

Weather Exercise - React-JS

Description

Since we are programmers and sit inside the whole day we would like to have an app to check the weather outside so we do not actually have to go outside to see what it's like.

The WeatherApp contains two screens:

- Loading screen
- Weather info screen



Loading Screen

The loading screen is the first screen that is shown and here the weather data will be loaded from OpenWeatherMap at: <https://openweathermap.org/>. You can use our OpenWeatherMap APPID to obtain weather information. The URL provided below returns weather info for a total of 5 days and each day contains a maximum of 8 weather segments (3 hours).

Example request with our APPID:

<http://api.openweathermap.org/data/2.5/forecast?q=Munich,de&APPID=75f972b80e26f14fe6c920aa6a85ad57&cnt=40>

Weather Info Screen

After the weather data has been loaded the weather info screen is made visible. This screen is capable of showing a minimum of 5 days of weather forecasts for the same location.

Temperature checkbox

The screen contains a CheckboxGroup that switches between Celsius and Fahrenheit (Default). When the user selects i.e. Celsius, all temperatures in the cards (BarChart) must switch to Celsius.

Card Arrows

Below the Checkboxes, there are two arrows to scroll through the weather cards (`pageSize == 3`)

- The left arrow is only visible when the current `pageIndex` is `> 0`.
- The right arrow is only visible when there is an item at `pageIndex + pageSize`.

Weather Cards

Below the arrows, a maximum of 3 weather cards are visible and they are laid out horizontally. Each card displays the weather forecast for one day and must at least show the average temperature and date for that day.

GitHub & Technologies

The sources of the WeatherApp should be available to us through a public repository on GitHub.

The example app must be written in React-JS. We prefer that you use Redux for storing state and <https://material-ui.com/> for drawing cards, buttons, etc. However, you are free to use other libraries but please let us know why you prefer other libraries.

BONUS

Barchart

When we select a weather card, a Barchart shows the temperature of each weather segment for that day. I.e. when selecting tomorrow's weather card, the Barchart shows 8 bars with temperatures of 00:00 AM, 03:00 AM, 06:00 AM Etc.

Unit Tests

To make sure we do not get soaked by the rain although the WeatherApp told us the sun is shining and its 30 degrees, we do appreciate a couple of unit tests.

Responsive Interface

To avoid taking our laptop everywhere, it would be nice if the WeatherApp also works on mobile devices.

Live Preview

A live preview of the WeatherApp would be awesome, i.e. you could host it on a GitHub page.