

YOU DON'T NEED jQuery

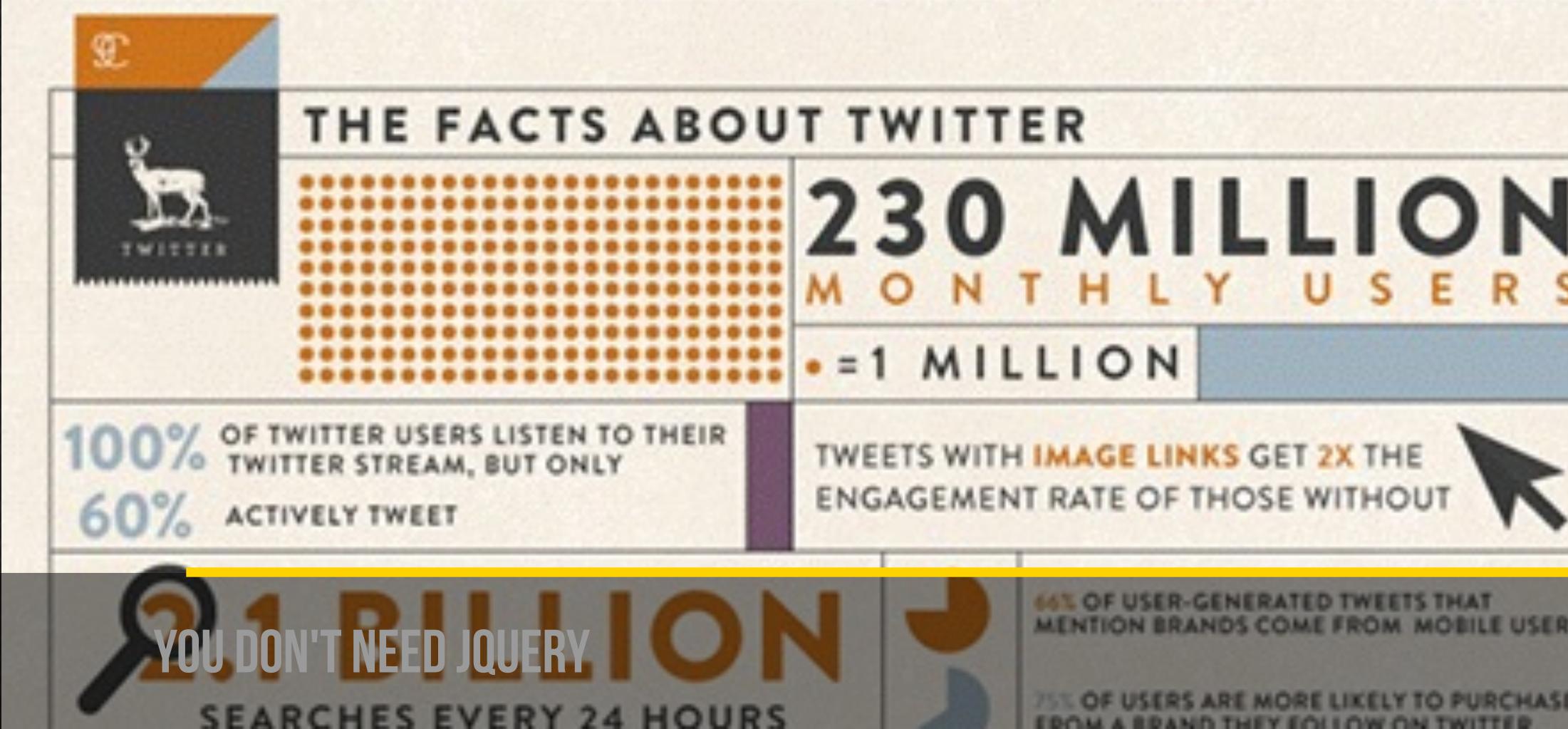
@joshbroton // joshbroton.com

WHO AM I?

- Sr Dev + Curmudgeon // Lemony



LEMONLY.COM/WORK



WHO AM I?

- Sr Dev + Curmudgeon // **Lemony**
- Founder // **standing.io**



DESIGN

CODE

BUSINESS

SPEAKERS

CONFERENCES

SHORT TALKS

MOST LIKES

VIEWS

DATE ADDED

STANDING.IO

Real World NodeJS - Creating the next big thing

Dawn of the Devs

Views: 27 | 0 0

HTML.future - What the Web Needs Next

Views: 1 | 0 0

Fast Test, Slow Test

Views: 6 | 0 0



Mike Monteiro: What Clients Don't Know (and Why It's Your Fault)

YOU DON'T NEED JQUERY



@JOSH BROTON

WHO AM I?

