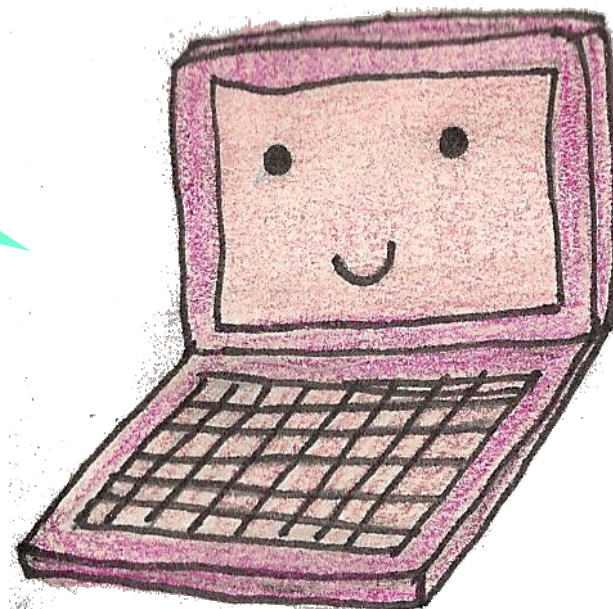


Some Fantastic Front-End Performance Tricks and Why We Do Them

Some Fantastic Front-End Performance Tricks and Why We Do Them

whEEEEEEEE!

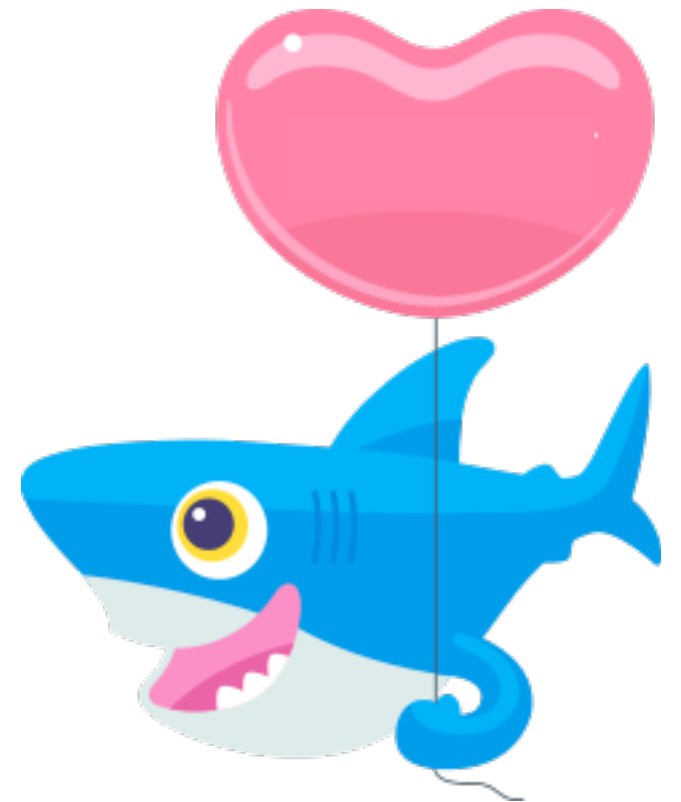


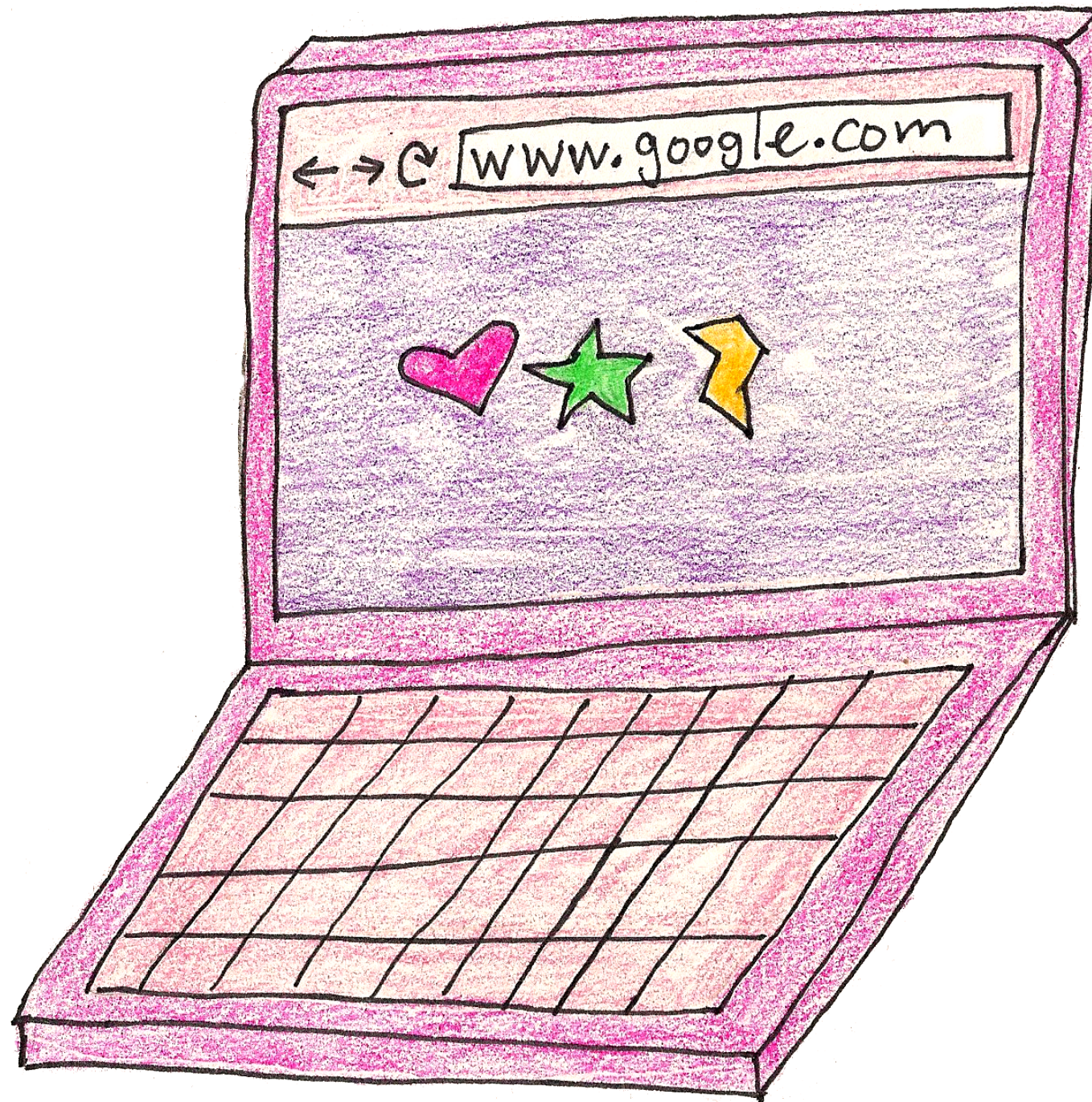
Jenna Zeigen
QueensJS
2/3/16
@zeigenvector

Engineering Manager
@ DigitalOcean

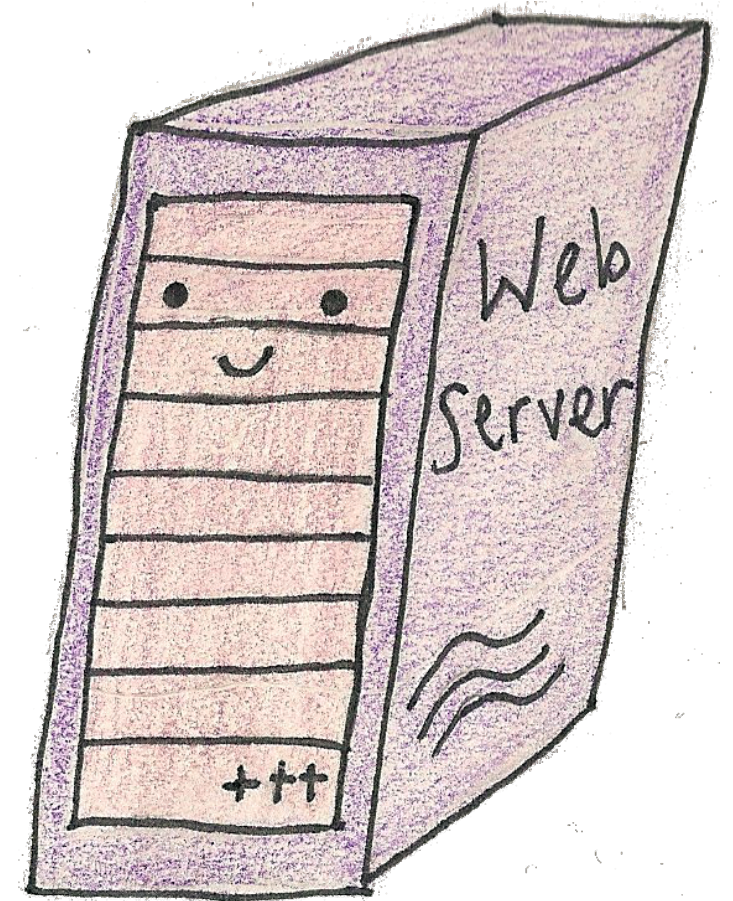
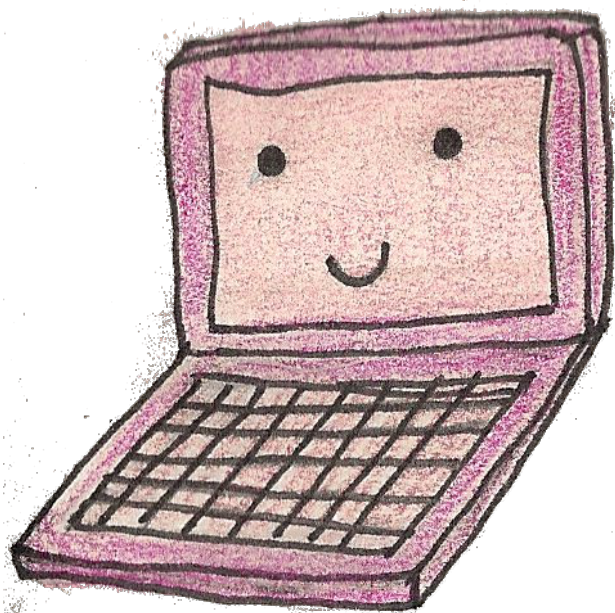


