Weather App Plan

# Explanation

This app will be a weather app. It shows todays weather like temperature, pressure, humidity, clouds and main weather etc. The user should also be able to add their own home weather station so that they and others can see it. The idea is to have a large (almost p2p) network to increase resolution and accuracy of weather data. The addresses can be stored on a server database (or locally due to time constraints).

# Features of App:

## Basic functionality includes -

1. Weather data should be collected as the user loads the webpage

2. The initial data is presented to the user with context so for example degrees Celsius and Speed units are added with text so data can be interpreted

3. Some light math may need to be done as it's being displayed so that the user is not shown in degrees Kelvin for example (UX)

4. UseEffect will be used to run this once the page is loaded

5. Should have 4 components other than App.js index.js...

6. Should have error handling: API's giving incorrect responses, user adds out of bounds data, etc.

## Other features

1. User should be able to add their own station, this will be done by linking the webpage

to your home station

2. React will then use the data on this page and its identifiers to load it into the

standard form that the usual/main weather uses to display weather data

3. You should also be able to remove the station

4. Advanced - currently without a server the station will be lost when the webpage is reloaded

add a server/DB for persistence

## Structure

Weather.js is the main script file, everything will link to this and from here exported to App.js

1. Add location API to find users location (Google geocoding)

2. Use this location to call the "OpenWeather" API (free)

3. Transfer json array data to object - this will then be output using HTML/JSX

4. Icons - The API returns an icon code; this could be used to show an icon for

a more aesthetically pleasing page

5. The user should be able to update the page and it calls the weather API again excluding the location

6.

Flow Diagram for getting and displaying weather data

CALL LOCATION API

PAGE LOAD

CALL WEATHER API

VALID PLACE?

READ JSON AND FORMAT ADDRESS

NO

YES

CHANGE ARRAY ADDRESS

DISPLAY WEATHER INFO