- Sr Dev + Curmudgeon // **Lemony**
- Founder // **standing.io**
- Frontend Dev // **kidblog.org**



WHO AM I?

- Sr Dev + Curmudgeon // **Lemony**
- Founder // **standing.io**
- Frontend Dev // **kidblog.org**
- Founder // **3themes**



3themes?

(More like 1theme, amirite?)

I DON'T ALWAYS
HAVE ADD

BUT

DIYLOL.COM

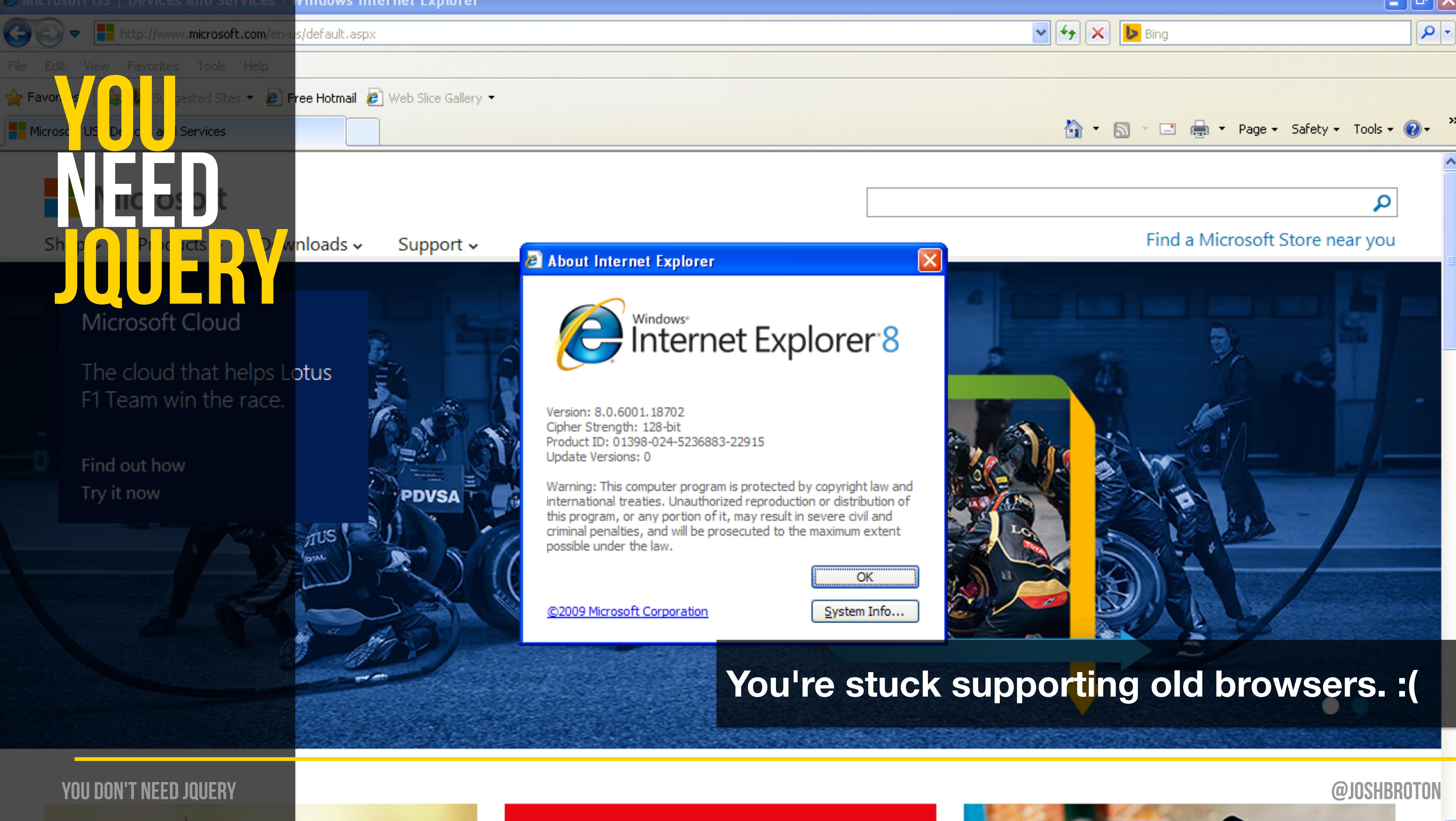


WHAT WE'RE COVERING

(You still have time to leave...

