

Questions D3 Homework

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

with `d3.select()` and `d3.selectAll()`, with `select` you only select one group of the select element e.g "body". with `selectAll` you select more groups of the same element name e.g "td"

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

with the function `Data()` you can later use `d` in this functions above to call the data and use datapoints containing in `d` (called with `data(yourdata)`) in the function.

- 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.**

```
d3.select("body").append("div")
d3.select("div").attr("class", "barChart1")
d3.select("body").append("svg")
    .attr("width", 50)
    .attr("height", 50)
    .attr("class", "barChart2")
    .append("rect")
    .attr("x", 0)
    .attr("y", 0)
    .attr("width", 50)
    .attr("height", 50)
    .attr("fill", "purple");
```

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

Selecting the elements wanted, creating the data with `.data`, adding them to the elements that does not exist yet with `enter` as a placeholder. Next `exit` the elements not used.

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

SVG uses xml datapoints, HTML Canvas uses just pixel drawing.

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

SVG and `rect` were appended. The SVG represents the whole graph, the `rects` are append to it with a function and depending on the data