Alphabet Soup of the Web

CSS, HTML, JS, HTTP, RDBMS, DNS... oh my!

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Interwebz..Where did it begin?!

The date, 1969. The place, UCLA

Protocols

As the network grew it required a new protocol to be developed to help with the transfer of information. The new protocol was called TCP/IP (or just TCP). This protocol is still in use today, in use on your computer and even your smartphone. This protocol enables data to be broken down into packets, sent over the wire, and reassembled on the other end.

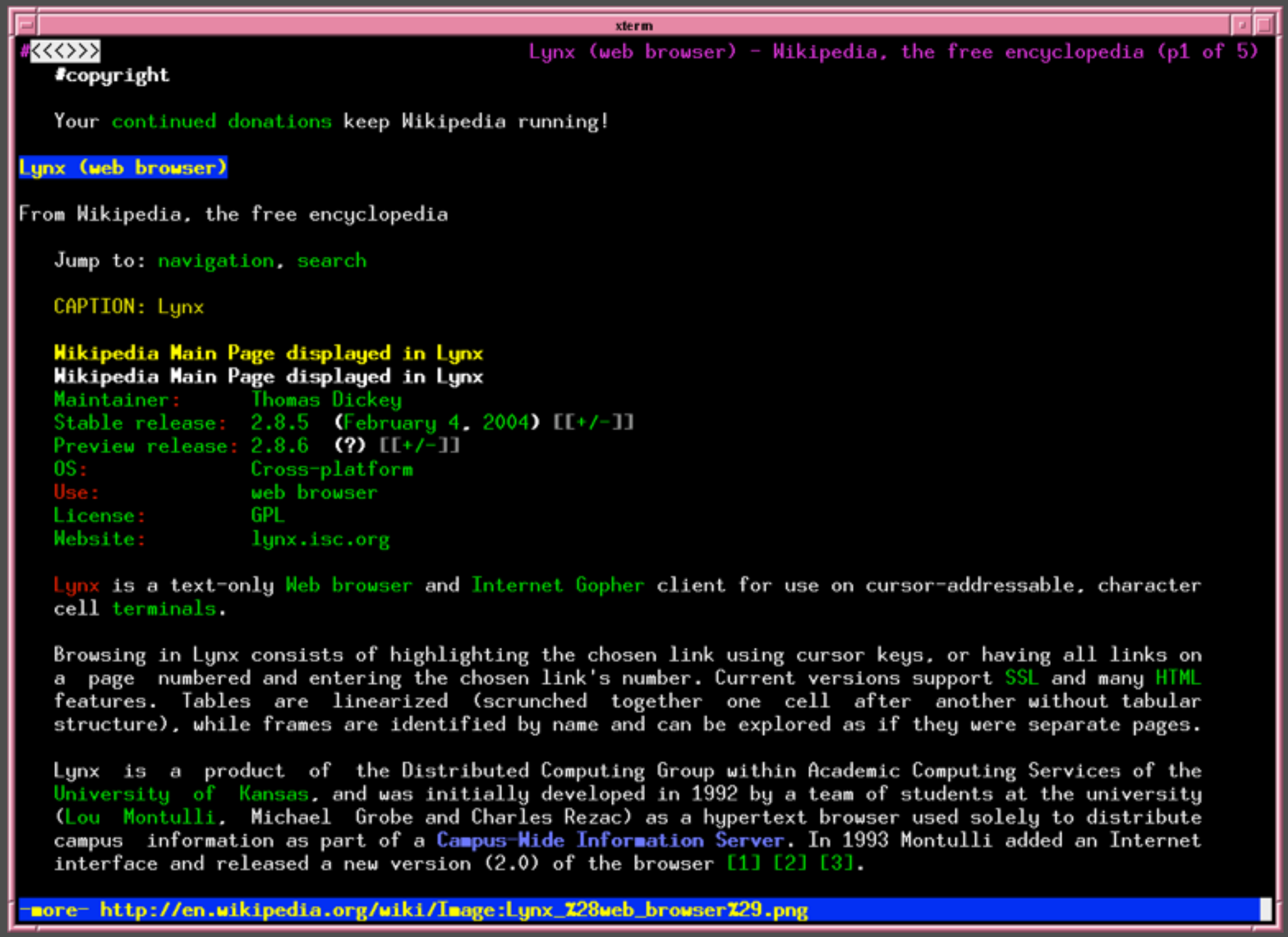
Interwebz.. How does it work?!