zeigenvector





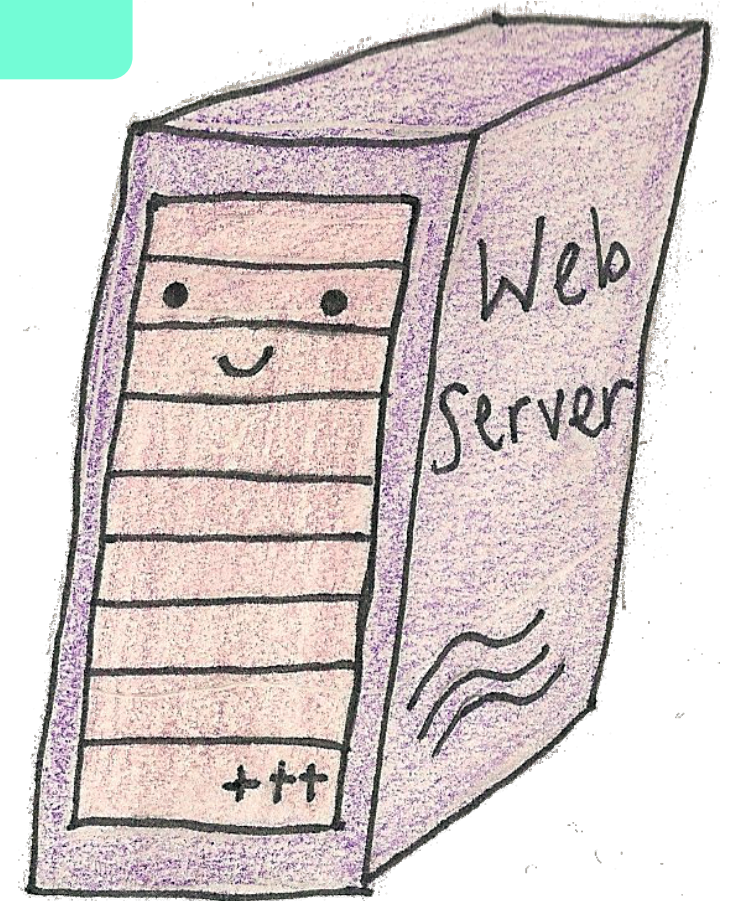
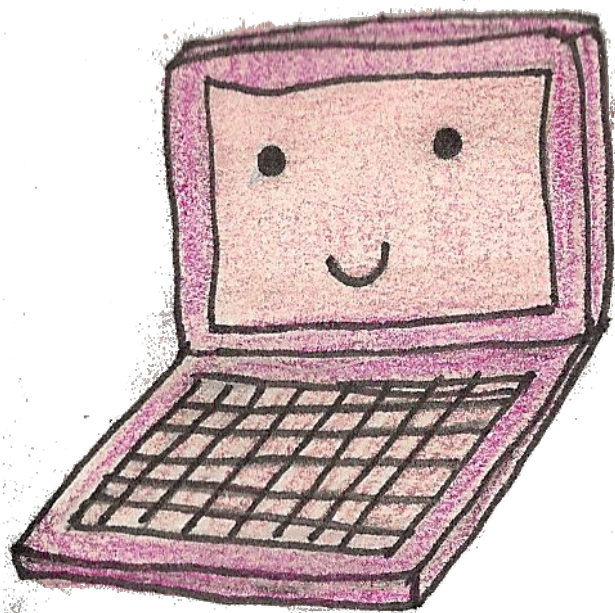
A Short Summary of How the Internet Works!



The Internet.

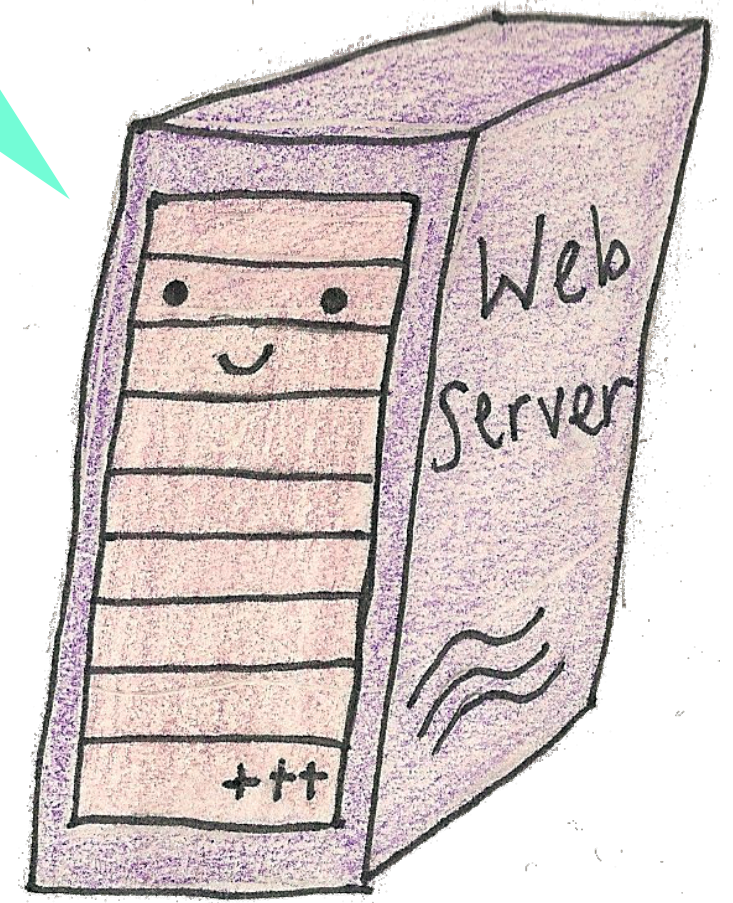
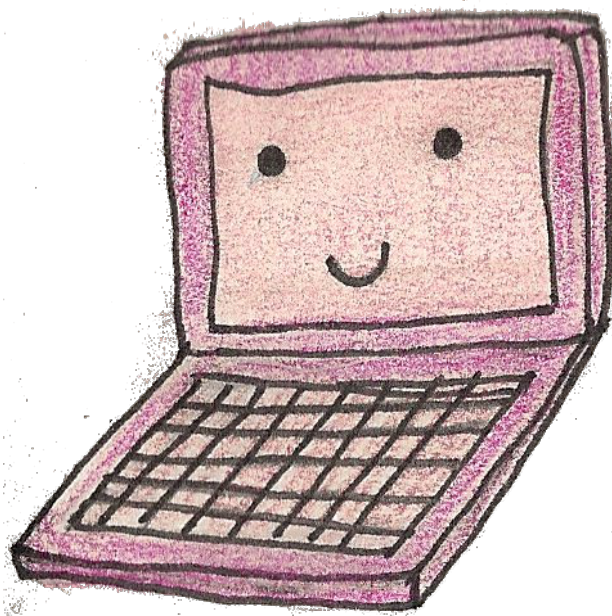
You, you got what I need,
It's that page, hey, can you send?
It's that page, hey, can you send?
Maybe?

♪ ♪ ♪



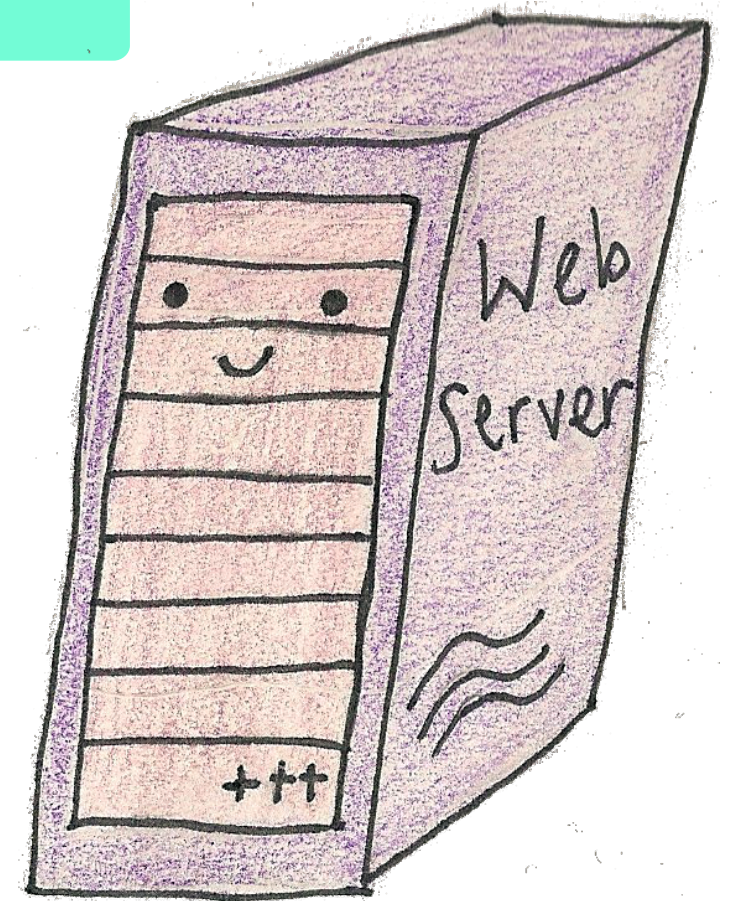
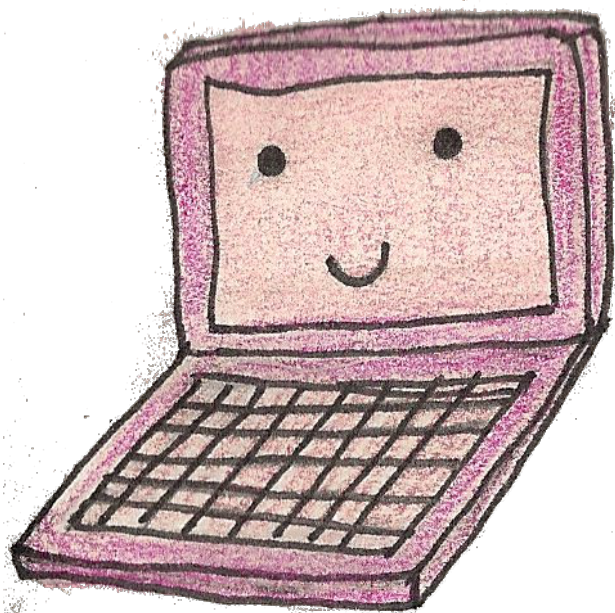
The Internet.

All this HTML
I will send to you
All this HTML
You'll know what to do
♪ ♪ ♪



The Internet.

