

Questions week 4

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

With the use of `select` and `selectAll`. These functions can select tags inside the DOM

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

The arguments of the function. `d` is bound data and `i` is the index.

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.

```
d3.select("body").append("div").attr("class", "barChart1")
```

```
d3.select("body").append("svg").attr("class", "barChart2").attr("width", 50).attr("height", 50)
```

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

`enter` - incoming elements, entering the stage.

`update` - persistent elements, staying on stage.

`exit` - outgoing elements, exiting the stage.

`Append` – incoming tag, entering the stage.

`selectAll + data + enter + append` – makes tags based on difference in data and selected tags

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

Greater visual expressions in SVG

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?

`append("g")` - makes a `'g'`-tag for translating the bar to right position

`append("rect")` - makes a `'rect'`-tag for a bar chart rectangle

`append("text")` - text for the bar