

Questions. Thomas van Dooren, 10625488, dataprocessing.

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1. D3.js is able to bind data to DOM elements. Then the javascript is able to use the bound data to update the webpage. The select function is able to select html information and use it in your javascript. Mike: "A selection can be created in myriad ways. Most often you create one by querying a selector, which is a special string that identifies desired elements by property, say by name or class ("div" or ".foo", respectively). While you can create a selection for a single element:" Mike: "There is an important difference between select and selectAll: select preserves the existing grouping, whereas selectAll creates a new grouping. Calling select thus preserves the data, index and even the parent node of the original selection!"

"D3 allows you to bind arbitrary data to a Document Object Model (DOM), and then apply data-driven transformations to the document. For example, you can use D3 to generate an HTML table from an array of numbers. Or, use the same data to create an interactive SVG bar chart with smooth transitions and interaction."

2. Function is an anonymous function, a function without a named label that has d as input. D is just an argument for the function. In the exercise that has been made, d is a value from the dataset. In function(d,i) d can be a value from a list. i is the index of d in the list where it belongs to.

3. `var div = '<div id="yourId" class="barChart1" yourAttribute="yourAttributeValue">blah</div>';
document.getElementsByTagName("body").innerHTML = div;`
square:

```
var svgContainer = d3.select("body").append("svg") .attr("width", 200)
.attr("height", 200); var square = svgContainer.append("square") .attr("x", 10)
.attr("y", 10) .attr("width", 50) .attr("height", 50);
```

4. Append is letting javascript give values to some html element. (creating a single element) Update creates the initial join of data to elements Enter prepares one new element for every unmatched data item Exit de-enters the element(s)

It refers to...a "magical" toolkit for data joins and selections. What is the question exactly?

5. Making a barchart in html is much more manual labor. it does not calculate anything for you. Which SVG does. The main difference is that svg automatically makes bars from your data. html cannot do this.

6. In a simple bar chart, from mike's book, appends a child element div for each bar with the desired width. This is appended to a div with the class "chart"