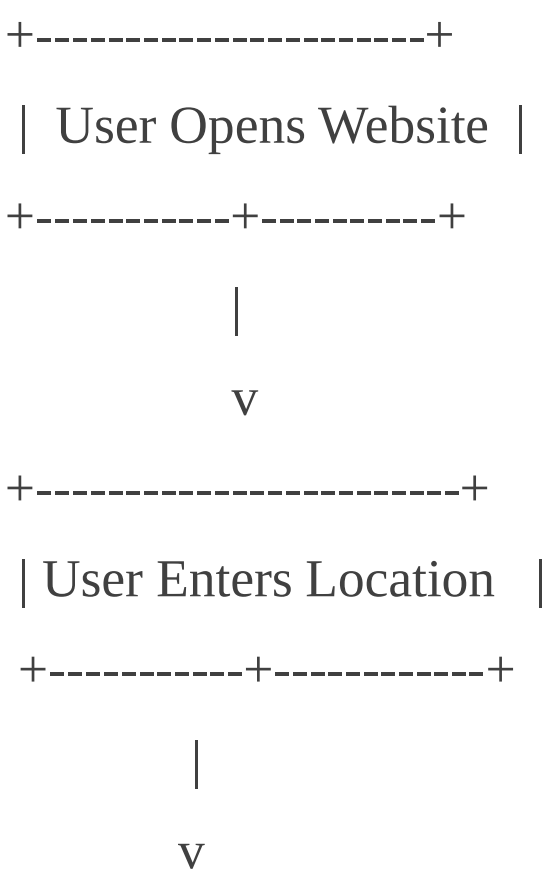
Software Requirements

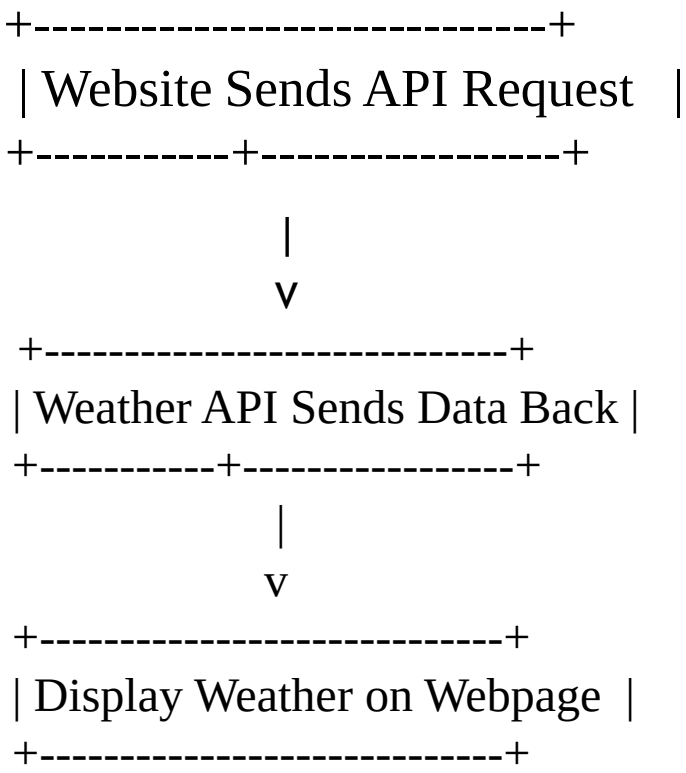
- HTML5
- CSS3
- JavaScript
- Weather API Key (OpenWeather API / any API)
- Browser: Google Chrome
- Editor: VS Code / Notepad++

Hardware Requirements

- (Only basic, since it’s web-based)
- Any PC / Laptop
- RAM: 2 GB or higher
- Internet connection

SYSTEM ARCHITECTURE (FLOW CHART)




Website Sends API Request
Weather API Sends Data Back
Display Weather on Webpage

MODULE DESCRIPTION

- 1. User Interface Module

  HTML forms take user input (location).

  CSS is used for styling and layout.

- 2. API Request Module

  JavaScript sends request to weather API.

- 3. Data Processing Module

  Extracts temperature, humidity, and conditions from API response.

- 4. Output Display Module

  Shows weather details on the webpage

INPUT & OUTPUT

- **INPUT**

  User enters a city name or location in the search box.

