Weather App

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Features

Current weather: Get real time data from any city

Location based Weather: Use current location to get weather with the help of geolocation

24-Hour Forecast: See next weather and temperature for the next 24 hours

7-Day Forecast: See weather and temperature for the next 7 days

Temperature unit convertor: App support Clesius, Fahrenheit and Kelvin.

Dynamic background: Color changes based on temperature or if it's night.

Responsive design: Works on pc and mobile

Apis used:

https://openweathermap.org/current - 7-day Forecast and current

Current:
https://api.openweathermap.org/data/2.5/weather?q=${city}&appid=${api}&units=metric

7-Day:

https://api.openweathermap.org/data/2.5/forecast?lat=${lat}&lon=${lon}&appid=${api}&units=metric&cnt=40

https://open-meteo.com/en/docs - Hourly Forecast

hourly:

https://api.open-meteo.com/v1/forecast?latitude=${lat}&longitude=${lon}&hourly=temperature_2m,weathercode&timezone=auto

Many things in this ideas and and implementations were found from Open-Mateo's and Openweathermaps website. For example: icons and how to implement necessary APIs correctly.

How does it work

1. **City search**

    Users can search weather by entering city name. Then app fetches data from OpenWeatherMap and displays:

    -Current Temperature

    -Weather description

    -Weather icon

    -Country

2. Geolocation

The "Use my location" button uses the browser Geolocation Api to fetch weather for user's current coordinates.

3. Temperature buttons

These button allows users to change the displayed temperature unit. It supports Celsius, Fahrenheit, Kelvin.

4. Dynamic background

The Background changes are based on:

-Cold (Blue) below 5°C

-Warm (Orange) Between 5°C and 20°C

-Hot (Red) Above 20°C

-Night (Dark blue) If it's nighttime it changes no matter the weather

All the background use linear-gradient in CSS to make it more stylish and personal feeling then boring single color

Linear-gradient info found here: https://developer.mozilla.org/en-US/docs/Web/CSS/gradient/linear-gradient

Background color hex codes were found here: https://htmlcolorcodes.com

5. Forecast

- Hourly: App has hourly weather forecast starting from current time.

-7-day: Shows next 7-day forecast with max/min temperatures.

How many point should I get and why

Features	Points	Why
Well written pdf	3	Good Structure and clear
App is responsive	4	Works on both environments
Works all browsers	3	Uses standards should work
Location seaech	1	Uses location search
Geolocation API	2	I have it on my app
2 data providers	3	OpenWeatherMap and Open-Mateo
Current weather at location	1	I have it
24 Hour forecast	3	
7-Day forecast	2	It doesn't show last day
Icons	3	OpenWeatherMap icons
Background reflects weather	2	I works and is not just single boring color
Temp switch	2	It works and switches temps
Total Points	25-29	I think the app deserves at least 25

AI decralation:

Ai used: chatgpt

While making this app I have used chatgpt for coding logic and helping to solve problems: For example: While making 7dayforecast I had many problems because it showed 5 day data and how can I handle the data daily based.

Also updateTempareature(): I used ai help to get me to change temperature. I HAVE NOT COPIED ANY CODE STRAIGHT FROM AI. All code is handwritten but updateTemperature function has had AI help because I could understand the problem. That's why it has many comments because so I would understand what I am doing.

I also asked where can I find icons and where can I find how to implement them to my app by icons I mean sun and the coulds or rain to display the current weather.