I hear **Nick**, **Josh**, and **Carolyn** are awesome)

1. You Need jQuery
2. Why you shouldn't use jQuery
3. Replacing jQuery



YOU NEED JQUERY

Microsoft Cloud

The cloud that helps Lotus F1 Team win the race.

Find out how
Try it now

YOU DON'T NEED JQUERY

You're stuck supporting old browsers. :(

@JOSH BROTON

YOU NEED JQUERY



YOU DON'T NEED JQUERY

@JOSH BROTON

YOU NEED JQUERY

You don't control the production environment.

- WordPress plugins
- CMS users
- Unknown dependencies

YOU NEED JQUERY

Customers hate it when you
break all the things.



YOU NEED JQUERY



You're vanillaJS averse

WHAT WE'RE COVERING

1. You Need jQuery
2. Why you shouldn't use jQuery
3. Replacing jQuery

MILLISECONDS MATTER

"...**250 milliseconds** can be the difference between a return customer and an abandoned checkout cart."

"...every **100 milliseconds** of latency resulted in a 1% loss of sales."

"...lose 20% of their traffic for each **additional 100 milliseconds** it takes a page to load."

bit.ly/1hZ04et // bit.ly/1jlxMaC

LOW-HANGING FRUIT

(Download Latency)

"... add roughly **150ms** to 1 full second of load time..." - TJ Van Toll

Request Latency: **344ms**

Download: **108ms**

Average Hit: **452ms**

bit.ly/1ncPcg7



Average Hit:
452ms

bit.ly/1ncPcg7

LOW-HANGING FRUIT

(Parse / Execute)

Parsing and Executing jQuery on mobile:

IE11: 18ms

Chrome: 15ms

Safari: 9ms

Safari iOS7: 178ms

Android 2.2: 1184ms

Android 4.4: 603ms

Average Hit: 535ms



Average Hit:
535ms

bit.ly/1ncPcg7

452ms + 535ms =
987ms

bit.ly/1ncPcg7

```
$('.thing').addClass('active')
```

BUT WHAT ABOUT A CDN?

"The chance that someone hitting a CDN has [cached your version of] jQuery is 1.7%."