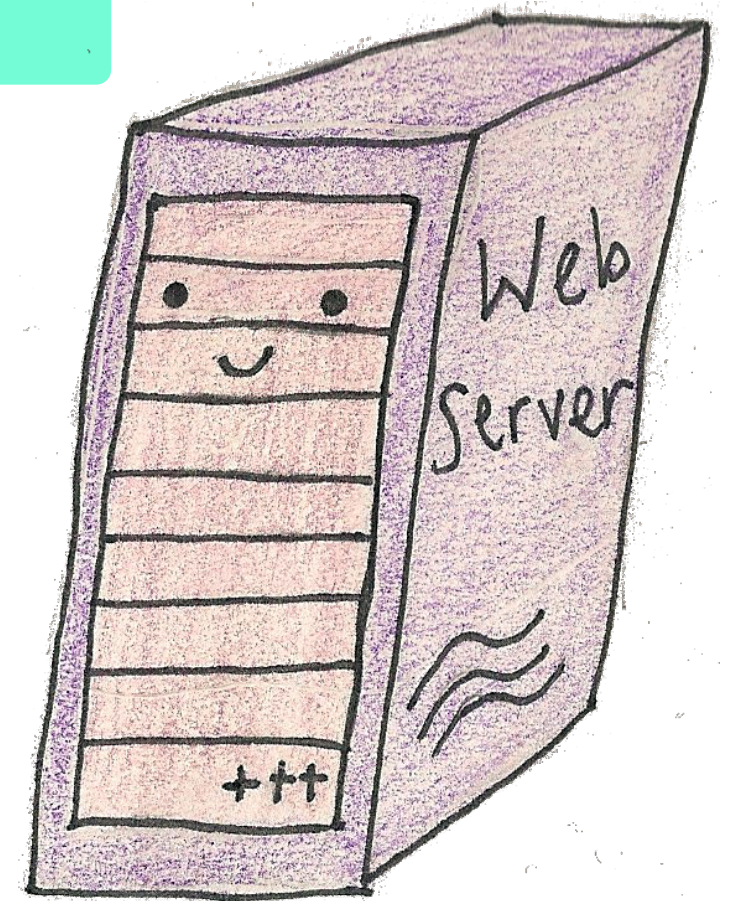
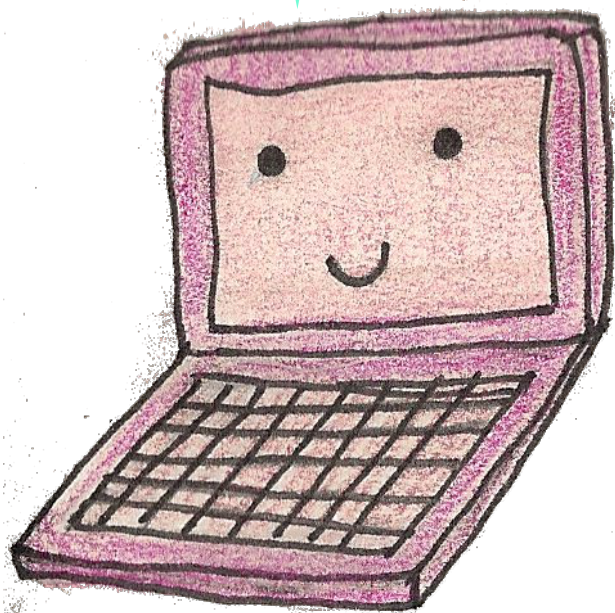
We did everything right,
Bytes are on the client side
♪♪♪



The Internet.

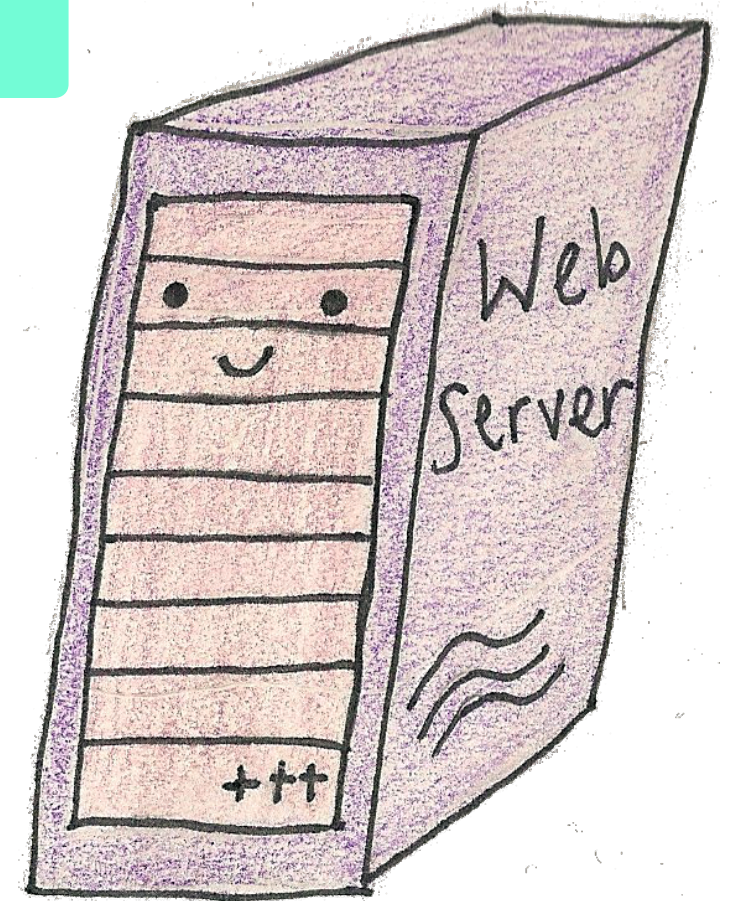
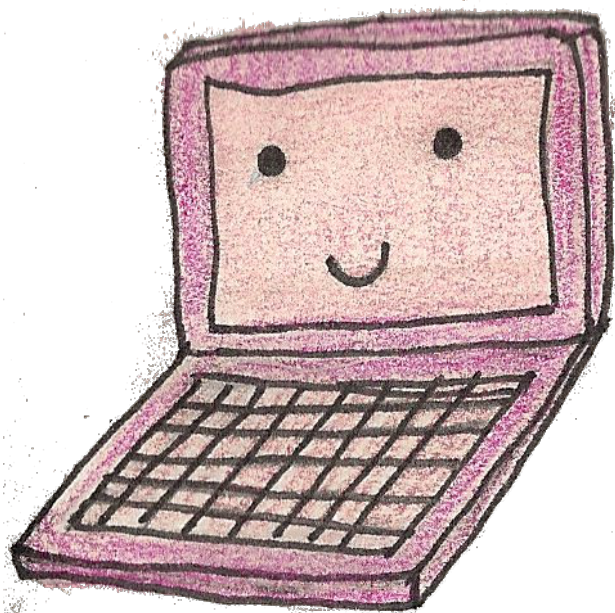
I begin to parse,
To split the text apart
Break it down into sections
Tokens into selectors

♪ ♪ ♪



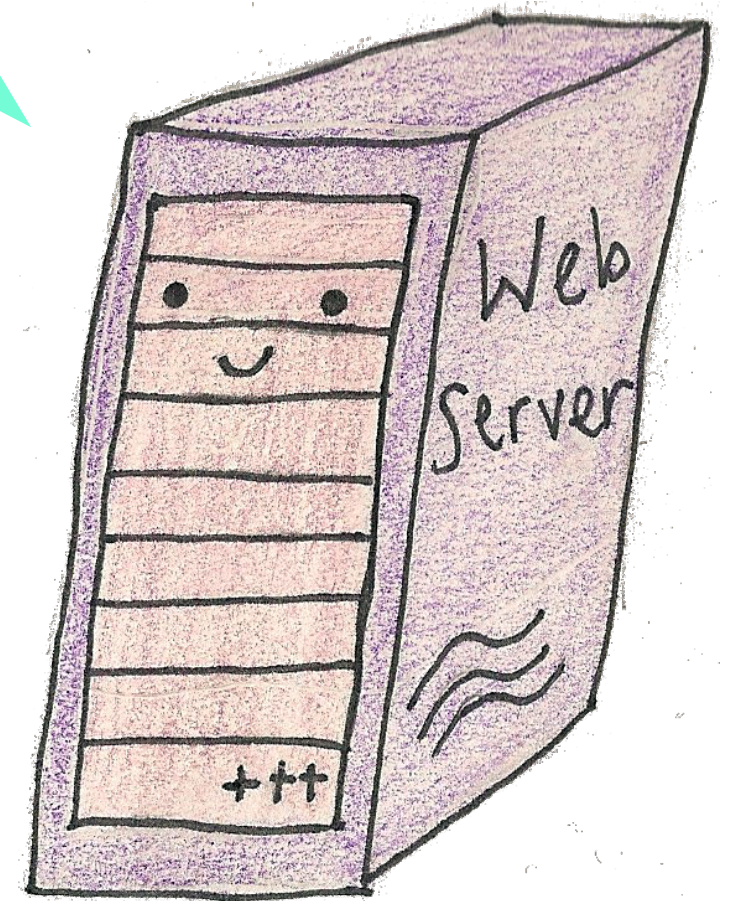
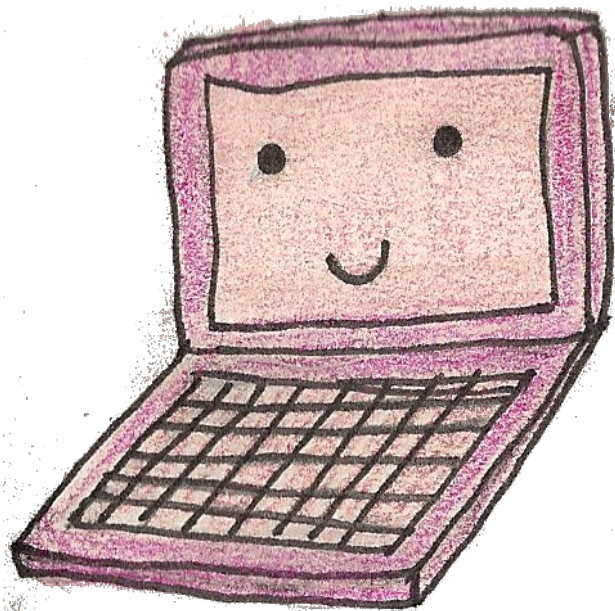
The Internet.