Step 1

Choose a Web Browser

or like a million other really horrible ones

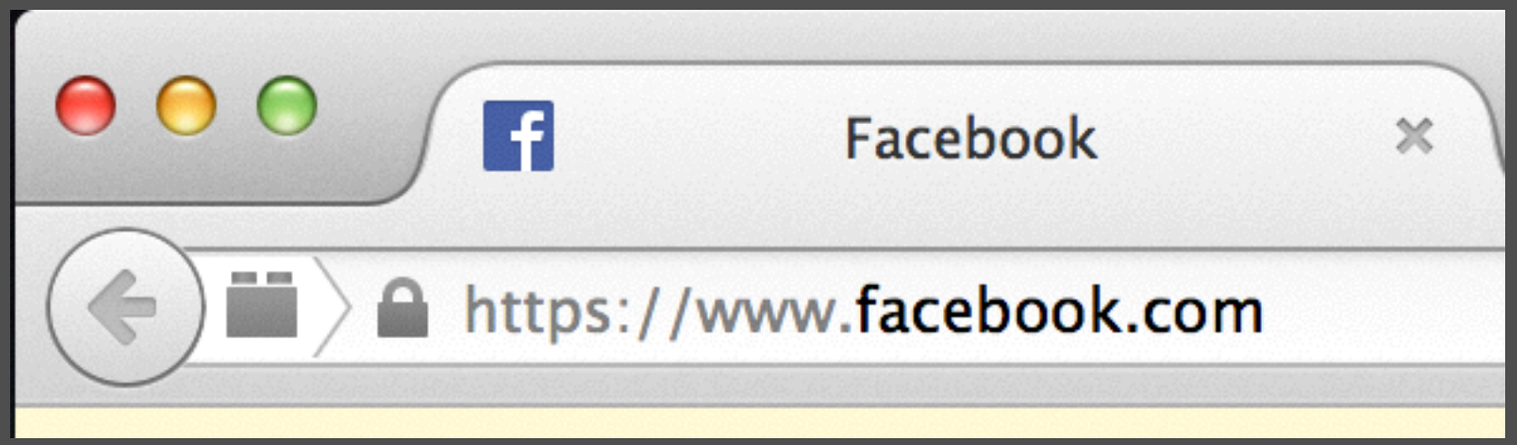
or even one like this!



Step 2

That's "You Are Elle", not "Earl"

Type in a website address (also called a URL)



Step 3

Hey DNS, can you tell me where I can find www.facebook.com?

