questions.pdf
Minor programmeren; Data processing; Intro D3
Orin Habich 10689508

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

We can access the DOM with d3.select(). E.g. if we put <svg class="chart"></svg> in the html, we can access this with d3.select(".chart").

Select (<tagname>) selects the first element with a given tagname. SelectAll(<tagname>) selects all elements with that tagname

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

Just a dummy variable containing a point obtained by .data(). The second variable, represents the order of the element in the selection

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.append("div").attr("class", "barChart1")

d3.append("svg").attr("width", 50).attr("height", 50).append("rect")

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

Append creates a new child node in the DOM. update replaces existing elements with elements based on new data. enter prepares one new element for every unmatched data item. If all datapoints are matched with elements, and there are elements left, exit() will select those elements, so they can be manipulated (probably removed).

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

Whereas HTML is largely limited to rectangular shapes, SVG supports more powerful drawing primitives.

HTML restricts to hardcoding the bars.

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?

<rect > elements were appended, corresponding to the bars. <g> elements were appended, corresponding to ticks on axes. <path elements> were appended, corresponding to the axes. <text> elements were appended.