Are you listening? (Whoa-oh-oh-oh-oh)
Please come back. (Whoa-oh-oh-oh-oh)
I'll tell you what do I need
I'll tell you what do I need
Whoa-oh, whoa-oh
♪ ♪ ♪



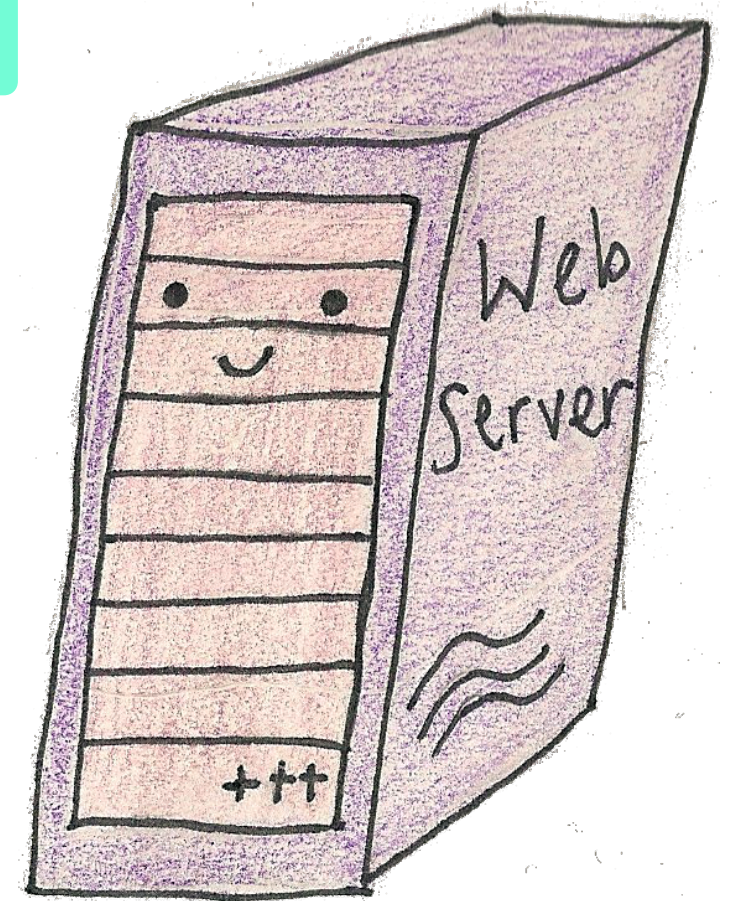
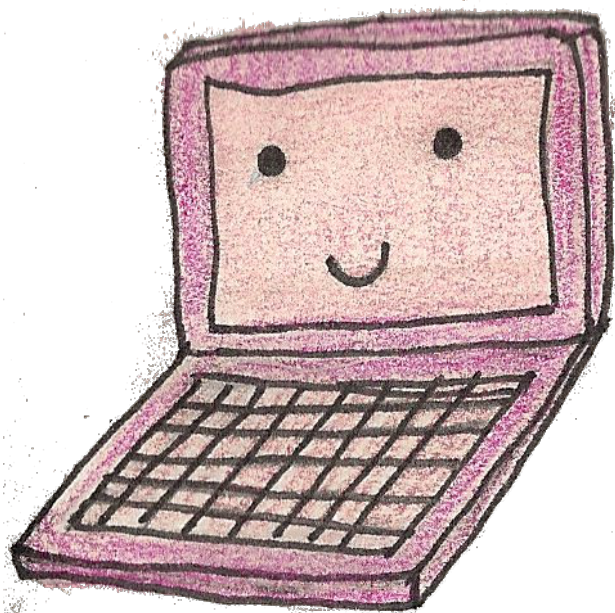
The Internet.

Sending out some CSS
Sending out some CSS
♪ ♪ ♪



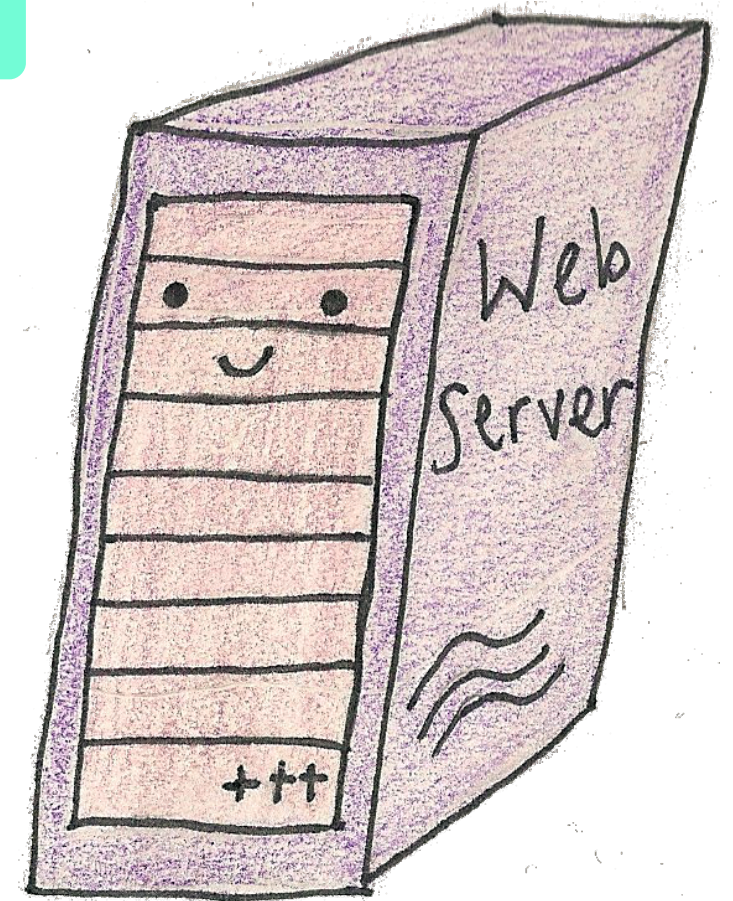
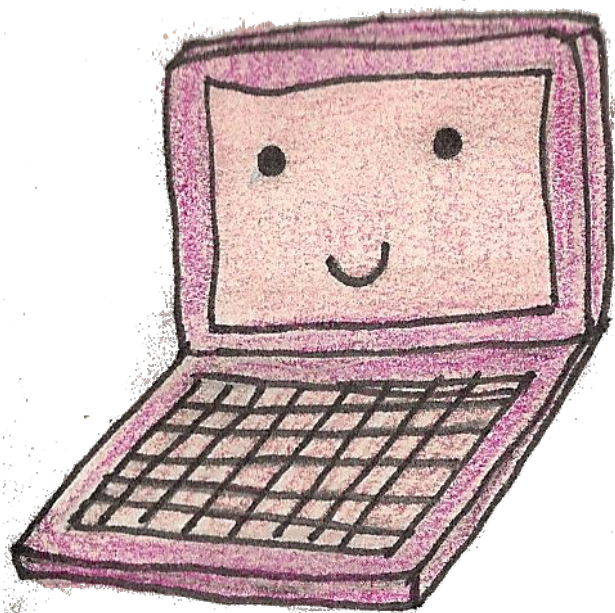
The Internet.

Assets came quickly,
The execution of all things
♪ ♪ ♪



The Internet.

Cause the render's gonna...
rend, rend, rend?
♪ ♪ ♪

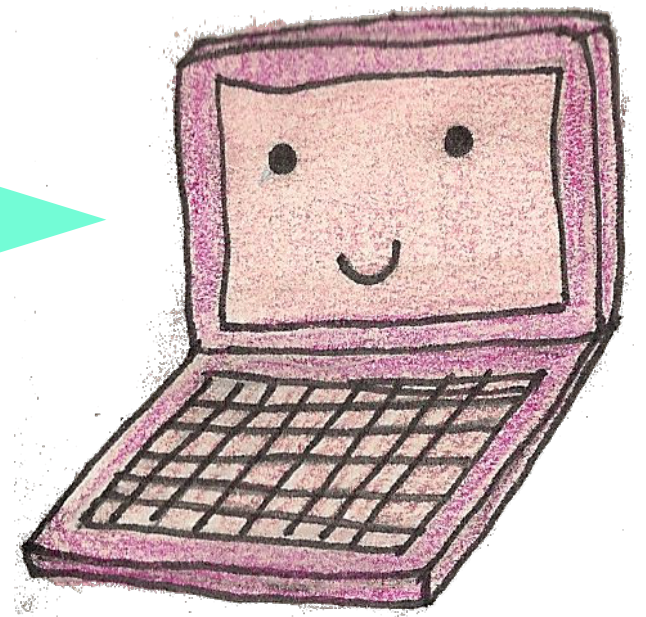


Overview

1. Scripts at the Bottom
2. Styles at the Top
3. Make Fewer Requests
4. Caching
5. Small Files

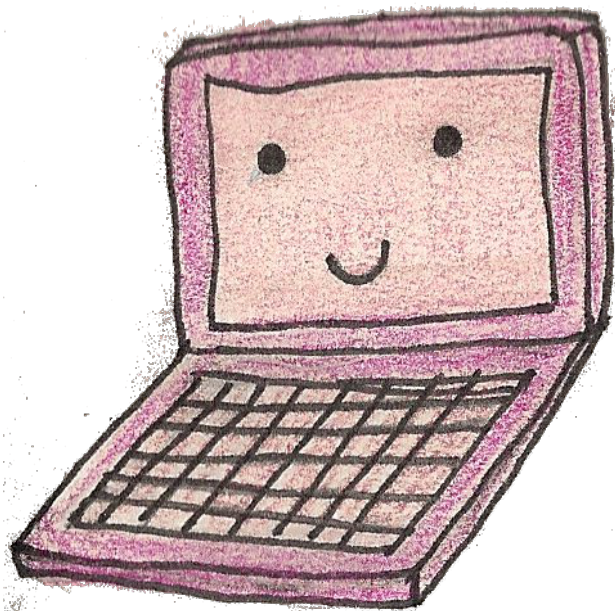
Put your scripts at the bottom!

