Introduction

In this document I show my plan for developing a weather app using data from the Open Meteo API. The apps goal is to provide accurate and up-to-date weather information, including current weather conditions and a 7-day forecast. Key features include displaying the weather in the user's current location, for the current day and the coming 7 days, the ability to search for other locations, notifications(?) and a widget for easy access to current weather information.

Functionality

1. Current Weather: The app will automatically detect the user's current location and display the current weather, including temperature (min and max), weather status (sunny, cloudy, rainy, etc.), and other relevant details.

2. Search: It will be possible to show weather in other locations by searching and marking locations as favourite.

3. 7-Day Weather: Users will be able to view a detailed 7-day weather, showing daily high and low temperatures, weather conditions, and windspeed.

4. Weather Widget: Widgets will be implemented to allow users to quickly view the weather conditions without opening the app. Aiming to implement three different widget sizes.

Design and Layout

The app will have a clean and user-friendly interface. Design elements include:

- Home Screen: Displays the current weather with icons and temperature. A summary of the week's weather will be shown below the current weather.

- Forecast Screen: Users can tap on the week's summary to navigate to a detailed 7-day forecast screen, which will show temperature min and max as well as max wind speed

- Widget: A simple and minimalist design showing the current temperature and weather icon.

Implementation Strategy

1. Services: The location manager will fetch the user's location
2. Networking: The API will be called and data will be decoded
3. Logic model: The model will call networking with the location from Services
4. UI: The View will only display the information and it will be connected to the logic model.