- Alex Sexton

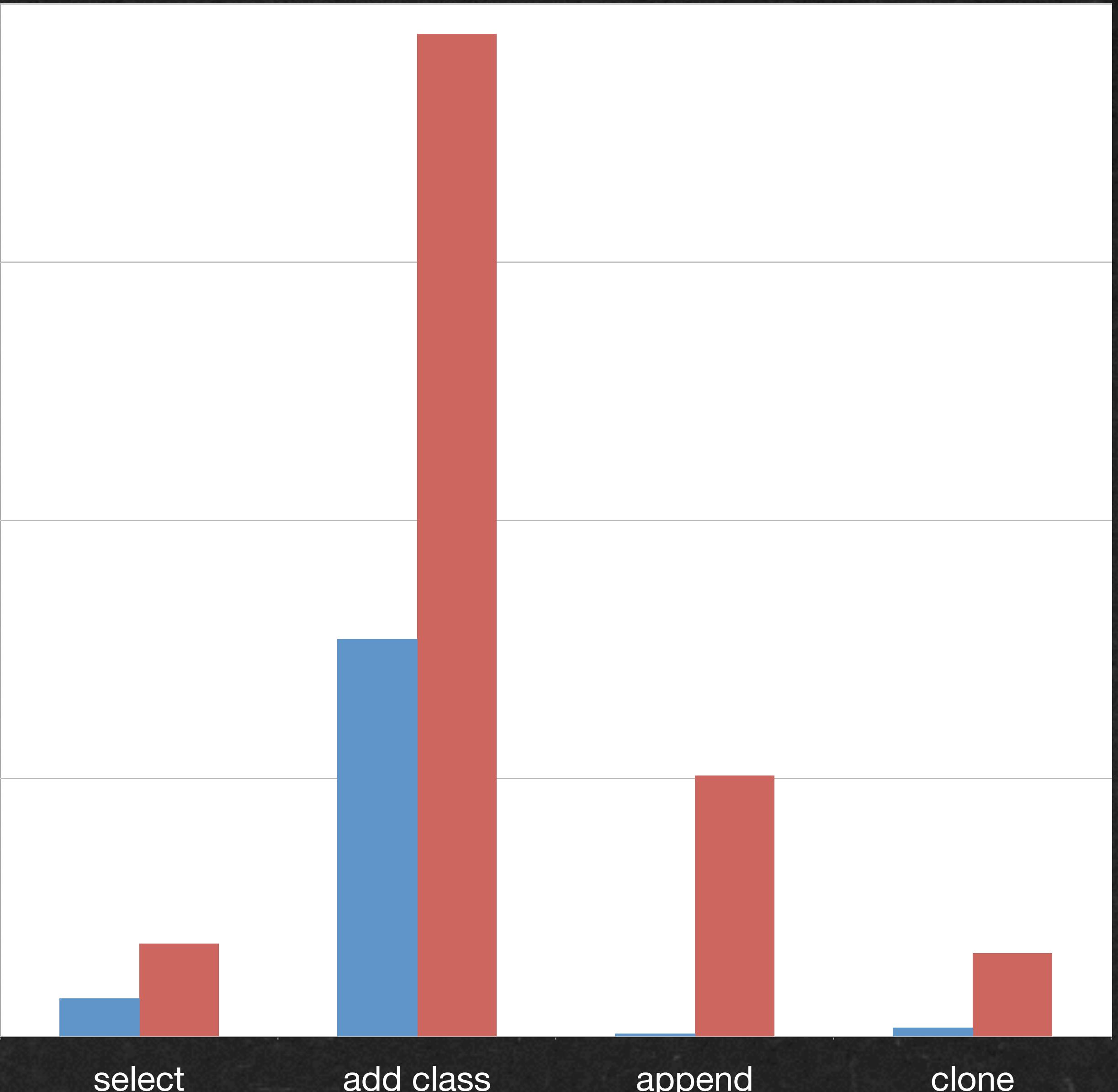


(that's really small)

OTHER PERFORMANCE IMPROVEMENTS

Does vanilla JS have speed benefits above jQuery?

Are they worth going after?