Sure thing! It's at 173.252.120.6

IP Address

Step 4

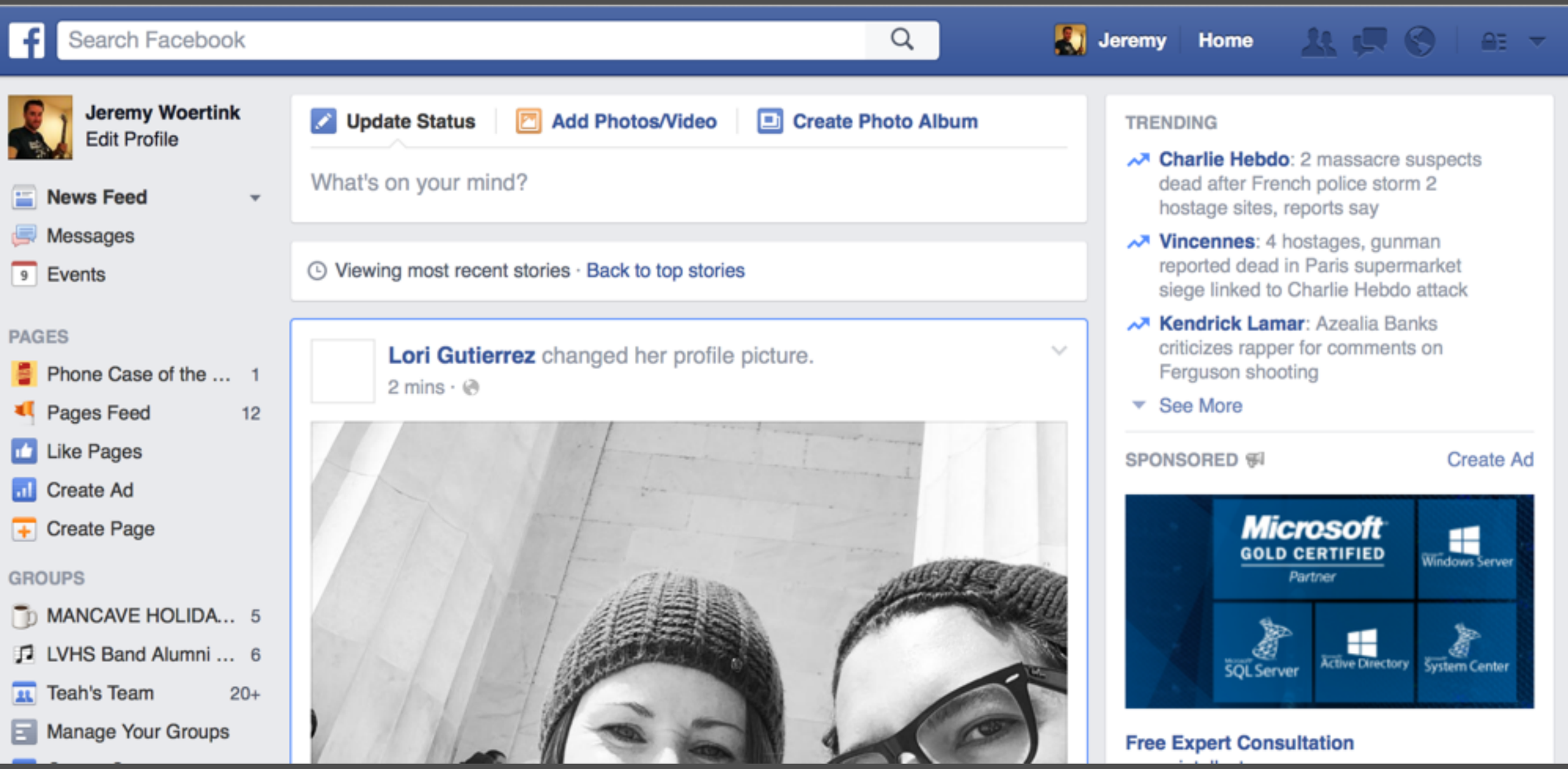
Hello, 173.252.120.6.1 want to creeper stalk people.

