

Developer Coding Challenge

The Weather Channel provides an XML output of the forecast for a given location, e.g. http://wxdata.weather.com/wxdata/weather/local/UKXX0085?cc=*&unit=m&dayf=1 for London.

- Create a single page application that displays information about the weather today and the following three days. It should look something like this (you don't have to focus on design, but if you feel like showing off, that's great too):

| Today | Saturday | Sunday | Monday |
|---------------|--------------|---------------|-------------|
| Partly cloudy | Mostly sunny | Mostly cloudy | PM Showers |
| High 21° +2 | High 23° +4 | High 22° +3 | High 23° +4 |
| Low 12° | Low 13° +1 | Low 13° +1 | Low 11° -1 |

- Since the Weather Channel doesn't provide you with historical data, you should randomize it in the ranges of high 15°-25° and low 5°-15° for the previous 28 days and store in a database. Display the differences to the average for preceding weeks next to temperatures for every day. For example, given that average high was 19°, and today is 21°, it should display 21° +2. For Saturday it should display 23° +4, i.e. how much hotter or colder it is today than the previous weeks. Do not display anything if there is no difference.
- Use React for the frontend. No worries if you haven't used it before, give it a stab and see how you get on.
- (Optional) Use Webpack, Babel, and make the front-end IE9 compatible.

Use any tools at your disposal that you feel will show off your skills and understanding. Extra points awarded if you use Clojure or Elasticsearch.

Please submit the solution by email attachment or a public repository.