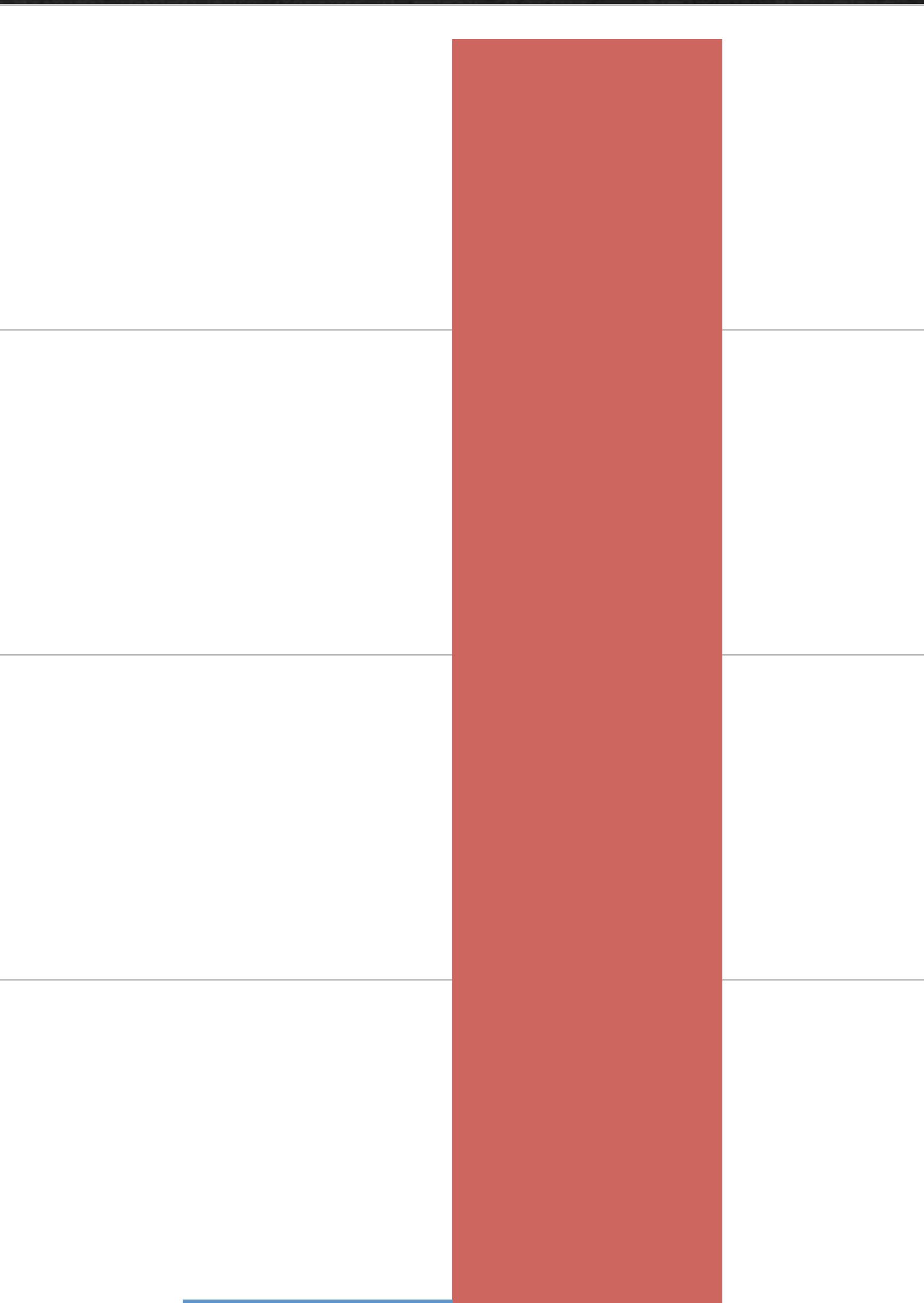


bit.ly/1kNgnuk

OTHER PERFORMANCE IMPROVEMENTS

What about loops?

JavaScript is ~290x faster



loops

bit.ly/1eNrG5P

WORTH THE EFFORT?

10ms + 10ms
+ 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms
+ 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms
+ 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms
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+ 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms + 10ms

= A lot

bit.ly/1kNgnuk

IT'S. REALLY. THIS. BAD.