HTTP GET homepage

** Note: Stuff is going on here

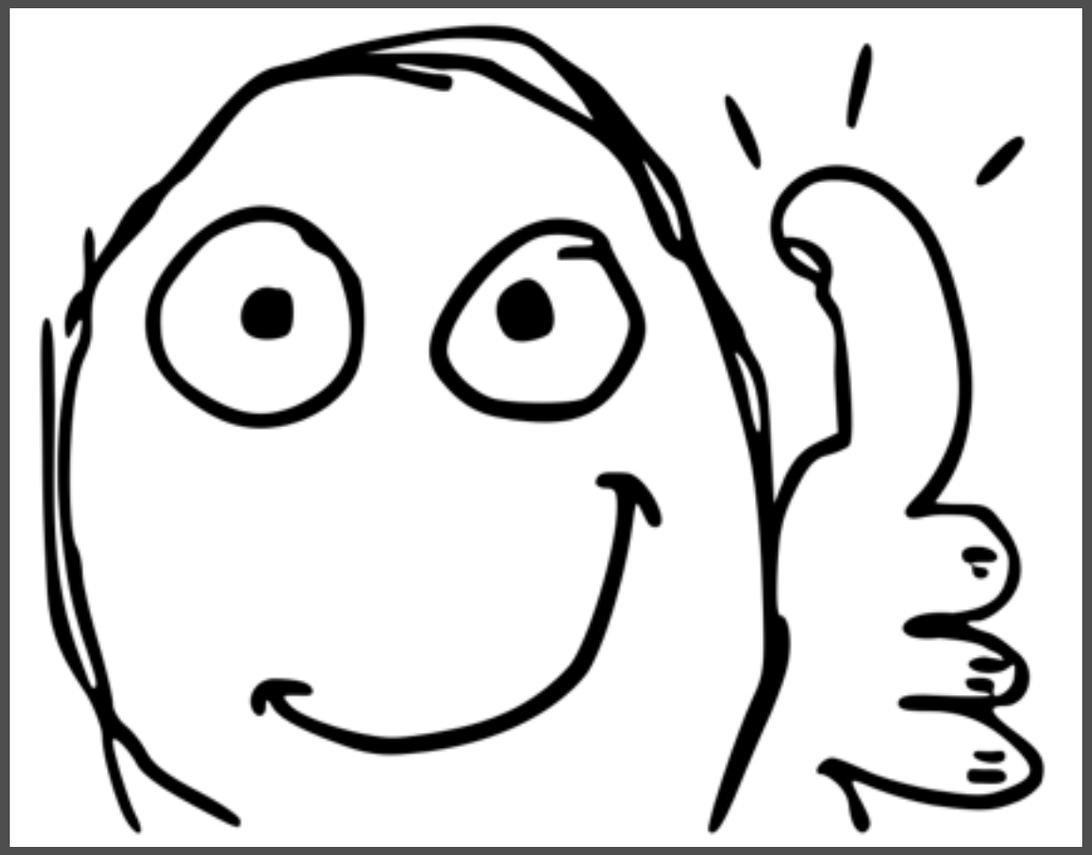
Here's the homepage. Let me know if you need anything else.

Step 5



That's it! (sort of)

Terminology (nerd jargon)



feel free to be taking notes

HTTP & DNS

Hyper Text Transfer Protocol

the thing that takes stuff to the place where the thing is, and gets the things from the place with the stuff.

(think "FedEx")

Domain Name System

some computers that turn your domain name into some numbers and back again

Domain Name

http://www.yourcoolwebsite.com  things that look like this

HTML - CSS - JS

Hyper Text Markup Language

the "stupid" web language. A Markup Language is NOT a programming language.

