You don't know JS!

This Afternoon

- Review Game

- Javascript Review

- jQuery Review

- The Javascript World

Review Game

- 4 teams

- Must choose top cards first.

- Each time one person answers Q in a row, 100 point reduction from points earned.

Javascript Review

```javascript
var number = 5;
var string = "Hello";
var array = [1, 2, 3];
var object = {a: 1, b: 2};
var func = function (x) { return x * x; }

if (object.a == 1) {
  console.log("A is 1");
}

for (var i = 0; i < array.length; i += 1) {
  var value = func(array[i]);
  console.log(value);
}
```

What does it do?

```javascript
var mystery = function (a, b) {
  var r = [];
  for (var i = 0; i < a.length; i += 1) {
    r.push( b(a[i]) );
  }

  return r;
}

var result = mystery([1, 2, 3, 4, 5], function (x) {
  return x * x;
});

console.log(result);
```

Pair Exercise

1. Make a webpage that prompts the user to enter a list of numbers (e.g. "1 5 27 33"), and alerts the sum of those numbers (e.g. 66).

2. [Challenge] Make a webpage that prompts the user to enter a list of numbers (e.g. "1 5 27 33"), and alerts the sum, product, AND average of those numbers.

jQuery Review

What does it do?

```javascript
$('#new-post').on('submit', function(event) {
  var firstName = $(this).children('input[name="first_name"]').val();

  if (firstName.length > 0) {
    event.preventDefault();
    alert("Hello, " + firstName);
  }
});
```

Pair Exercise

In the jquery lab.

1. When a container is clicked, add the "highlight" class to all the shapes in that container.

2. [Challenge] When "button 1" is clicked, make all of the shapes "small". When "button 2" is clicked, make all the shapes "large".

3. [Challenge] When the shapes change size, make them transition smoothly using CSS animations.

The Javascript World

Frameworks

- Bootstrap

- Foundation

- Backbone

- React

- Angular

- Ember

Bootstrap Components

- Tabs

- Alerts

- Carousel

- Tooltip

- Modal

- ...

- All jQuery based

Libraries

- `jQuery UI`: advanced UI components

- `chosen`: an awesome select tag replacement

- `pickadate.js`: user-friendly date picker

- `animate.css`: gaudy animations

Libraries

- `hopscotch`: tours

- `font-awesome`: all the icons you ever wanted

- `chartjs.org`: awesome free charts library

- `highcharts`: awesome paid charts library

Libraries

- `codemirror` + `ace`: Code editors

- `mousetrap`: Easy keyboard shortcut events

- `underscore`: Adds missing functionality to Javascript

- `Google Maps`: Easier than you think

- `turbolinks`: Faster Rails apps

The Browser

- Canvas

- Web Audio and Video

- Chrome Plugins

- WebGL and three.js

Robotics

- `johnny five`: arduino, raspberry pi, etc.

Native Development

- Scripting OSX

- iOS and Android with React Native

Javascript as a Platform

- Coffeescript

- Typescript

- Dart

- Clojurescript

- ...