WHAT WE'RE COVERING

1. You need jQuery
2. Why you shouldn't use jQuery
3. Replacing jQuery

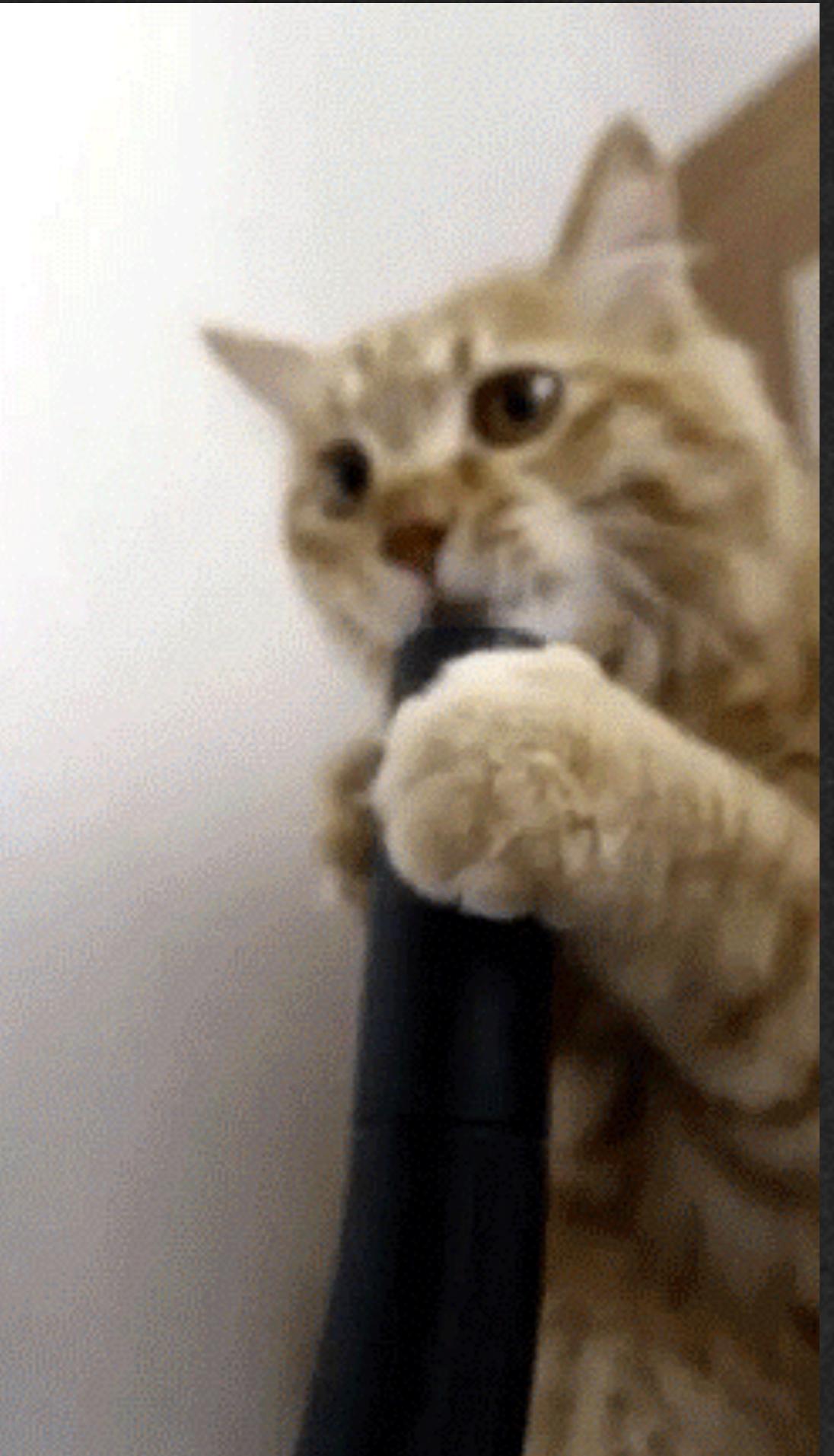
(why we were t

REJOICE

JOY







LESSON 1: THE DOM

"The Document Object Model (DOM) is a cross-platform and language-independent convention for representing and interacting with objects in HTML, XHTML and XML documents.[1] Objects in the DOM tree may be addressed and manipulated by using methods on the objects. The public interface of a DOM is specified in its application programming interface (API)." (wikipedia)

TL;DR: The DOM is the whole set of elements on a page.

JavaScript interacts with the DOM through the native DOM API.

```
<!DOCTYPE html>
▼<html class=" js flexbox canvas canvastext webgl no-touch geolocation postmessage websqldatabase backgroundsize borderimage borderradius boxshadow textshadow opacity cssanimations csscolumns cssgeneratedcontent video audio localstorage sessionstorage webworkers applicationcache svg inlinesvg " style=" height: 100%; >
  ▶<head>...</head>
  ▼<body class="home blog">
    ▼<div class="wrapper" role="document">
      ▶<header class="header-main">...</header>
      ▼<section class="content row">
        ▼<main class="content--body content-main" role="main">
          ▶<header class="page--header">
            <h1 class="page--title">
              Latest Posts </h1>
            </header>
            ▶<article class="post-1399 post type-post status-publish format-standard hentry category-122 tag-block-element tag-horizontally-center tag-transform tag-translate tag-vertically-center">...</article>
            ▶<article class="post-1389 post type-post status-publish format-standard hentry category-122 tag-block-element tag-horizontally-center tag-transform tag-translate tag-vertically-center">...</article>
            ▶<article class="post-1295 post type-post status-publish format-standard hentry category-122 tag-block-element tag-horizontally-center tag-transform tag-translate tag-vertically-center">...</article>
            ::before
            ▼<header>
              ▼<h1 class="post--title">
                <a href="/absolute-positioning-and-horizontal-vertical-centering/">Absolute Positioning and Horizontal Vertical Centering</a>
              </h1>
            </header>
            ▼<section class="post--byline">
              ▼<span class="byline--author author vcard">
                <a href="http://joshbroton.com/author/joshbrotonmail-com/" rel="author" class="fn">joshbrotonmail.com</a>
              </span>
              " . "
              <time class="byline--date published" datetime="2014-02-06T04:26:51+00:00">February 6, 2014</time>
            </section>
            ▶<div class="post--summary">...</div>
            ▶<footer class="post--metadata">...</footer>
            ::after
          </article>
          ▶<article class="post-1273 post type-post status-publish format-standard hentry category-122 tag-block-element tag-horizontally-center tag-transform tag-translate tag-vertically-center">...</article>
          ▶<article class="post-1253 post type-post status-publish format-standard hentry category-122 tag-block-element tag-horizontally-center tag-transform tag-translate tag-vertically-center">...</article>
          ::before
          ▶<header>...</header>
          ▼<section class="post--byline">...</section>
          ▶<div class="post--summary">...</div>
          ▶<footer class="post--metadata">...</footer>
```

