Ajax

just kidding

Ajax Basics

- Ajax is something we use on the client side.

- It stands for Asynchronous JavaScript and XML

- the page doesn't wait for it to finish

- it happens in the background

Why?

- Rather than have your page load data on everything.

- Load a list of items, then when you click on one create an ajax request to grab more info from your server on that particular one

No refreshes

- Allows us to send and receive data in the background, we don't need to have the page refresh!

- Keeps our apps fast and responsive

- We only request/send the data that we want

How

- Ajax uses good ole http requests! with all the methods and headers that go with that.

- We do this in JS by creating a XMLHttpRequest()

- It gets pretty long however.

- And its a lot shorter...

With jQuery

```
$.ajax({
  method: "GET",
  dataType: "json",
  url: "/dogs"
}).done( function(data, status, response ) {
  // do something with the data
});
```

Dissecting This

- Create the request by passing in URL, method, what datatype we want, headers etc.

- Then assign handlers.

- jQuery has 3 main ones

  - `done` aka (success)

  - `fail` aka (error)

  - `always` aka (complete)

POSTing Data

```javascript
$.ajax({
  method: "POST",
  url: "/dogs",
  contentType: "application/json; charset=utf-8",
  dataType: 'json',
  data: { "name": "Sparky" }
}).done(function(data, status, response) {
    // ...
});
```

jQuery shortcut methods

- `$.get()`

- `$.getJSON()`

- `$.post()`

Client and Server

remember, the client doesnt know about the server, the only way that they can communicate is through the client making HTTP requests, and the server sending responses

Now what?

We can combine Ajax with the DOM manipulation we've already learned to get data from our servers, and display stuff interactively, then when users click, they can see new information, all without a page reload!