# JavaScript

# Cookbook

By your best friend, Matt.

# <https://docs.google.com/document/d/16e7fuLvpziN9TuBvMi-ViHcjvPhg0cTZh9EJCTUT7Pg/edit#>

# 

# Day 3

## D3

**“Install” d3 on your page**

<script src="<https://cdnjs.cloudflare.com/ajax/libs/d3/4.7.3/d3.min.js>"></script>

You now have access to the magical d3 object!!

**Select an Element**

d3.select(".someclass");

**Select an element inside another element (link inside a header)**

d3.select("#header>a");

**Get text out of an element**

d3.select(".someclass").text();

**Set text of an element**

d3.select(".someclass").text(“put this text into the element”);

**Get HTML out of an element**

d3.select(".someclass").html();

**Get an element’s child object (here, a link inside an object with class .someclass)**

var mylinkAnchor = d3.select(".someclass>a")

**Get an attribute**

d3.select(".someclass").attr("href");

**Set an attribute**

d3.select(".someclass").attr("href", "<https://d3js.org/>")

**Set two attributes at once (chaining)**

d3.select(".someclass").attr("href", "<https://d3js.org/>")

.text("d3js.org");

**Use chaining to select an element inside an element**

d3.select(".someclass").select("a").text();

**Get many elements**

d3.selectAll("li");

d3.selectAll("li").nodes(); //return what you selected, as dom elements

**Set many elements**

d3.selectAll("li").style("background-color", "darkblue");

**Create a new element**

d3.select("ul").append("li").text("Hi, I'm a new Item");

**Create a new element & keep a handle to manipulate it**

var $li = d3.select("ul").append("li");

$li.text("Hi, I'm a new Item");

**Remove elements**

//selecting all <a> elements inside any <div>

d3.selectAll('div>a').remove()

**Add an event**

d3.select("button").on("click", function() {

//this code is executed when event fires

});

//<https://developer.mozilla.org/en-US/docs/Web/Events>

// ^^ These are all the events that you can catch

**Make an API request (make sure you understand CORS)**

d3.json(your\_url, function (error, response) {

if (error) return console.warn(error);

// do something with response

})

# Days 1 & 2

**For loop**

A = [1,2,3];

for(var i=0; i<A.length; i++){

A[i];

}

**For each loop**

for (x in object) {

object[x]; //remember, x is only an index. It’s not like python

}

**If**

if(x==1){

//when x is equal to one, run this code.

} else {

//when x is not equal to one, run this code.

}

**Get Keys and values from an object**

Unlike Python, which has .keys() and .values(), we need to use Object in Javascript

thing = {‘key1’:1, ‘key2’:2}

Object.keys(thing) //Object is built into javascript

Object.values(thing)

**Filtering an array using a function (like filtering in python, just a little uglier)**

cool\_array = [1,2,3,4,5,6,7];

cool\_array.filter(function(x){return x>5})

--> (2) [6, 7]

**Slice an array** slice(start, end)

cool\_array.slice(1,3)

(2) [2, 3]