LESSON 1: THE DOM

jQuery is just another DOM API.

```
<!DOCTYPE html>
▼<html class=" js flexbox canvas canvastext webgl no-touch geolocation postmessage websqldatabase backgroundsize borderimage borderradius boxshadow textshadow opacity cssanimations csscolumns cssgeneratedcontent video audio localstorage sessionstorage webworkers applicationcache svg inlinesvg fontface" role="document">
  ▶<head>...</head>
  ▼<body class="home blog">
    ▼<div class="wrapper" role="document">
      ▶<header class="header-main">...</header>
      ▼<section class="content row">
        ▼<main class="content--body content-main" role="main">
          ▼<header class="page--header">
            <h1 class="page--title">
              Latest Posts </h1>
            </header>
          ▶<article class="post-1399 post type-post status-publish format-standard hentry category-absolute-positioning-and-horizontal-vertical-centering">...
            ▶<article class="post-1389 post type-post status-publish format-standard hentry category-absolute-positioning-and-horizontal-vertical-centering">...
            ▼<article class="post-1295 post type-post status-publish format-standard hentry category-tag-block-element tag-horizontally-center tag-transform tag-translate tag-vertically-center">...
              ::before
              ▼<header>
                ▼<h1 class="post--title">
                  <a href="/absolute-positioning-and-horizontal-vertical-centering/">Absolute Positioning and Horizontal Vertical Centering</a>
                </h1>
              </header>
              ▼<section class="post--byline">
                ▼<span class="byline--author author vcard">
                  <a href="http://joshbroton.com/author/joshbrotongmail-com/" rel="author" class="fn">joshbrotongmail-com</a>
                </span>
                " * "
                <time class="byline--date published" datetime="2014-02-06T04:26:51+00:00">February 6, 2014</time>
              </section>
              ▶<div class="post--summary">...</div>
              ▶<div class="post--metadata">...</div>
              ::after
            </article>
          ▶<article class="post-1273 post type-post status-publish format-standard hentry category-tag-events tag-javascript tag-onscroll tag-setinterval tag-window-onscroll">...
            ::before
            ▶<header>...</header>
            ▼<section class="post--byline">...</section>
            ▶<div class="post--summary">...</div>
            ▶<div class="post--metadata">...</div>
```

LESSON 1A: DOM NODES

```
<!DOCTYPE html>
▼<html class=" js flexbox canvas canvastext webgl no-touch geolocation postmessage websqldatabase backgroundsize borderimage borderradius boxshadow textshadow opacity cssanimations csscolumns generatedcontent video audio localstorage sessionstorage webworkers applicationcache svg inlinesvg flexboxgrid" role="document">
  ▷<head>...</head>
  ▷<body class="home blog">
    ▷<div class="wrapper" role="document">
      ▷<header class="header-main">...</header>
      ▷<section class="content row">
        ▷<main class="content--body content-main" role="main">
          ▷<header class="page--header">
            ▷<h1 class="page--title">
              Latest Posts </h1>
            </header>
          ▷<article class="post-1399 post type-post status-publish format-standard hentry category-1399">...</article>
          ▷<article class="post-1389 post type-post status-publish format-standard hentry category-1389">...</article>
          ▷<article class="post-1295 post type-post status-publish format-standard hentry category-1295 tag-block-element tag-horizontally-center tag-transform tag-translate tag-vertically-center">
            ▷<::before>
            ▷<header>
              ▷<h1 class="post--title">
                ▷<a href="/absolute-positioning-and-horizontal-vertical-centering/">Absolute Positioning and Horizontal Vertical Centering</a>
              </h1>
            </header>
            ▷<section class="post--byline">
              ▷<span class="byline--author author vcard">
                ▷<a href="http://joshbroton.com/author/joshbrotongmail-com/" rel="author" class="fn">joshbrotongmail-com</a>
              </span>
              ...
              ▷<time class="byline--date published" datetime="2014-02-06T04:26:51+00:00">February 6, 2014</time>
            </section>
            ▷<div class="post--summary">...</div>
            ▷<footer class="post--metadata">...</footer>
            ▷<::after>
          </article>
          ▷<article class="post-1273 post type-post status-publish format-standard hentry category-1273">...</article>
          ▷<article class="post-1253 post type-post status-publish format-standard hentry category-1253 tag-events tag-javascript tag-onscroll tag-setinterval tag-window-onscroll">
            ▷<::before>
            ▷<header>...</header>
            ▷<section class="post--byline">...</section>
            ▷<div class="post--summary">...</div>
            ▷<footer class="post--metadata">...</footer>
          </article>
        </main>
      </section>
    </body>
  </html>
```

DOM Node

DOM Node

DOM Node

Yep... DOM Node

JavaScript is
for interacting
with these
DOM nodes.

LESSON 2: BASIC JQUERY

```
$(' .thing' ).addClass( 'new-class' );
```

"Use jQuery..."



"...on these nodes..."

"...and do this..."



