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YEAR – 2

SEMESTER - 3

BRANCH - CSE

SECTION – D

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Project Name –

Weather Application

Purpose of this project –

Provide real-time weather updates for any location

Displays current temperature, humidity, wind speed, and weather conditions.

Technologies Used -

- HTML:** Structure and layout of the application.
- CSS:** Styling and responsive design for different devices.
- JavaScript:** Handling API calls and dynamic data updates.
- Weather API:** Fetches real-time weather data.

Working with WeatherAPI -

API Provider and Endpoint:

- Provider:** WeatherAPI
- Endpoint:** <https://api.weatherapi.com/v1/current.json>
- Parameters:** key (API key), q (city name).

Data Fetching Process:

- `fetchWeather(city)`: An asynchronous function that sends a request to the WeatherAPI endpoint

JSON Response Parsing:

- The JSON data structure includes location (for city name) and current (for weather details like temperature, humidity, wind speed).

Feature of this Application –

City Search: Allows users to search by entering a city name and clicking a button to fetch data.

Weather Details: Displays temperature, condition (sunny, rainy), humidity, and wind speed.

Dynamic Data: Updates instantly when new city data is requested.

Future Enhancements –

- Adding a weekly forecast option.
- Showing icons for weather conditions and implementing transitions.

Project Implementation

Weather App

Weather in Ghaziabad

Temperature: 24.2 °C

Condition: Mist

Humidity: 83%

Wind Speed: 5.4 kph

Weather App

Weather in Delhi

Temperature: 12.4 °C

Condition: Clear

Humidity: 42%

Wind Speed: 12.6 kph

Weather App

Weather in Jaipur

Temperature: 24.1 °C

Condition: Mist

Humidity: 65%

Wind Speed: 7.6 kph

THANK YOU