# Full-Stack Software Engineer Technical Test

## User Story

I am an energy manager who would like to understand my labs energy usage in more detail than I am previously used to so that I can identify areas in which I can reduce my consumption and save money, as well as reduce my carbon usage.

I have my energy usage being monitored by the Hark Platform as well as the temperature of my facility. My energy consumption is being run through a set of analytic pipelines which will detect anomalies.

My energy consumption data is in half-hour intervals and the temperature data may be infrequent. Anomalies detected could be at any point in my graph.

I would like to be able to cross reference my energy consumption with my temperature data, and also be able to see which at which points in my data are anomalies.

When hovering over my points in the graph, I would like to be able to see the current temperature at that time as well as my energy consumption. If there is an anomaly detected at that point, it should also be present in the graphs tooltip.

## Technical Notes

We have provided you with a set of energy consumption data, temperature data and potential anomalies. We would like to have the data available over an API and retrieved by a React front-end that displays the graph to solve the energy managers problem described above.

We are happy for you to choose the technologies you use (minus those mentioned above) however for reference at Hark we use C#, Highcharts, TypeScript and GraphQL to solve these problems.

If you'd like to extend the specification above, we'd love to see some extra features that you could build on top of the data we have provided. This could include some summary metrics, graphing options and configuration.