Advanced CSS

Our Goals

- Working effectively with your editor
- Understand CSS positioning and display
- Writing semantic HTML
- Have a brief introduction to Web Accessibility

Atom is already pretty good...

But we can use packages to make it better:

- Emmet
- Open in browser
- Open recent
- Atom Beautify
- Minimap
- JS Hint
- Todo show

- JavaScript snippets
- Autodetect indentation
- Linter
- Linter - HTML
- Linter - CSS
- Linter - JS
- Color Picker

What is Zen coding (Emmet)?

- It automates the creation of HTML for us
- It came from here, it used to be called Zen coding
- Most of us are sick of writing HTML, too many angle brackets and too many quotes
- It's an abbreviation expander, to use it:

    - You type in a set of keywords and symbols
    - Then press tab or **<CTRL> + E**

What is Emmet?

- It was built by Sergey Chikuyonok
  - For Smashing Magazine
- It was Zen Coding, but now everyone knows it as Emmet

Doctypes and Full Pages

```
!
html:5
```

Creating Elements

```
div
p
a
h1

div.className
div#idName
div.className#idName
```

Adding extra information

[] - for attributes
{} - for text

```
h1{Hello World}
a[href="http://ga.co"]
a[href="http://ga.co"]{General Assembly}
```

Creating Siblings

+ – for siblings

```
h1+a
header+main+footer
```

Creating Children

> - for children

```
header>h1
div>p>lorem
```

Creating Elements

`* - for children`

```
p*3
ul>li*3
```

Creating Groups

`()` - for groups
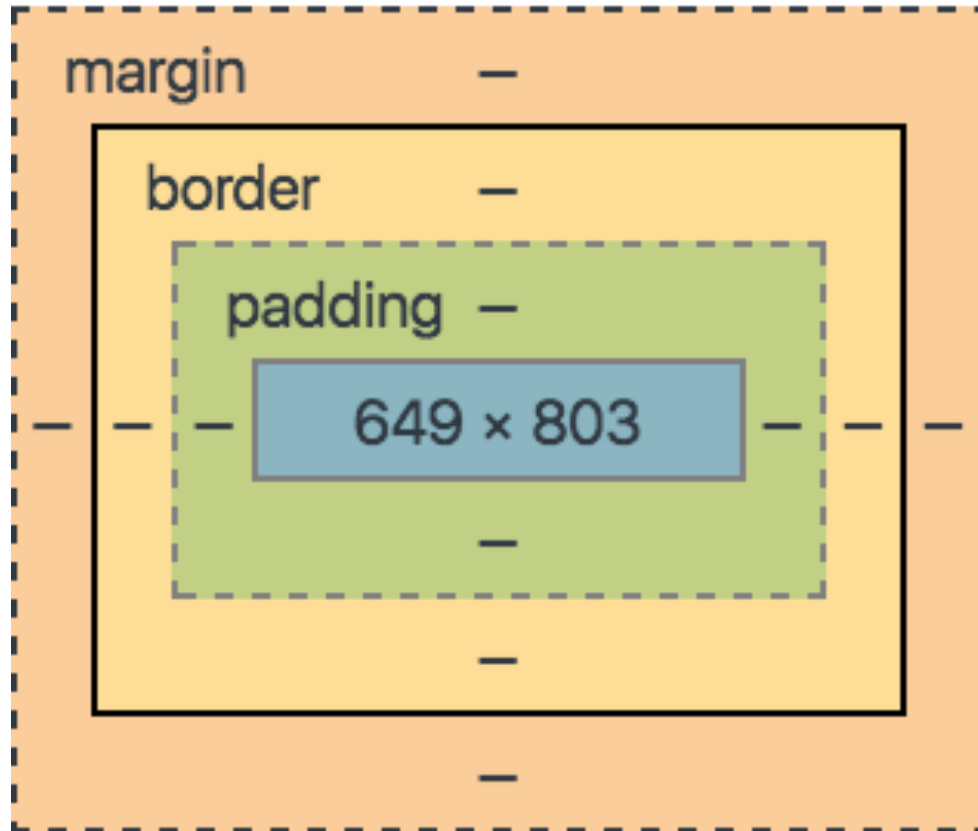
```
(header>h1)+(main>p)
(main>p*3)+(footer>ul>li*3)
```

Use it as much as possible!