- **OUTPUT**

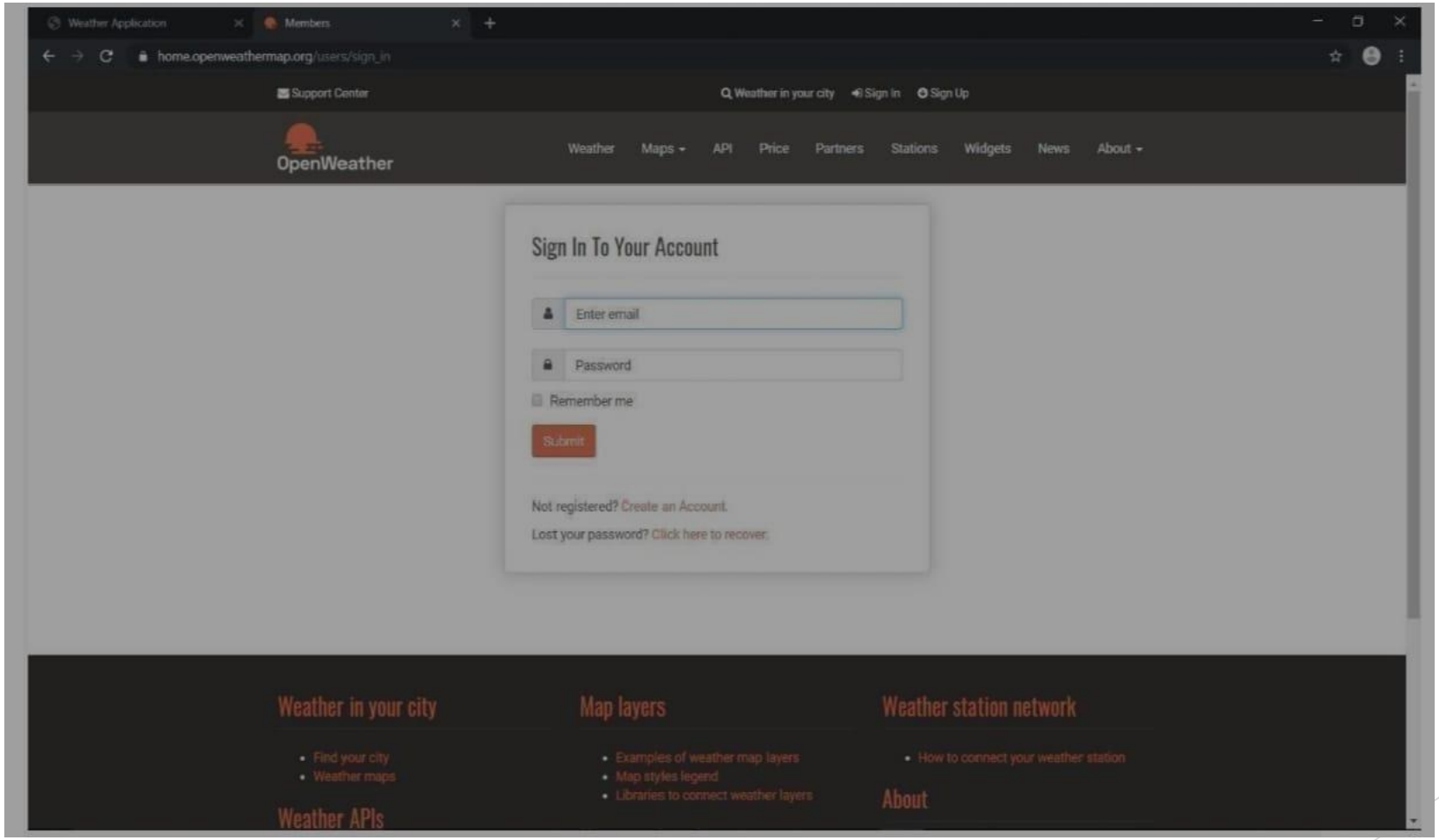
  Temperature

  Humidity

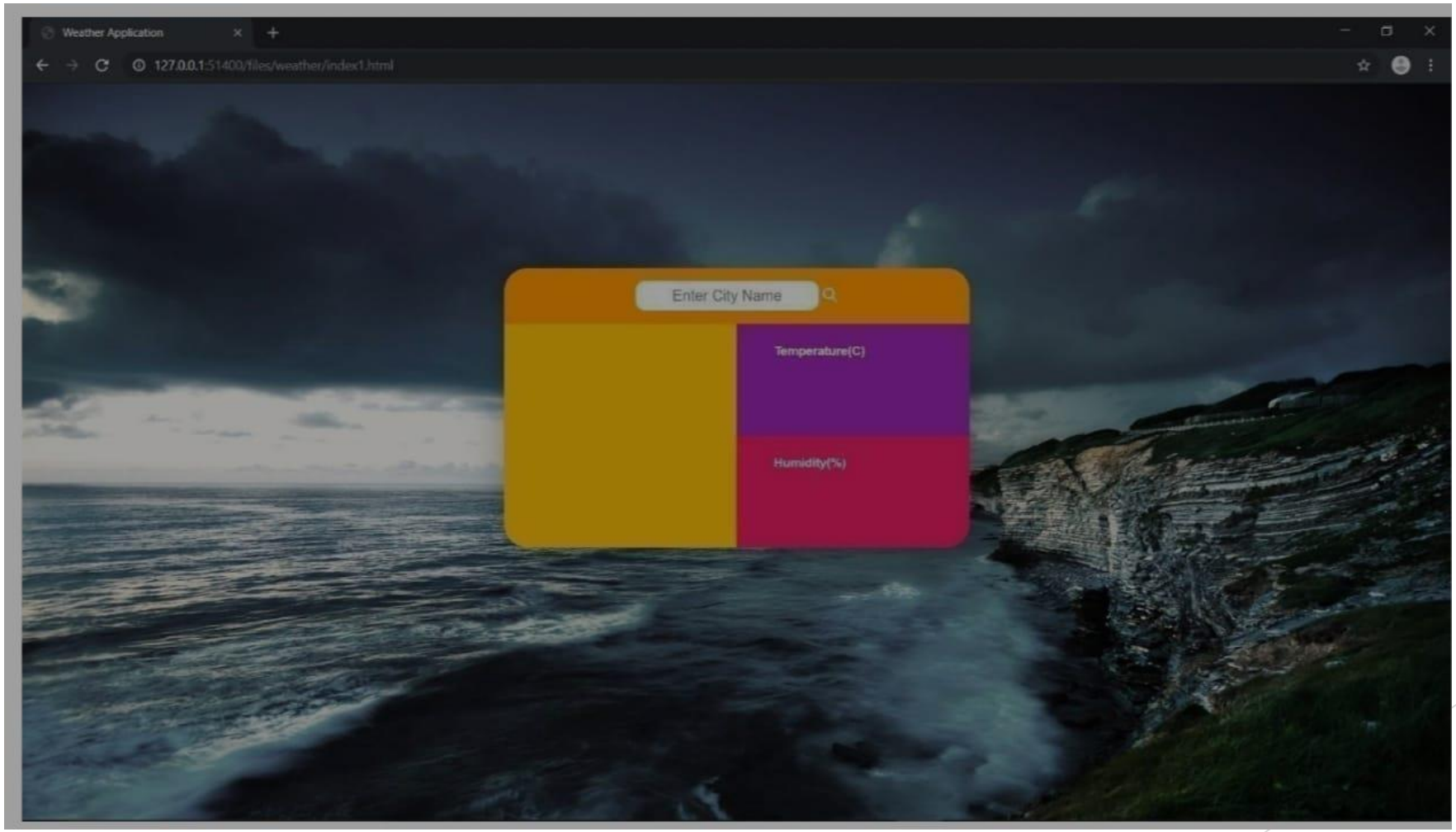
  Weather condition

  Real-time updated weather data for that place

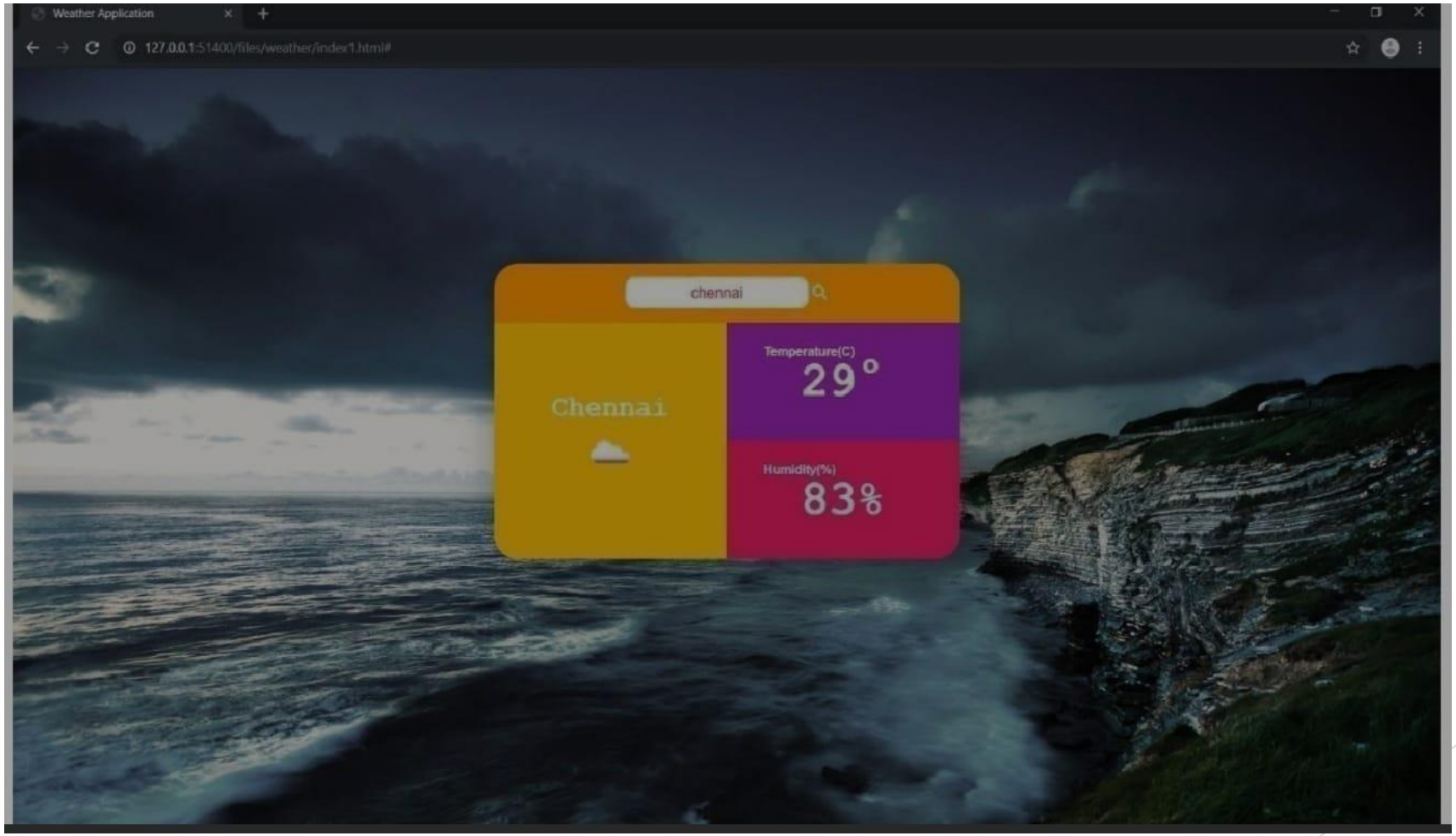
HOME PAGE


Weather Application
Members
home.openweathermap.org/users/sign_in
Support Center
Weather in your city
Sign In
Sign Up
OpenWeather
Weather
Maps
API
Price
Partners
Stations
Widgets
News
About
Sign In To Your Account
Enter email
Password
Remember me
Submit
Not registered? Create an Account
Lost your password? Click here to recover
Weather in your city
Find your city
Weather maps
Weather APIs
Map layers
Examples of weather map layers
Map styles legend
Libraries to connect weather layers
Weather station network
How to connect your weather station
About

INPUT


Weather Application
127.0.0.1:51400/files/weather/index1.html
Enter City Name
Temperature(C)
Humidity(%)

OUTPUT


Weather Application
127.0.0.1:51400/files/weather/index1.html#
chennai
Chennai
Temperature(C)
29°
Humidity(%)
83%

CONCLUSION

- When the program is executed, the Google Chrome browser opens the designed webpage. The user enters the desired location, and the application shows the temperature and humidity for that area. Thus, a simple and effective weather-displaying website has been successfully created using HTML, CSS, and JavaScript.

REFERENCE

- Improving the design using stylish themes and modern UI.
- Adding animated icons for weather conditions.
- Comparing API weather with past 5-year weather data for predictions.
- Adding 7-day or hourly forecast features.

THANK YOU