how to website

html + css + js

word of warning

html + css kinda suck

an email I recently received*

subject: making website pls halp

i am #1 CS rap fan but i cannot website. pls make 4 me.

- k. west

p.s. is it too late to comp

^{*}this totally happened i swear

how does website happen?

- browser understands 3 languages:
 - html: general structure
 - css: modify appearance
 - javascript: add functionality

overview of html

- hierarchical structure
- lots of tags, have semantic meanings
 - have attributes
- should make sense independent of appearance

overview of css

- structure: <css-selector> {property: value; ...}
- select with tag name, id, and/or class
- does everything appearance-related

overview of javascript

- actual programming language
- you can do whatever the fuck you want with it
- use sparingly

lets help mr. west!

writing good html

- use semantically correct tags
- should make hierarchical sense
- don't hack for appearance
 - avoid tags like
>, , , etc.

<html> <!-- html (put things here pls) -->

</html> <!-- hello, closing tag! you're my best friend :) -->

```
<html>
   <head> <!-- metadata here -->
   </head>
   <body> <!-- actual stuff to display -->
   </body>
</html> <!-- such a nice hug, html tag :) -->
```

```
</body>
```

```
<html>
    <head>
        <title>My Nerdcore Rap Site</title>
        <link rel="stylesheet" href="css/styles.css">
        <script type="text/javascript" src="js/script.js"></script>
    </head>
    <body>
        <div class="container">
        </div>
    </body>
```

</html>

```
<html>
    <head>
        <title>My Nerdcore Rap Site</title>
        <link rel="stylesheet" href="css/styles.css">
        <script type="text/javascript" src="js/script.js"></script>
    </head>
    <body>
        <div class="container">
            <h1>Nerdcore rap 8-)</h1> <!-- header 1: big text -->
```

</div>

</body>

</html>

```
<html>
   <head>
       <title>My Nerdcore Rap Site</title>
       <link rel="stylesheet" href="css/styles.css">
       <script type="text/javascript" src="js/script.js"></script>
   </head>
   <body>
       <div class="container">
           <h1>Nerdcore rap 8-)</h1>
            <!-- unordered (bulleted) list -->
           </div>
   </body>
</html>
```

```
<html>
   <head>
       <title>My Nerdcore Rap Site</title>
       <link rel="stylesheet" href="css/styles.css">
       <script type="text/javascript" src="js/script.js"></script>
   </head>
   <body>
       <div class="container">
          <h1>Nerdcore rap 8-)</h1>
          <!-- list items -->
              <
              </div>
   </body>
</html>
```

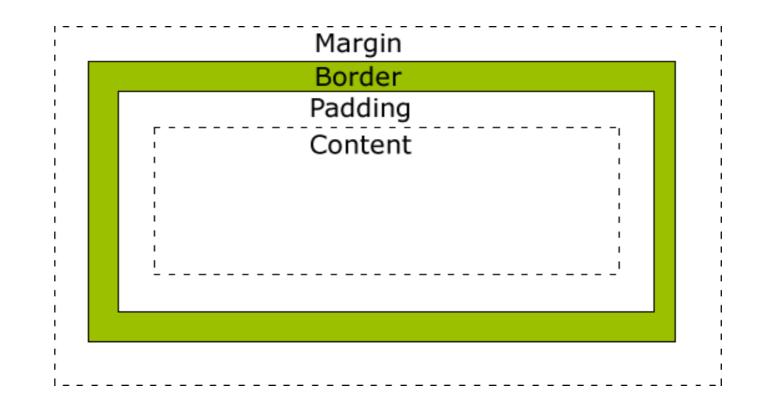
```
<html>
   <head>
       <title>My Nerdcore Rap Site</title>
       <link rel="stylesheet" href="css/styles.css">
       <script type="text/javascript" src="js/script.js"></script>
   </head>
   <body>
       <div class="container">
           <h1>Nerdcore rap 8-)</h1>
          <!-- a = anchor -> link -->
                  <a href="/songs/bitcoin/">Bitcoin Baron</a>
              <
                  <a href="/songs/pimping/">The Pimping Lemma</a>
              </div>
   </body>
</html>
```

CSS!

- select with #id, .class, or tag_name
- combine them (e.g. ul.songs)
- get descendents (e.g. #container ul)
- pseudoselectors (e.g. #btn:hover)

css box model!

- content
- border



- padding (between content + border)
- margin (outside border)

css properties!

- so many :o
- some useful ones:
 - color (font color)
 - background-image
 - background-color
 - margin, border, padding, width, etc.

position

- common values:
 - static (default)
 - relative (position statically w/ adjustments)
 - absolute (position wrt to closest relative parent)

floating elements

- want things next to each other? No problem.
- float: horizontally (left/right, not up/down)
- float: left
- stuff after float flows around it
- before the float not affected

float away from me!

