Project work - Weather app

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Declaration of AI usage:

- 1) Chat GPT, Google Gemini
- **2)** I only got next five days and not the whole week. I was so disappointed so I asked Chat GTP if Open-Meteo gives me 7 day data for free.

I don't know if it counts, but when I search for things like how to manipulate a date object in JavaScript or how to convert Celsius to Fahrenheit, Google's AI(Gemini) summary pops up and gives the correct answer. It was not an intentional use of AI.

3) AI/AI tools were not used for anything else I mentioned earlier.

What was done

I wanted to create a website that looked similar to https://www.is.fi/supersaa/. I watched the Open Weather tutorial and coded along until I realized I was only getting data for the next five days. I had to switch APIs because I wasn't going to give my billing information to get a newer version of the API that would give me data for seven days. I found Open-Meteo from the https://github.com/public-api-lists/public-api-lists list and after I made sure that API gives me data for seven days I chose it. I also found very good tutorial on Youtube where someone built weather app with Open meteo:

https://www.youtube.com/watch?v=HS7GfTuJgA8. I watched it carefully and took some ideas from it and used them in my app. The data is sometimes one or two ours old and the time provided in the app is based on the time coming from the API.

I searched weather images I could use in the project and came across to this great repository: https://github.com/basmilius/weather-icons?tab=readme-ov-file. It is under: MIT License Copyright (c) 2020-2024 Bas Milius which means it is free to use, but I must give credit for its use. I didn't want to copy the whole repository, only one folder where the animated images were. I used this website to only download the folder I wanted: https://download-directory.github.io/

I realized that I wasn't fast enough to add second different API to get weather data to the web application. I looked again the features and decided to do the temperature changing feature which was faster than adding new weather data from different API. Stackoverflow.com came handy multiple times when I needed help with date objects or rounding numbers. I wanted to add a smiley face and Font Awesome was the right best tool for that.

Points Proposal

These are the features I added to the project. Total: 22 points

I tried using setup GitHub pages but it didn't work for some reason. Firefox, Edge, and Chrome worked when I tested them on Windows 11:The application was tested in Safari on an iPhone 12 mini via GodeGrade.

I tried the directory structure well. The resources are in their own folder because there are a lot of them. Separate files for html, CSS and JS.

The app includes media queries to scale the view for smaller devices.

Feature	Max points
Well written PDF report	3
Application is responsive and can be used on both desktop and mobile environment	4
Application works on Firefox, Safari, Edge and Chrome	3
The application has clear directory structure and everything is organized well	2

Feature	Max points
User can search for locations	1
User sees the current weather at a specific location	1
User sees the forecast for the next 7 days	3
All the weather forecast elements uses icons (and numbers) for e.g. sunny and cloudy weathers	3
User has an option to switch between celsius and fahrenheit degrees and kelvins	2