

CC Lab

Week 2: JS Libraries

PComp Shopping WOOHOO!

For week four of CC Lab, please have:

The starter kit from Adafruit:

<https://www.adafruit.com/products/170>

OR

The starter kit from 16Hertz:

<https://www.amazon.com/gp/offer-listing/B00OHQ3BFE>

(If you're taking PComp classes, you'll probably already have these things.)

Alternatively, you can also send an email out on listserv and see if any of the previous students have any similar Arduinos and parts that they're willing to sell for a cheaper price.

What are JavaScript libraries?

A **JavaScript library** are file(s) with pre-written **JavaScript** in them.

Libraries make it easier to develop **JavaScript**-based applications.

Some Common JavaScript Libraries



jQuery
DOM
manipulation



d3.js
Data
visualizations



p5.js
Processing
for web

three.js

three.js
3D/webGL

How to use libraries?

Download, copy to your folder, then link them to your html file,
just like any other external JS file.

```
<!-- SCRIPTS -->  
<script src="assets/js/jquery-3.1.0.min.js"></script>  
<script src="assets/js/script.js"></script>  
  
</body>  
</html>
```

Alternatively, there are sites such as Google, Yandex, jQuery, etc. who host popular JS libraries for you to link to.

Benefits

- CDN-hosted, which likely means faster than the hosting provider your site is with.
- Less content for your web server to serve to your clients.
- Instantly-updated libraries, if you link to the "latest" version.
- Potentially cached library

Downsides

- Potential security issues
- If host site is down or inaccessible (i.e. firewall), your site may potentially break

jQuery

Probably the most popular and common JavaScript library in existence.

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“Write less, do more.” - jQuery

Javascript

```
var div1 = document.getElementById("div1");
```

jQuery

```
var div1 = $('#div');
```


To vanilla JavaScript or to jQuery?

That is the question.

(psst... here's a little joke: <http://vanilla-js.com/>)

Time to get your hands dirty!



Homework

Use jQuery and one other library to create something awesome.

