Project Report - Weather App

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I chose the weather app as my project, where users can either search for any city or use their current location to get the weather forecast. After entering a location or clicking to use your location, the app displays the current weather, a 7-day forecast, and a 24-hour hourly forecast with icons and temperatures. You can also switch between Celsius, Fahrenheit, and Kelvin using the unit toggle above the forecasts.

The UI is responsive and adjusts for both desktop and mobile devices. The background color changes in order to reflect the current temperature (blueish when cold, reddish when hot, yellowish when warm), and all-weather details are shown with both icons and numbers for better clarity. There is also favorites features so you can add your favorite locations and access them quickly from the favorites bar.

I used *WeatherAPI* as my single forecast provider, which made it very straightforward to implement all the main features. I did not include support for multiple weather APIs or a comparison chart between providers because I thought it would be the best if I prioritized making the UI smooth and clear for a single provider.

AI Use

I used ChatGPT to assist in troubleshooting. Whenever I got stuck (exp, with the hourly forecast, favorites, or updating all temperatures when the unit changes), I asked ChatGPT for assistance in making them work, which I then adapted for my own project. ChatGPT was quite useful for improving my CSS layout, writing helper functions, and making sure the code structure stayed clean and easy to understand. I also used WeatherAPI.com for the API documentation. For the CSS structure and responsive layout, I got feedback and hints from both ChatGPT and my course materials.

Points justification

I believe all the points are justified as at least when I tested the software all of these features were included and worked.

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
Users can search for locations	1
Users can use their location GPS-coordinates (Geolocation API)	3
Users can see the current weather at a specific location	1
Users can see 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

The look and feel of the application reflects the current weather (e.g. it is blueish, when it is cold; reddish, when it is hot;, dark, when it is night…)	2
User has the option to tag some locations as her favorites and thus access them from the favorites menu	2
User has an option to switch between celsius and fahrenheit degrees and kelvins	2
Proper directory structure (separate files for JS, CSS, HTML)	2
Mobile-first design: app is easy to use on all screen sizes	2
All temperatures update live when changing unit	2
Users can see the forecast for the next 24 hours, hourly based	3
Nice UI	2
total	**40**