

D3questions

ruben.timmermans

February 2016

1 Questions.

1.1 How can D3 access and change the DOM? What do `select` and `selectAll` do?

By using function such as `'append'` and then using `'select'`. `'Select'` selects an element in the HTML code and by using `'append'` one could change/add code to the HTML. `'SelectALL'` selects all elements in the HTML code (i.e. `SelectALL('p')` selects all paragraphs). `SelectAll` returns all strings with prompted selector.

1.2 What are the `d` and `i` in `function(d)` and `function(d, i)`?

`d` is just a convention and `i` is een looping dummy variable.

1.3 Write sample lines of JavaScript to add a `div` element with class `"barChart1"` and to add an `svg` element with class `"barChart2"` with square dimensions.

```
1: d3.select("body").append("div").attr("class", "barChart1")
2: d3.select("body").append("svg").attr("class", "barChart2").attr("width", 100).attr("height", 100)
```

1.4 Describe `append`, `update`, `enter`, and `exit` at a high level. What does `"selectAll + data + enter + append"` refer to?

`append`: create and append new elements.

`update`: updates elements.

`enter`: returns placeholders.

`exit`: returns elements that are no longer needed.

The `"selectAll + data + enter + append"` combination refers to: creating new placeholders and fill it with data.

1.5 What are the main differences between drawing a bar chart with HTML and SVG?

In html one can make a bar chart where every bar refers to 1 div. In SVG one can do this more efficient by getting rid of the ugly 1 bar 1 chart set up.

1.6 In drawing the simple bar chart with D3 and SVG, what elements were appended, and what parts of the graph did these elements correspond to?

Rectangles referring to the bars from the bar chart.