Scripts go at the bottom
Not up here
Scripts go at the bottom
So the whole page freakin' here
♪ ♪ ♪



Scripts at the Bottom

```
1 <html>
2   <head>
3     <meta charset="utf-8">
4     <title>yay internet</title>
5     <link href="css.css" rel="stylesheet" type="text/css" />
6   </head>
7
8   <body>
9     <div>yay internet</div>
10    <script src="js.js" type="text/javascript"></script>
11  </body>
12 </html>
```

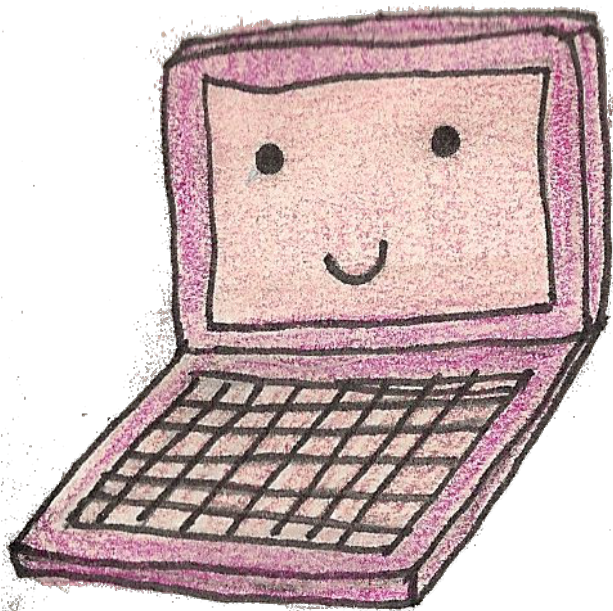


Closing tag...



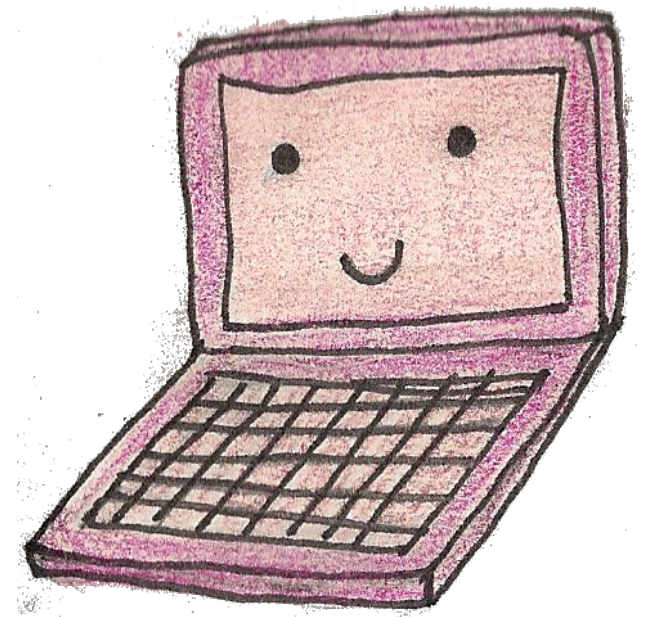
Scripts at the Bottom

Stop, JavaScript time!
♪ ♪ ♪



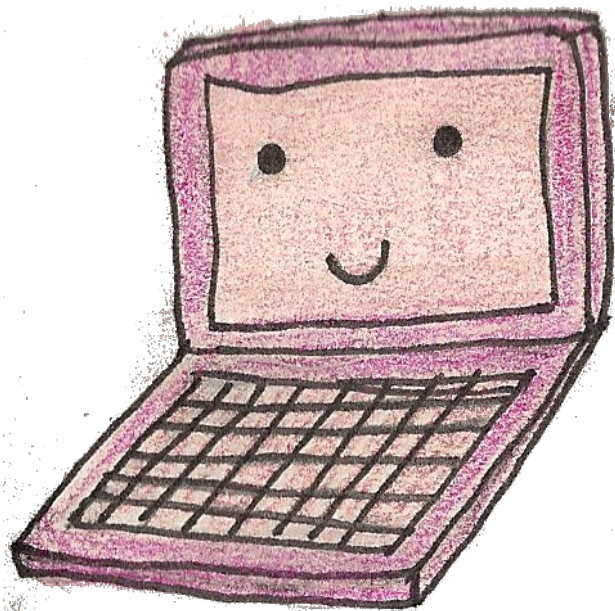
Put your styles at the top!

Go `'head`
Switch your styles up
♪ ♪ ♪



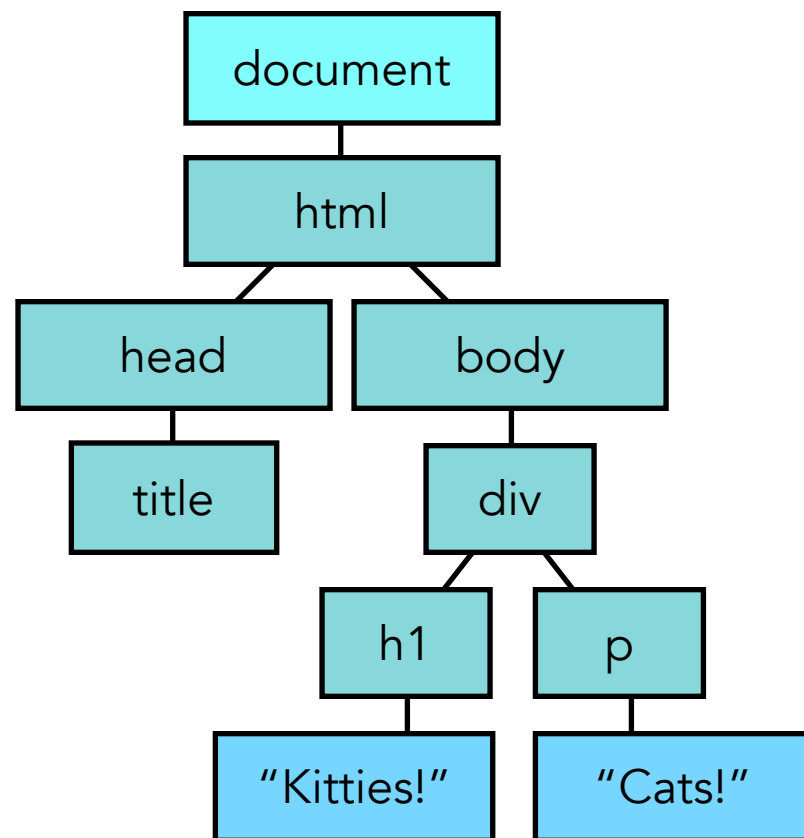
Styles at the Top

```
1 <html>
2   <head>
3     <meta charset="utf-8">
4     <title>yay internet</title>
5     <link href="css.css" rel="stylesheet" type="text/css" />
6   </head>
7
8   <body>
9     <div>yay internet</div>
10    <script src="js.js" type="text/javascript"></script>
11  </body>
12 </html>
```

