Client Side - Assignment 1

Hello and welcome to your first assignment !

If you are reading this, it's because we liked what we saw of you in our initial interview and therefore we wish to test your coding abilities.
In this coding exercise we are looking to see how you accommodate a feature request.
We wish to see your logical thinking as well as your UX/UI abilities, so your code should be elegant and logical as well as have a nice UX/UI
We wish also to assess how comfortable you are with React and its concepts, making sure you have a good understanding of them. Your time is valuable so, please, mostly focus on showing us your composition and optimisation skills, code doesn't have to be super pretty.

Assignment instructions:

This assignment should be made using javascript and the React framework
As a bonus you may show off your TypeScript / JSDocs skills, but this is not required.

Given the provided data set shape, we would like you to build a table to display this data and provide a nice user experience through the UI.

The table will need to have the following features:

- ➔ Ability to render different data types per column
  - ◆ Some of the data points will be string, numbers, boolean ...
- ➔ Ability to filter columns
  - ◆ The user should be able to select somehow the columns he would like to see and the ones to hide
- ➔ Ability to edit data directly from table cells
  - ◆ The user should be able to write the new data directly into the data cell
  - ◆ The user should be able to save the data
- ➔ Data save would be done only locally, doesn't need to be persisted

And abide by the following requirements:

- Optimized to render large data sets
- Be generic enough to be reusable with other data sets with different columns

You may add any other feature that you want !

The data shape (table input data):

```JavaScript
// TableData
{
// This is the schema for a column. The column should abide by this schema for the column definition
  columns: Array<{
    id: string // <- id of the column. Should match the one on the data rows
    ordinalNo: // number <- position of the column
    title: string // <- name of the column
    type: string // <- type of the data in the column
    width?: number // <- defines the width of the column
  }>

// Array of rows. Each columnId represent the cell on given row for a given column
  data: Array<{
    id: string // <- rowId
    [columnId: string]?: any // <- Data for the column
  }>
}
```

Following reception of your assignment, we will review it and schedule an interview with you to go over it together.

Good luck!