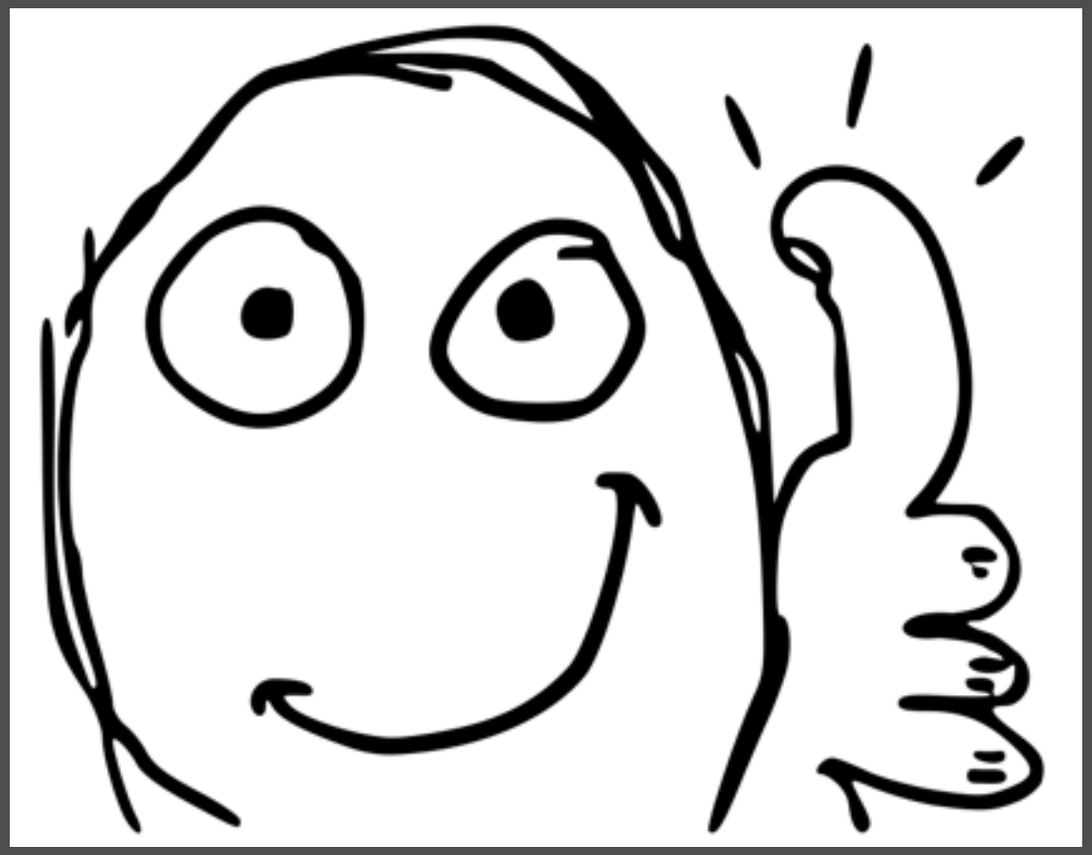
Cascading Style Sheets

the thing that makes the web look pretty!

JavaScript

NOT to be confused with Java. This is the programming language that makes webpages fancy!

Website Breakdown



Show me the HTML

```
<html>
  <head>
    <title>Ruby Programming Language</title>
    <link rel="stylesheet" type="text/css" href="styles.css" />
  </head>
  <body>
    <div id="page">
      ... page stuff in here
    </div>
    <script type="text/javascript" src="scripts.js"></script>
  </body>
</html>
```

Make it pretty!

```
body {
    background: #213449 url(“images/background.png”);
    font-size: 14px;
    color: #ffffff;
}
#page {
    width: 980px;
    margin: 0 auto;
    padding: 10px;
}
p .links {
    text-decoration: underline;
}
```

Now make it fancy!

```
$(function() {
    $('p .links').click(function() {
        windowPopup(this.href);
        return false;
    });
});

var windowPopup = function(href) {
    window.open(href, '_blank', '', false);
};
```

Remember that Webserver?

yeah, that one

What stuff was going on?

Sir, someone is requesting the homepage!

Notify the unicorns

Reporting for duty, sir!

Render the home page A.S.A.P

ok, got my HTML and CSS

Ready to go

Take it away, WebServer!

Unicorn

A webserver program. There's a bunch of others, too.

Webserver

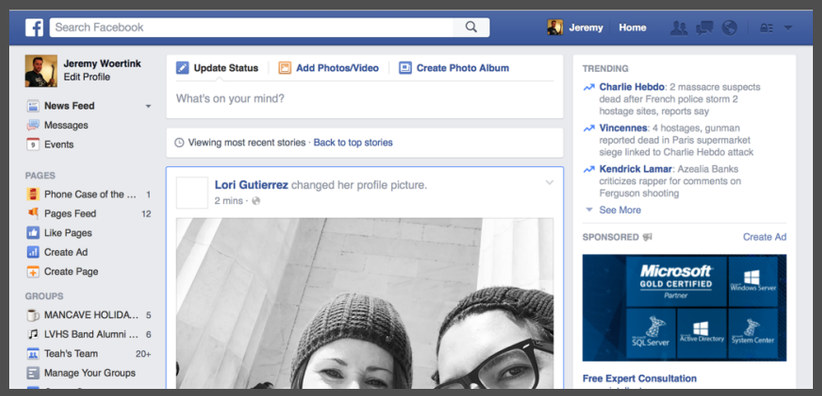
A program that will send files from your website server to someone's browser.

HTML

CSS

JS

Images



WHAMO!

We have interwebz

Learning Resources:

- www.w3schools.com
- teamtreehouse.com
- www.codeschool.com
- dochub.io
- hipsterhackers.usefedora.com

Huh?

Quick recap

1. Type in URL
2. Get IP Address of site from DNS
3. Connect to webserver of website
4. Website gets files ready
5. Webserver serves up website
6. Your browser downloads the requested page

Questions?