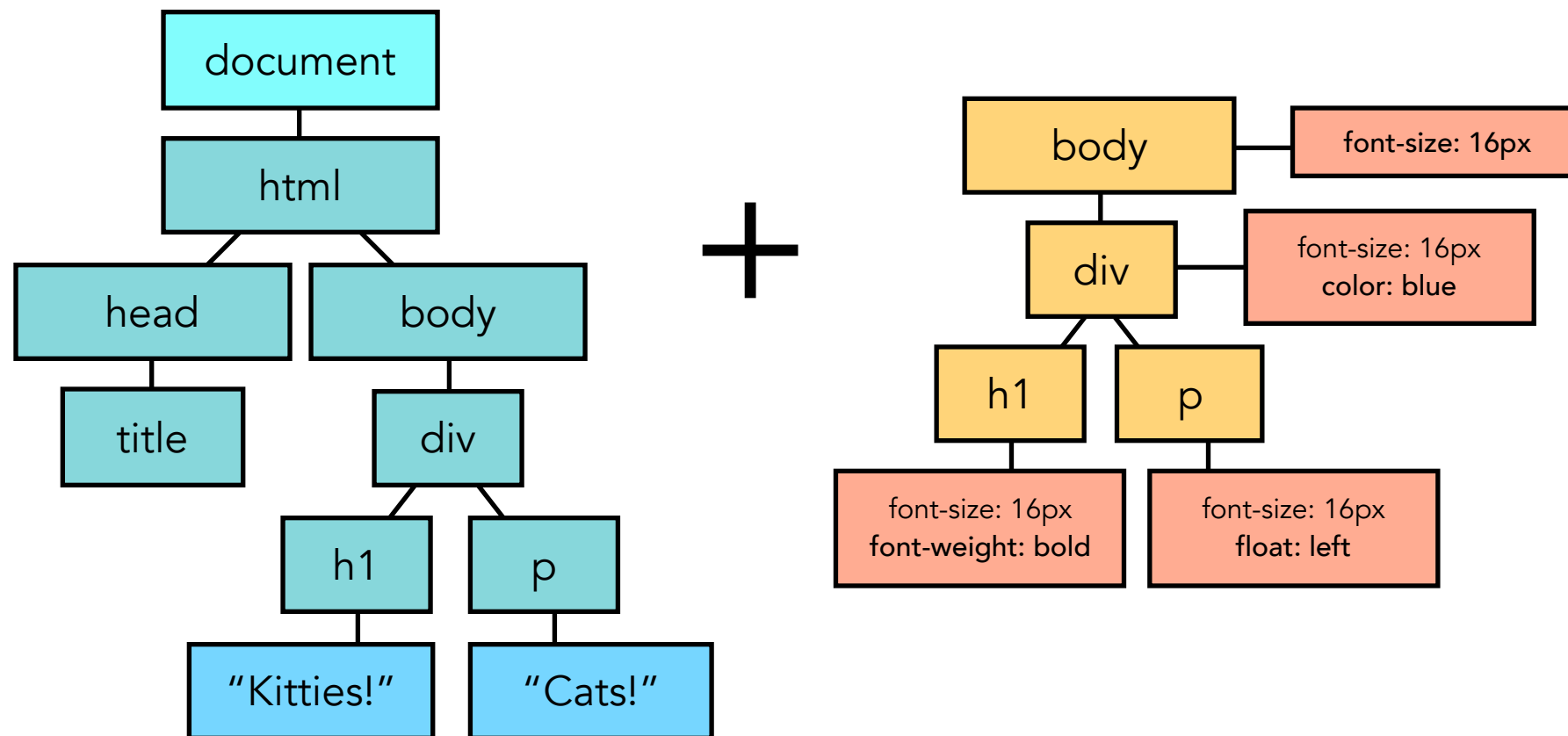


In your <head>
In your <head>
Stylesheet, stylesheet,
eet, eet, eet
♪ ♪ ♪

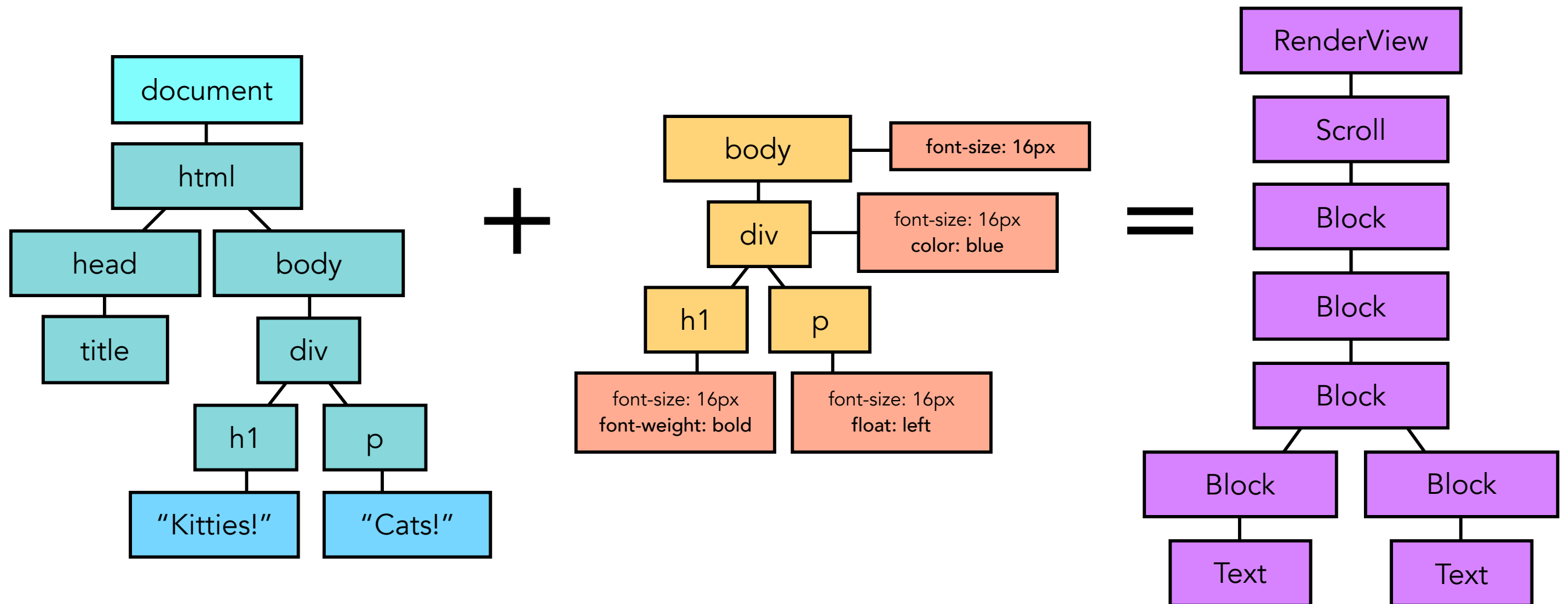
Styles at the Top



Styles at the Top

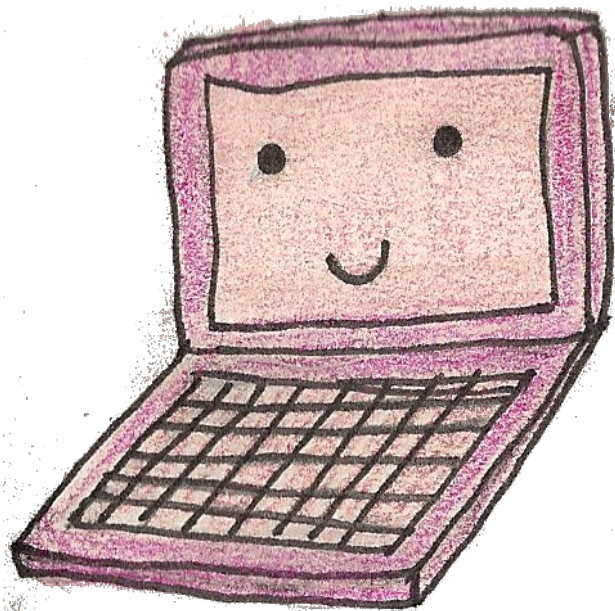


Styles at the Top



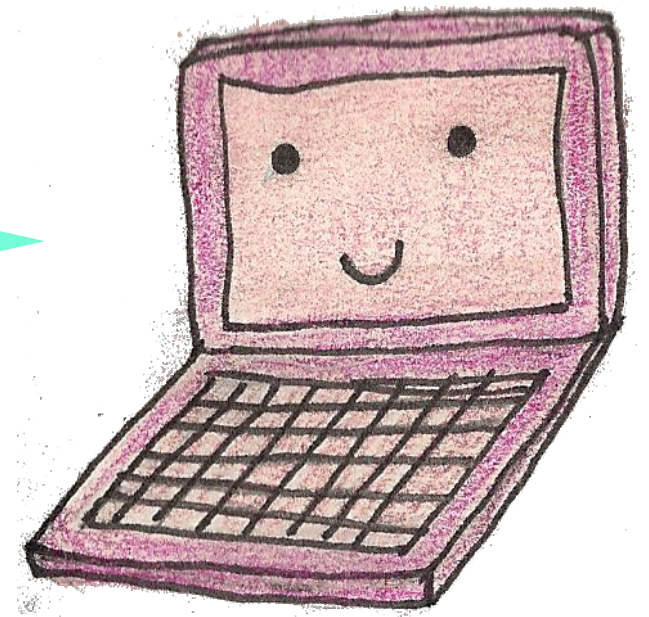
Styles at the Top

'Cause we know how to style
We know how to style
♪ ♪ ♪



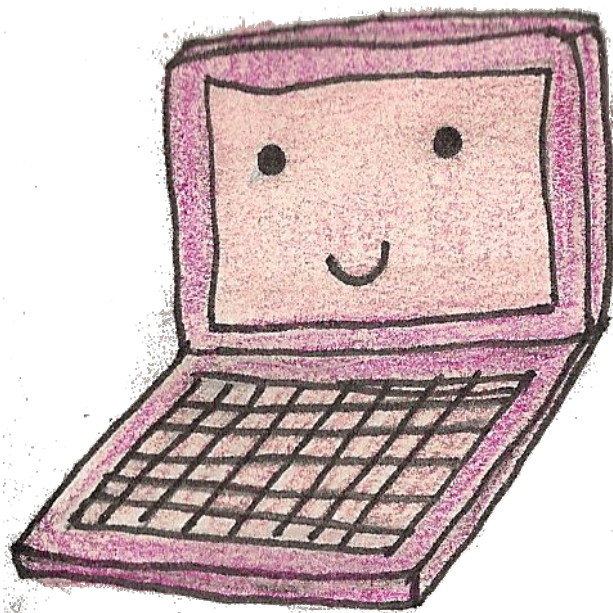
Make Fewer Requests!

Come together, right now
Up the speed



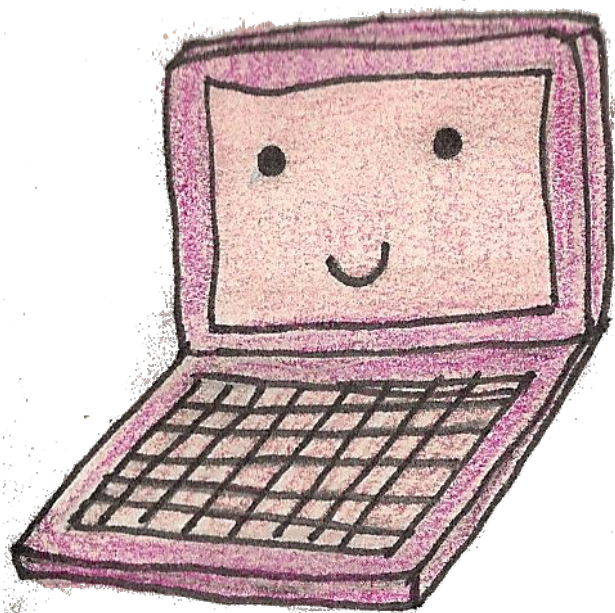
Make Fewer Requests

There's only so much I can do
All else goes in the queue
♪ ♪ ♪



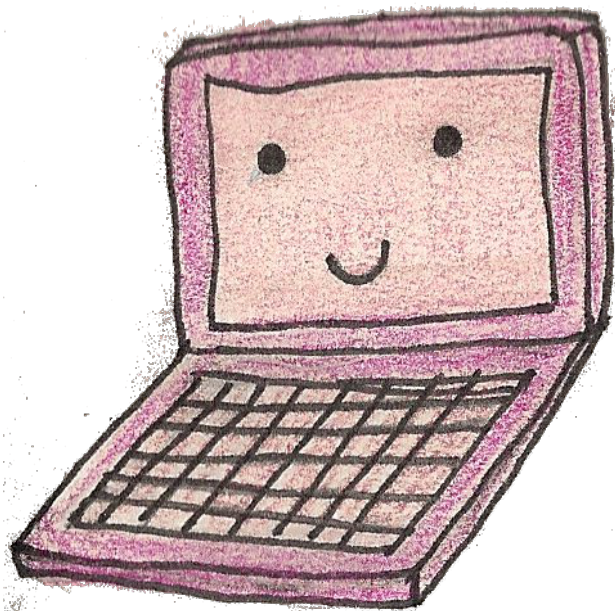
Make Fewer Requests

Yeah, it's always better
when they're together
♪ ♪ ♪



Make Fewer Requests

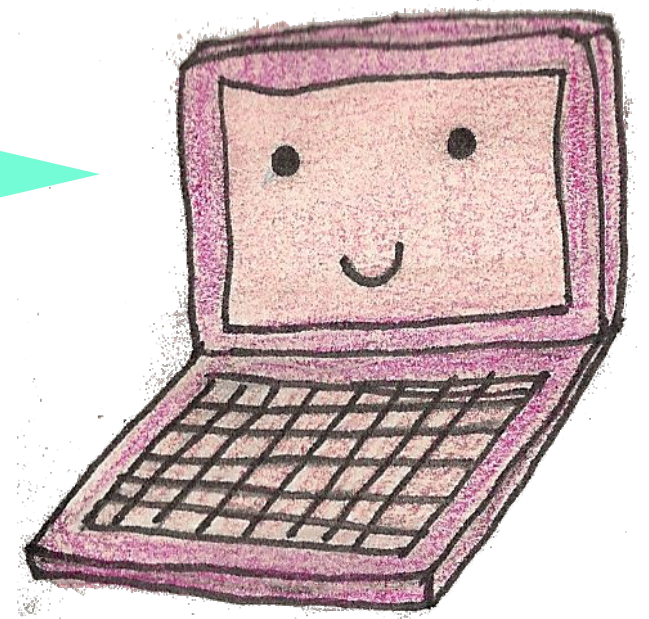
Got to keep you inlined
To make this page load streamlined
♪ ♪ ♪



Cache is queen!