- Tired of annoying elements floating all up in your space? No problem!
- property: clear
- specifies which sides of an element floating elements are NOT allowed.

```
.text_line{
    clear: both
}
```

javascript

- dynamic content responding to user actions
- insert using <script></script> tags, or best, keep it in separate file and link it in the <head>:

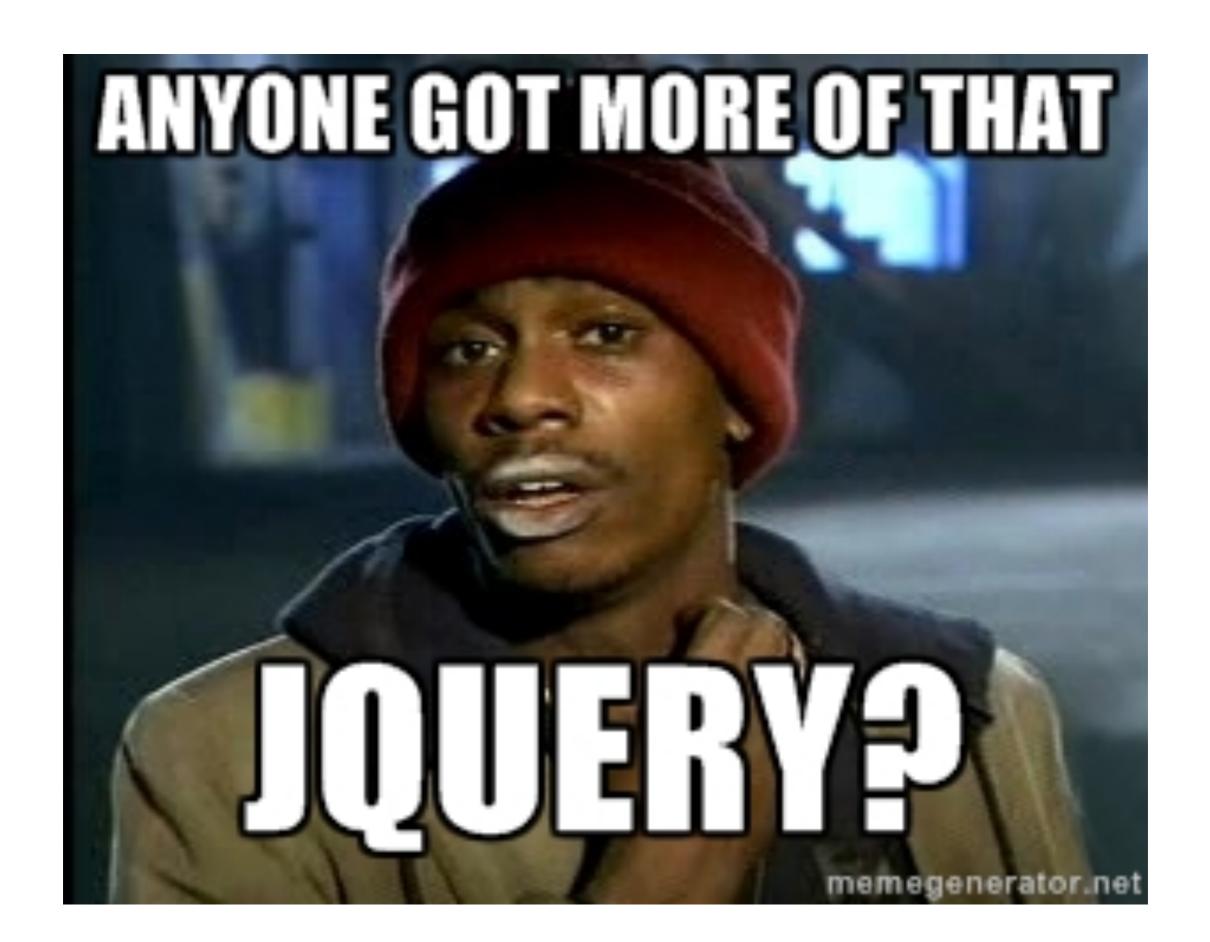
```
<script src="js/all.min.js"></script>
```

grab elements like this:

```
document.getElementById("demo").innerHTML
= "Hello World!";
```

real talk

- could use DOM, but lesbihonest:
 - jQuery select using css selectors
 - \$(".content#interstitial").show()
 - this is the shit



jQuery

Setting text:

```
$("button.surprise").text("SURPRISE!")
```

hiding/showing elements:

```
var $hiddenBox = $( "#message" );
$("#button-container button").on( "click",
function( event ) {
    $hiddenBox.show();
});
```