

# Assignment

Design and implement a **simple**, **modern**, and **elegant** weather widget using real-time data from a weather API. You can use data for **Thessaloniki** or any other city you prefer.

- Focus on a clean UI and smooth user experience.
- You're welcome to **add extra features or enhancements** — creativity is encouraged!

**Deadline:** Please submit your project by **April 12th**.

The data will be provided by Open-Meteo API.

## Summary

The widget should display current weather information (Weather description with appropriate icon, Temperature, Feels like temperature, Wind speed, Wind gust, Wind direction, Humidity, Pressure), using the current object, returned by the API call.

Additionally, a menu should exist inside the widget, which will allow the user to select a future date (up to 6 days ahead) and display the forecast information inside the widget.

Aggregations of daily data should be the following

- temperature → average
- feels like temperature → average
- wind → maximum
- wind gust → maximum
- wind direction → dominant
- humidity → maximum
- surface pressure → maximum

Finally, a max temperature line-chart, that will display today and next 6 days, should be also available inside the widget. Chart should not be affected by the selected filters.

## UI

- Widget should be designed as close it can be to the attached mockup.
- Special care should be taken in order for the resulting work to be elegant and responsive.
- You can use a library of your choice for drawing charts.
- You can use any weather icon set of your choice, or implement a mapping based on the weather codes provided by Open-Meteo

## Fetch data

Data must be retrieved using the following API

endpoint. *<https://api.open-meteo.com/v1/forecast>* for

the following location:

*latitude: 40.5872, longitude: 22.9482*

Keep in mind that the service is restricted to 600 calls per minute and 10000 calls per day.

**API Documentation:** <https://open-meteo.com/en/docs>

## Minimum Requirements

- Write clean, well-structured and maintainable code
- Usage of HTML5, CSS3, JavaScript
- Responsive design
- Elegant appearance
- Your deployed application should be working in all major browsers (Google Chrome, Firefox, Edge, Safari)
- Creation of a GitHub repository with a unique name and a README describing the project and the installation process.