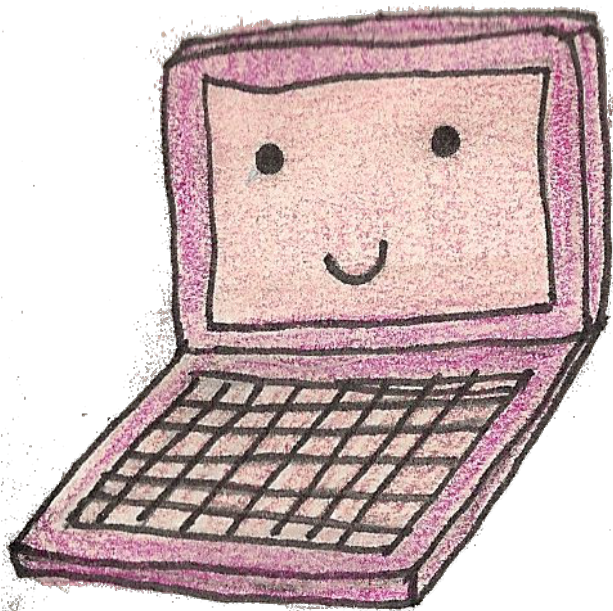
Pull it down, I'm yelling timber
Unless it moves or gets enhanced
This data, I'm told to remember
Until it tells me to forget

♪ ♪ ♪



Caching

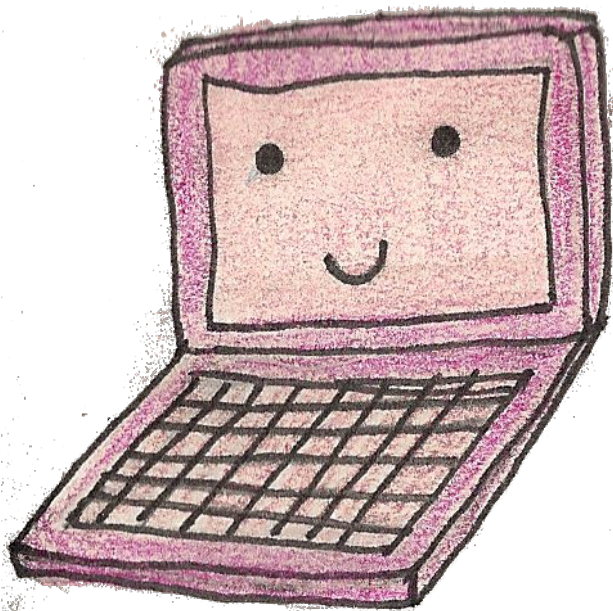
Cache moneyyy.



Caching

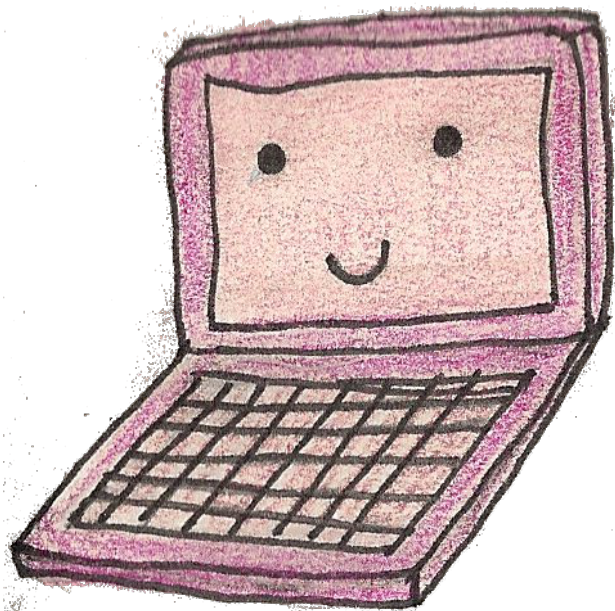
Hey, I just met you
This is easy
I still know your number
Super breezy!

♪ ♪ ♪



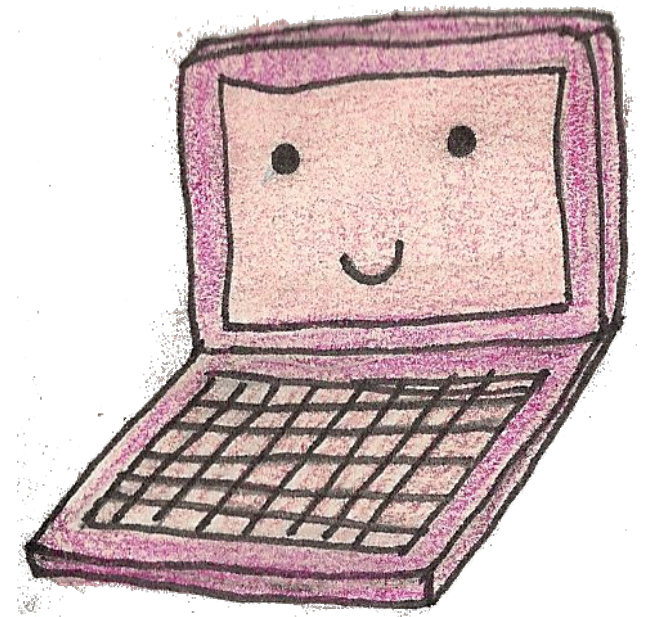
Caching

I will remember youuuu...
♪ ♪ ♪



Make your files as small as possible.

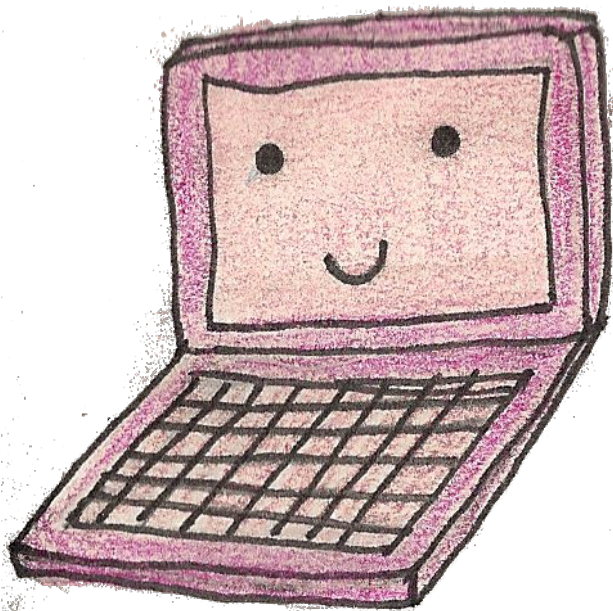
Go shorty, it's your
birthday
♪ ♪ ♪



Small Files

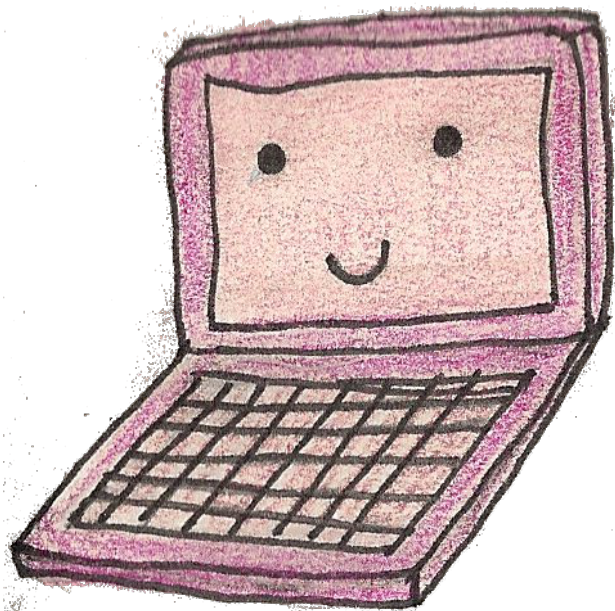
All the small things
What speed this brings!

♪ ♪ ♪



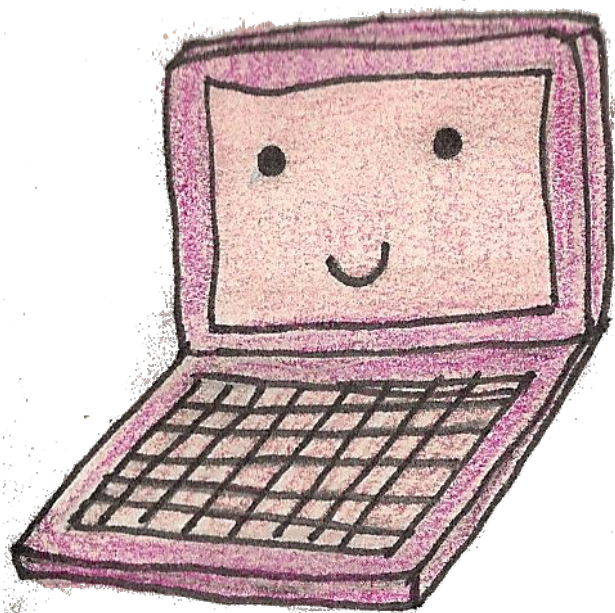
Minification

Got some files to send over
And their length's insane
Remove the whitespace, baby
It'll up your game
♪ ♪ ♪



