



Just frontend/full-stack pairing exercise

What you'll be building

As a maker of financial-data products, Just provides its customers with beautiful data visualizations in the form of browser-rendered charts.

For this pairing exercise, we would like you to implement a React application which renders a chart using data from the JSON file that we have provided. You are free to choose any charting library or other libraries of your preference to speed up the development process. If you don't have any libraries you're used to, we recommend Recharts. Recharts is already integrated into the starter React project we have sent you.

The chart you will be building will display the aggregated cost of trades grouped chronologically by month, and further grouped by which bank provided the trade execution service. Just aggregates trades based on which month they were executed and then sums the trade cost to reveal the total cost (i.e. how much money the bank took), normalized the accounting currency of the company using Just Transaction Cost Analytics (TCA).

Inside the provided JSON, you will find an array of data points to populate the chart with trade cost data at the key-path: `tradeCost.aggregatedTrades.data`. Each data point is a JSON object that looks something like the object in the below code snippet. You can safely assume the `values` array for each datapoint will always have only one value (the value you will be plotting in the chart). The labels array will have two values, the first being the month that the data point corresponds to and the second being which bank the brokered the trade.

```
{
  "values": [93013.2219654035],
  "labels": ["2018-01-01", "Business Bank"]
}
```

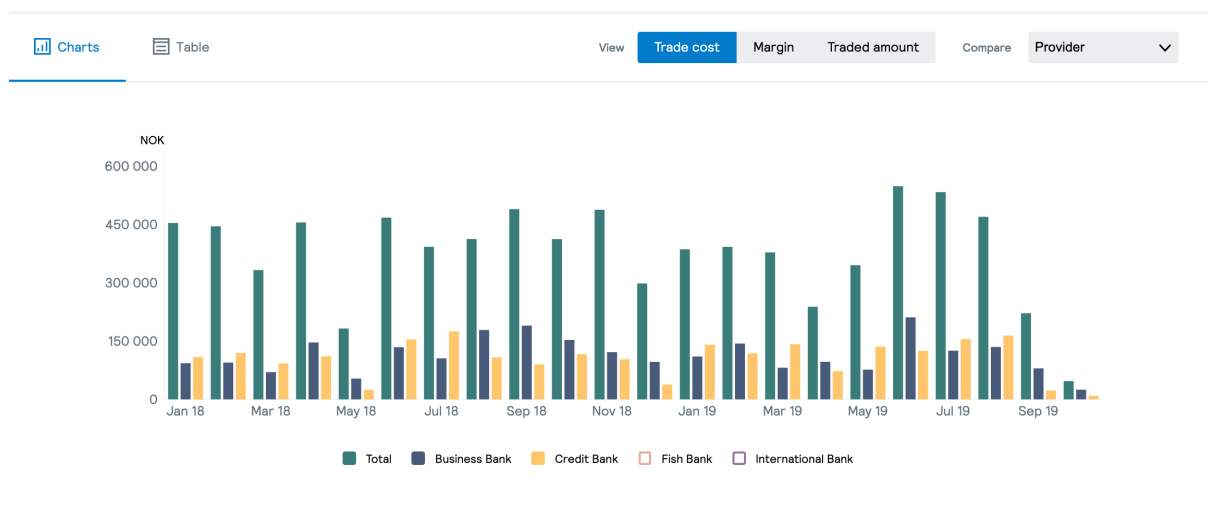
The JSON is already under the `src/` directory in the boilerplate project we have sent you.

What the chart should display

The chart should be a bar chart displaying aggregated trade cost by month, where each bar corresponds to one the total cost that the user paid for all the trades in a given month through a given FX provider.

The x-axis for the chart should be a chronologically sorted array of months.

The y-axis for the trade cost chart should display the value and ideally the axis should be labelled as well.



Glossary of terms

FX: "foreign exchange" 😊

Parts per million (PPM): We use parts per million (PPM) to describe the proportion of the trade's value that was paid in margin. On a 1,000,000 NOK trade, a margin of 1,000 parts per million equates to 1,000 NOK paid to the bank. You can also think of it as a finer-grained measure similar to percent. 1 percent is 1/100th of the total, and similarly, 1 PPM is 1/1,000,000th of the total. Therefore, 100 PPM = 0.01%.