

Entry task for UI Developer

Description

The goal is to create an application, which will fetch and display weather forecast information for London in various ways, including historical data.

The application should have three tabs:

- Single table with columns 'Datetime', 'Weather State', 'Temperature', 'Surface Pressure', 'Relative Humidity', etc. Display weather conditions for London. The data will consist of:
 - hourly weather forecast for next few days
 - hourly historical weather conditions (e.g. last 1 week)
- Line chart displaying relationship between the time (x-axis) and the temperature (y-axis) from the table in the first tab.
- Heat Index Calculator. This page should contain these inputs:
 - Temperature (can be entered in both °C and °F)
 - Temperature units selection (switch between °C and °F input)
 - Relative Humidity (%)

It should calculate Heat Index (in °C or °F).

Please note that Heat Index value cannot be calculated for temperatures less than 26.7°C or 80°F.

Requirements

- Use of UI framework of your choice (we strongly prefer Angular)
- Use of some design framework (PrimeFaces, Material, Clarity, ...)
- Use REST APIs from <https://open-meteo.com/en/docs>
- Use Heat Index formula from <https://www.weather.gov/media/epz/wxcalc/heatIndex.pdf>

Bonus points

- Nice looking interface
- Easy to read and well-structured code, using style guide (e.g. <https://angular.io/guide/styleguide> for Angular)
- Sortable, searchable table with pagination
- User can pick arbitrary date range for historical weather conditions
- Display history of last 5 results of Heat Index Calculator stored in local storage

Presentation

Please prepare a demo/presentation of your implementation. It will be discussed during the interview. To ensure that we can prepare for the interview, please send the files (with a brief readme file) in advance by mail or by providing a link to GitHub. Consider topics for discussion like:

- Reason for choosing specific technologies
- Architecture
- Deployment