# HTML and CSS

# **Our Goals**

- History of the web and how it works
- Introduction to HTML
  - Understanding Structure
  - Learning about markup
  - Tags and elements
- Introduction to CSS
  - What CSS does
  - How CSS works
  - Rules, properties and values

# History of the web

- J.C.R. Licklider "The Galactic Network"
- ARPANet for the US Government
- Vint Cerf and Bob Kahn developed TCP/IP in 1974
- Then there was Tim Berners-Lee, who made the WWW in 1990
  - Here is the first website

# History of the web

- Evolution
- Infographic

# How the web works

- 1. You connect to the web through an Internet Service Provider (**ISP**)
- 2. You type in a domain name (or web address)
- 3. Your computer contacts a network of servers called the Domain Name System (**DNS**), they give back an IP address
- 4. This **IP address** allows us to contact the right web server
- 5. The right web server then sends the requested file back to your web browser

# Those files are what we care about today

# Our body of work

- HTML The Bones Content
- CSS The Skin Style
- JS The Brain Functionality

# HTML

# Some links

- HTML5 Specification
- HTML5.1 Working Draft
- Github Documentation
- HTML on MDN
- Dive into HTML5

# But, wait, why do we need it?



#### HTML

- Stands for Hyper Text Markup Language
- It is a system for defining or "tagging" pieces of text
- Currently at version 5 (October, 2014)

```
<tagname> This isn't real </tagname>
<h1> But this is a main heading </h1>
 This is a paragraph
```

# What is HTML5?

- It's *not* just elements
- It doesn't break anything
- It just works
- It's not going anywhere
- A lot of it is semantics

#### What is an element?

An element is made up of an:

- Opening and closing tag
- Content
- (Attributes like "class", "src", etc.)

```
<a href="http://google.com">
    A link to Google.
</a>
```

# Common Tags

#### **Actual Content**

h1 ... h6, p, a, img, button, form

#### **Divides Content**

div, article, section, nav, header, footer

# That's not it though...

```
<!DOCTYPE html>
<html>
<head>
    <title>My horrible website</title>
</head>
<body>
    <!-- Visible content goes here -->
</body>
</html>
```

#### **Placeholder Text**

- Meet the Ipsums
- Samuel L. Ipsum
- Monocle Ipsum
- Wikipsum
- Social Good Ipsum
- 56 other ones
- Clients from Hell

# CSS

# Some links

- CSS on MDN
- Current work on CSS
- CSS4(ish) modules
- CSS4(ish), or CSS2016 Details

#### **CSS**

- Stands for Cascading Style Sheets
- Styles HTML for us
- Currently at Version 3
- Broken into CSS rules

```
selector {
    property: value;
    /* This isn't real */
}
h1 {
    color: gainsboro;
}
```

# What is a CSS rule?

# **CSS and HTML**

```
<h1>
   Hello World
</h1>
<a href="http://www.ga.co">
   A link to GA's website
</a>
>
   Random gibberish
>
   More junk
```

```
h1 {
  font-size: 28px;
a {
  color: hotpink;
р
  font-family: "Comic Sans";
```

#### Conventions

- Main HTML file index.html
- Main CSS file *style.css*
- We separate things into different files
- We indent to make it easier to read

# **CSS Selectors**

```
p {}
p.octocat {}
.octocat {}
p#octocat {}
#octocat {}
* {}
div p {}
p, a {}
```

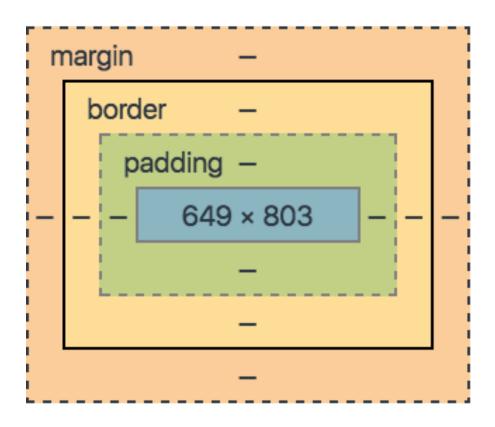
# **CSS Specificity**

- 1 point for an elements name
- 10 points for a selection based on a class
- 50 points for a selection based on an ID

#### For more:

- Pop Culture
- Smashing Magazine
- CSS Tricks

# The Box Model



# Floats and Clears

- CSS Tricks
- Smashing Magazine

# Web Inspiration

- Awwwards
- Site Inspire
- CSS DSGN
- FWA
- TypeWolf
- Web Creme
- Wow Web

- One Page Love
- Nice Portfolio
- Landbook
- Mind Sparkle
- Hoverstates
- Fourzerofour
- Codepen

#### Homework

- Understand: Separation of Concerns
- Play: CSS Diner
- Explore: Learn Layout
- Watch: DevTools
- Read: Tutsplus
- Complete: Brooklyn
- Complete: Busy Hands
- Complete: Ecardly