WeatherApp

My project work is browser based weather app where user can find weather data with city names and also use his/her current location to find weather data. The app is showing current weather, 24h hourly weather forecast and 7 days weather forecast based on day's weather on mid-afternoon. Also there is a graph which shows the temperature and wind forecast for next 24 hours based on different data providers data. User can save his/her favourite locations by clicking the star button and unsaving them by clicking it again. There is also favourites menu where user can search his/her favourite cities.

"Celsius" "Kelvin" and "Fahrenheit" buttons allows user to search weatherdata with different temperature and wind speed units. After selecting the weather unit, make new search and the data is displayed with that unit.

Declaration of AI usage

The AI that i used for this project was ChatGPT free version. I used AI for these things:

- wind arrow rotation,

- how to create wind arrow svg icon in js code side to html,

- change favourite button filling when clicking

- I coded three different but still almost same search functions(cityname, location and favourite). I used AI to merge these to one shorter method.

- Used to find different bootstrap elements on planning the weather forecast appearance

- Used AI to add alerts to different try catches

API:s that I used

OpenWeatherMap One Call API 3.0

OpenWeatherMap Geocoding API

Open-Meteo Free Weather API

Weather API (trial ends 5.11.24, but should work after that)

Docs I used

https://sentry.io/answers/convert-unix-timestamp-to-date-and-time-in-javascript/

https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Date
https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Intl/DateTimeFormat

Tuuli icon

https://icons.getbootstrap.com/icons/arrow-down-circle/

Frappe charts docs

Bootstrap docs (buttons and different elements used)

Points table

Feature	Points
Well written PDF report	3
Application is responsible and can be used on both desktop and mobile	4
Application works on Firefox, Safari, Edge and Chrome	3
The application has clear directory structure and everything is organized well	2
User can search for locations	1
User can use his/her location GPS-coordinates (Geolocation API)	2
At least two data/forecast providers are used	3
At least three data/forecast providers are used	2
User sees the current weather at a specific location	1
User sees the forecast for the next 24 hour, hourly based	3
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
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 sees simultaneously *(normally two)* three forecast in a graph, e.g. there is temperature forecast for the next 24 hours and there are three lines telling how the data sources are providing (a bit) different data	3,5
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
My suggestions:	
User sees simultaneously three forecast in a graph, e.g. there is wind forecast for the next 24 hours and there are three lines telling how the data sources are providing (a bit) different data	3
A well-functioning and good-looking user interface	1
At least four data/forecast providers are used (if geocoding api accepted)	1
Sum	44,5