

**Uncountable Front-End Assignment**

The goal of this assignment is to create a simple front end to interact with a single dataset.

**The Dataset**

The dataset is stored in Uncountable Front End Dataset.json. The dataset is a json dictionary with the outer keys being the name of the experiment. For each experiment there are two dictionaries “inputs” and “outputs” which have the actual data for each experiment.

**Front End**

The assignment is to build one or more views that allows a user to explore the dataset visually. We would prefer this assignment be done with modern web development tools (primarily Javsacript or Typescript).

You should use this opportunity to either demonstrate your ability to build great UX experiences and make an interface that is easy for a user to understand. A user should not need additional instruction on how to use the feature beyond any instruction on the page itself or, ideally, that which is self-evident from the design.

Here are some ideas:

1. Allow the user to select one or more properties and then display a scatterplot of those properties
2. Allow the user to select a measurement and a range of values for that measurements and then display histograms that show which inputs were used to produce measurements in that range
3. Allow the user to filter on certain elements of the data and query the data
4. …

Requirements:

1. The view(s) must be interactive. It must be able to produce different results based on user input
2. The interface should be aesthetically pleasing and/or a great UX experience

You may use publicly available external libraries. You will be evaluated on the code you write and functionality you add above and beyond the libraries you use.

**Primary Evaluation Criteria:**

(in order of importance)

1. Code Quality
   1. Is the code efficiently written and well-structured?
   2. Is the code performant and robust to edge cases?
2. UX
   1. Are the interfaces aesthetically pleasing and easy to use?
   2. Is there sufficient interactivity and complexity to demonstrate frontend ability?