Compression

Shrink it down,
gzip it
(Don't reverse it...)
♪ ♪ ♪



Compression

These are my compressions
♪ ♪ ♪

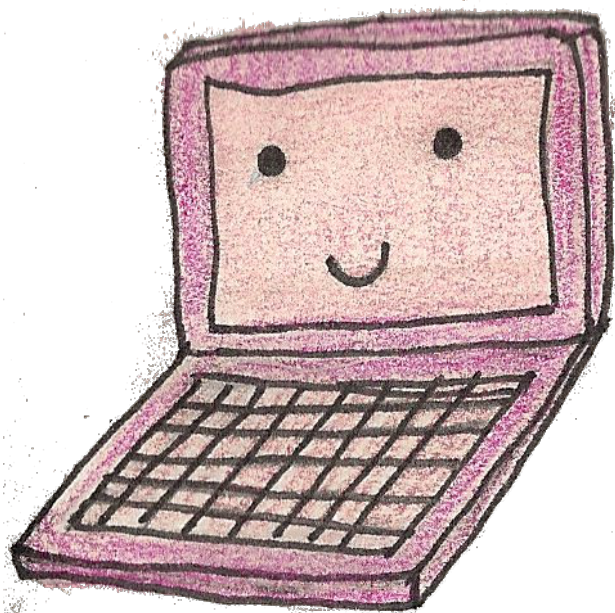
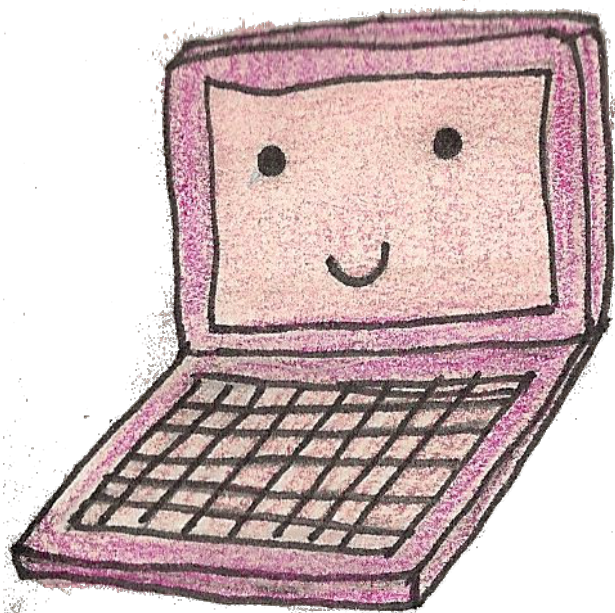


Image Optimization

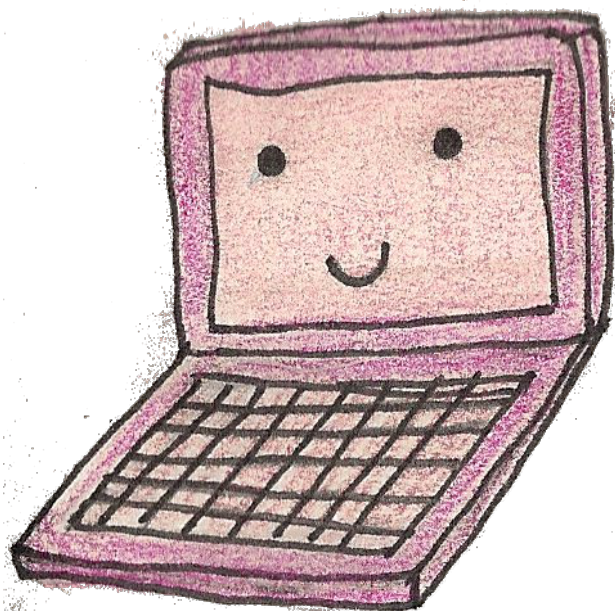
Harder, Better,
Faster, Smaller
♪ ♪ ♪



HTTP/2

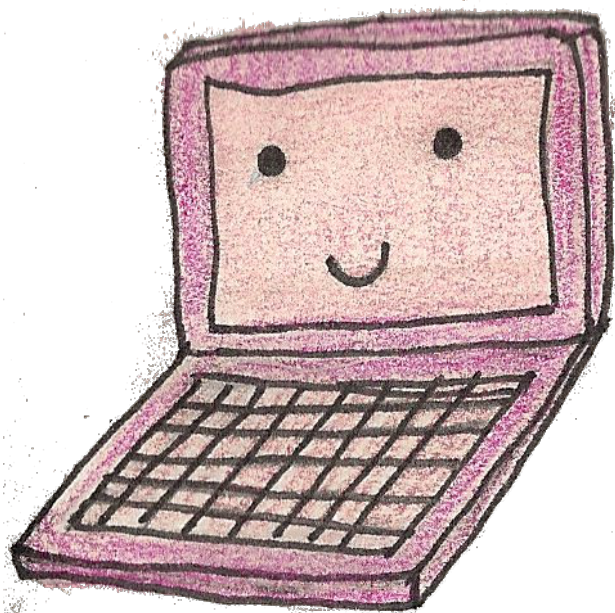
How you gonna upgrade me?
What's higher than one point one?

♪ ♪ ♪



HTTP/2

You taught me 'bout your past
But there's a future HTTP
♪ ♪ ♪



Overview

1. Scripts at the Bottom
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Resources

How the Internet works

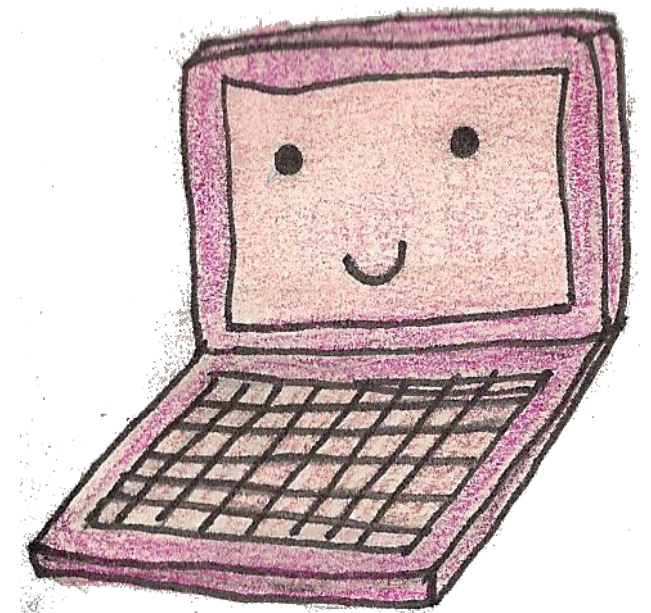
- [What Happens When \(Github\)](#)
- [Server Farm to Table, and Annotated Version](#)

Performance

- [Best Practices for Speeding Up Your Web Site \(Yahoo Developer Network\)](#)
- [Front-end Performance for Web Designers and Front-end Developers \(CSS Wizardry\)](#)
- [Raul Fraile: How GZIP compression works \(JSConfEU 2014\)](#)
- [Image Optimization \(Google Developers\)](#)
- [High Performance Web Sites \(Steve Souders\)](#)
- [Even Faster Websites \(Steve Souders\)](#)

HTTP/2

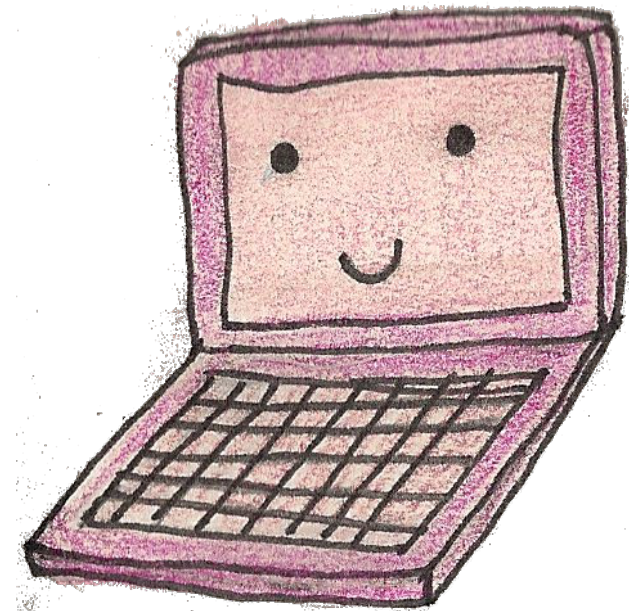
- [Andy Davies: The Case for HTTP/2 \(TXJS 2015\)](#)



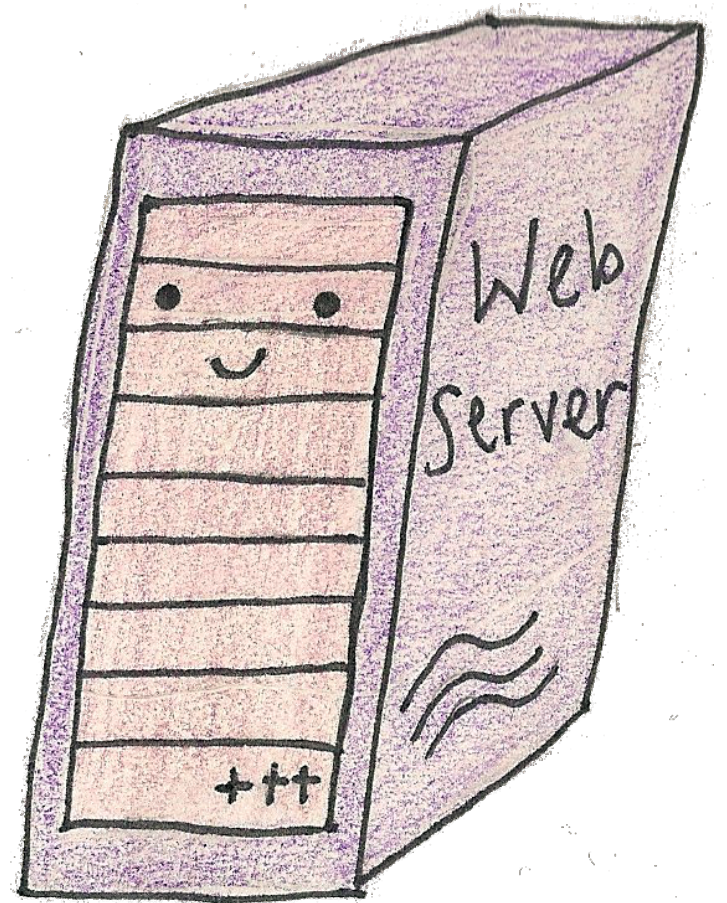
Complete Tracklist

Biz Markie - Just A Friend
The Beatles - All My Loving
Ellie Goulding - Outside
The Notorious B.I.G. – Sky's The Limit
Jimmy Eat World - Sweetness
The Police - Message in a Bottle
Rilo Kiley - The Execution of All Things
Taylor Swift - Shake it Off
Drake - Started from the Bottom
Semisonic - Closing Time
MC Hammer - U Can't Touch This
Kanye West - Good Life
The Cranberries - Zombie
Taylor Swift - Style
The Beatles - Come Together
Mary J Blige - Not Loving You
Jack Johnson - Better Together
Taking Back Sunday - Cute Without the E
Pitbull ft. Ke\$ha - Timber
Carly Rae Jepsen - Call Me Maybe
Sarah McLachlan - I Will Remember You
50 Cent - In Da Club
Blink 182 - All The Small Things
Taylor Swift - Blank Space
Missy Elliot - Work It
Usher - Confessions, Pt. II
Daft Punk - Harder, Better, Faster, Stronger
Beyoncé - Upgrade U
Taylor Swift - All Too Well

*something
witty about a
POP server...*



jenna.is/feperf-queensjs



Thanks!