- Emmet Documentation
- Emmet Cheat Sheet

Atom Shortcuts

- Atom Editor Cheat Sheet
- Atom Keyboard Shortcuts

Box Model

Display

The **Display** property specifies the way that an element interacts with other elements:

- Whether they can have other elements sitting next to them
- Whether you can set heights or widths

Display

- ***inline***
  - The element can have other elements sitting next to it, but you can't set widths and heights
- ***block***
  - The element can't have other elements sitting next to it, and you can set widths and heights

Display

- ***inline-block***
  - The element can have other elements sitting next to it, and you can set widths and heights
- ***none***
  - The element is invisible and doesn't take up any space on the page

Position

The **Position** property specifies exactly what you are probably imagining. You can move elements based on:

- Where the element is meant to be
- Where the element is in the *entire document*
- Where the element is in the *browser window*
- *It can remove the elements from the document flow*

Position: Relative

Based on where the element is meant to be in the
document flow. It's good for:

- Making elements overlap

Position: Absolute

You can specify the position of an element based on the entire document, but it won't scroll with the page. Good for:

- Precise positioning
- Difficult alignment

Position: Fixed

You can specify the position of an element based on the browser window, and it will scroll with the page. Good for:

- Creating headers
- Precise positioning
- Difficult alignment

Variadic Attributes

Shorthand to apply a number of properties

```css
h1 {
    /* Applies to all four sides */
    margin: 1em;

    /* vertical | horizontal */
    margin: 5% auto;

    /* top | horizontal | bottom */
    margin: 1em auto 2em;

    /* top | right | bottom | left */
    margin: 2px 1em 0 auto;
}
```

Custom Fonts

- Google Fonts
- Font Awesome
- Custom Fonts
- Fontello
- Icomoon

Google Fonts

- Go through here and Add the fonts that you want to your Collection
- Once you have selected all your fonts, click Use (bottom right)
- Choose the styles that you would like, and the character set
- Choose @import, and copy and paste the code into the top of your CSS file that it shows
- Reference the font with the code provided

Font Awesome

- Go here
- Put this in the head of your HTML page

  - ```
    <link rel="stylesheet"
    href="https://maxcdn.bootstrapcdn.com/font-
    awesome/4.6.1/css/font-awesome.min.css">
    ```

- Go through here and click on the icons that you want
- That will show you the HTML that you need

Custom Fonts

Have the files in your folder and reference them

- You can use this tool to get all the different types