"...with this information"



LESSON 3: JQUERY + DOM NODES

```
$('.home').addClass('new-class');
```



```
<!DOCTYPE html>
<html class=" js flexbox canvas canvastext webgl no-touch geolocation postmessage websqldatabase indexeddb backgroundsize borderimage borderradius boxshadow textshadow opacity cssanimations csscolumns cssgradients generatedcontent video audio localstorage sessionstorage webworkers applicationcache svg inlinesvg smil">
  <head>...</head>
  <body class="home blog new-class">
    <div class="wrapper" role="document">
      <header class="header-main">
        <nav class="nav-quicklinks" role="navigation">
          </nav>
        <div class="header--inner">
          <section class="open-button-wrapper">...</section>
          <nav class="nav-main" role="navigation">
            <div class="menu-header-menu-container">...</div>
          </nav>
          <section class="search" role="search">...</section>
          <h1 class="header--blog-name">...</h1>
        </div>
      </header>
      <section class="content row">
        <main class="content--body content-main" role="main">
          <header class="page--header">...</header>
          <article class="post-1399 post type-post status-publish format-standard hentry category-life c...">...
          <article class="post-1389 post type-post status-publish format-standard hentry category-life c...">...
          <article class="post-1295 post type-post status-publish format-standard hentry category-css ca...">...
          <header>
            <h1 class="post--title">
              <a href="/absolute-positioning-and-horizontal-vertical-centering/">Absolute Positioning a...
            </h1>
          </header>
          <section class="post--byline">...</section>
          <div class="post--summary">...</div>
          <footer class="post--metadata">...</footer>
        </article>
        <article class="post-1273 post type-post status-publish format-standard hentry category-music...">...
        <article class="post-1253 post type-post status-publish format-standard hentry category-javasc...">...
      </main>
    </div>
  </body>
</html>
```

LESSON 4: VANILLA JAVASCRIPT

```
document.querySelectorAll('.thing').className += ' new-class';
```



"Interact with the DOM..." "...specifically these nodes..." "...and do this"

LESSON 5: JAVASCRIPT + DOM NODES

```
document.querySelector('.home')  
.className += ' new-class';
```



```
<!DOCTYPE html>  
▼<html class=" js flexbox canvas canvastext webgl no-touch geolocation postmessage websqldatabase indexeddb backgroundsize borderimage borderradius boxshadow textshadow opacity cssanimations csscolumns cssgradients generatedcontent video audio localstorage sessionstorage webworkers applicationcache svg inlinesvg smil">  
► <head>...</head>  
▼<body class="home blog new-class">  
  <div class="wrapper" role="document">  
    ▼<header class="header-main">  
      <nav class="nav-quicklinks" role="navigation">  
        </nav>  
    ▼<div class="header--inner">  
      ►<section class="open-button-wrapper">...</section>  
      ▼<nav class="nav-main" role="navigation">  
        ►<div class="menu-header-menu-container">...</div>  
      </nav>  
      ►<section class="search" role="search">...</section>  
      ►<h1 class="header--blog-name">...</h1>  
    </div>  
  </header>  
  ▼<section class="content row">  
    ▼<main class="content--body content-main" role="main">  
      ►<header class="page--header">...</header>  
      ►<article class="post-1399 post type-post status-publish format-standard hentry category-life c...</article>  
      ►<article class="post-1389 post type-post status-publish format-standard hentry category-life c...</article>  
      ▼<article class="post-1295 post type-post status-publish format-standard hentry category-css ca...</article>  
        ::before  
        ▼<header>  
          ▼<h1 class="post--title">  
            <a href="/absolute-positioning-and-horizontal-vertical-centering/">Absolute Positioning a...</a>  
          </h1>  
        </header>  
        ►<section class="post--byline">...</section>  
        ►<div class="post--summary">...</div>  
        ►<footer class="post--metadata">...</footer>  
        ::after  
      </article>  
    ►<article class="post-1273 post type-post status-publish format-standard hentry category-music...</article>  
    ►<article class="post-1253 post type-post status-publish format-standard hentry category-javasc...</article>  
    <tag-events tag-javascript tag-onscroll tag-setinterval tag-window-onscroll">...</article>  
    ►<article class="post-1223 post type-post status-publish format-standard hentry category-life t...</article>
```

LESSON 6: JAVASCRIPT SELECTORS

```
$('body') → document.getElementsByTagName('body')  
$('.home') → document.querySelectorAll('slabmetør')  
$('#home') → document.getElementById('#home')
```

LESSON 7: JAVASCRIPT DEMO

THANK YOU!

@joshbroton // joshbroton.com