```css
@font-face {
  font-family: 'GT Pressura';
  src:  url('fonts/GTPresurra.eot');
  src:  local('GT Pressura'),
        url('fonts/GTPressura.eot#iefix'),
        url('fonts/GTPressura.eot') format('truetype'),
        url('fonts/GTPressura.otf') format('opentype'),
        url('fonts/GTPressura.woff') format('woff'),
        url('fonts/GTPressura.woff2') format('woff2'),
        url('fonts/GTPressura.svg') format('svg');
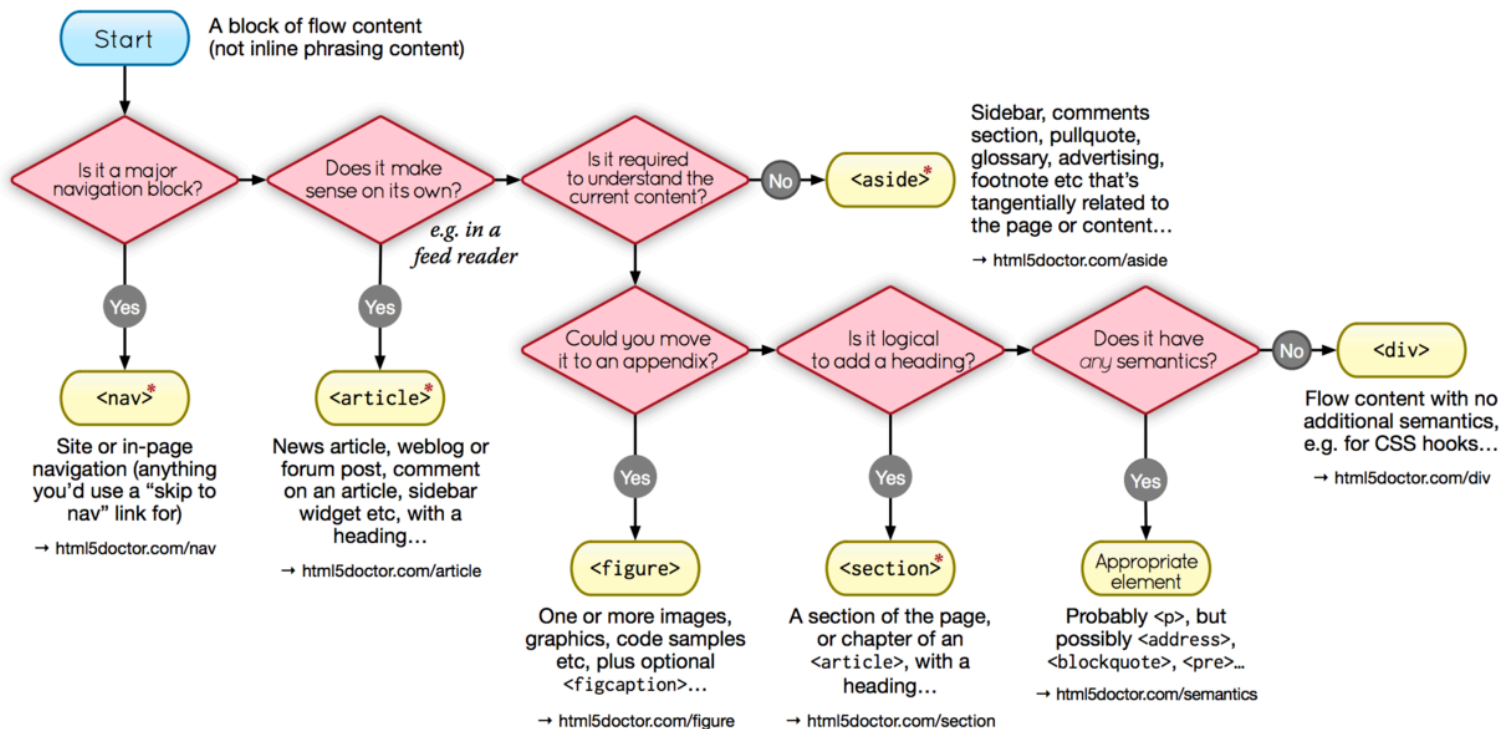}
```

Writing Semantic HTML

- Giving meaning to a subject
- It aids how both humans and machines interpret our page
- Great for "SEO"
- It's very hard to get used to
- Not always seen as a positive use of time

html5 Doctor

HTML5 Element Flowchart
Sectioning content elements and friends

By @riddle & @boblet
www.html5doctor.com

Start

A block of flow content
(not inline phrasing content)

Is it a major navigation block?

Does it make sense on its own?
e.g. in a feed reader

Is it required to understand the current content?

No → **<aside>***

Sidebar, comments section, pullquote, glossary, advertising, footnote etc that's tangentially related to the page or content…

→ html5doctor.com/aside

Yes → **<nav>***

Site or in-page navigation (anything you'd use a "skip to nav" link for)

→ html5doctor.com/nav

Yes → **<article>***

News article, weblog or forum post, comment on an article, sidebar widget etc, with a heading…

→ html5doctor.com/article

Could you move it to an appendix?

Is it logical to add a heading?

Does it have *any* semantics?

No → **<div>**

Flow content with no additional semantics, e.g. for CSS hooks…

→ html5doctor.com/div

Yes → **<figure>**

One or more images, graphics, code samples etc, plus optional <figcaption>…

→ html5doctor.com/figure

Yes → **<section>***

A section of the page, or chapter of an <article>, with a heading…

→ html5doctor.com/section

Yes → **Appropriate element**

Probably <p>, but possibly <address>, <blockquote>, <pre>…

→ html5doctor.com/semantics

***Sectioning content element**
These four elements (and their headings) are used by HTML5's outlining algorithm to make the document's outline
→ html5doctor.com/outline

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For more information:
www.html5doctor.com/semantics

Important Links

- Let's talk about semantics
- Our pointless point of semantic value
- Pursuing semantic value

Web Accessibility

- Semantic
- Perceivable
- Operable
- Understandable
- Robust
- Valid - HTML and CSS

Good links

- The Accessibility Cheatsheet
- The Web Accessibility Basics
- ARIA on MDN
- Web Content Accessibility Guidelines
- The Web Accessibility Initiative

Your homework