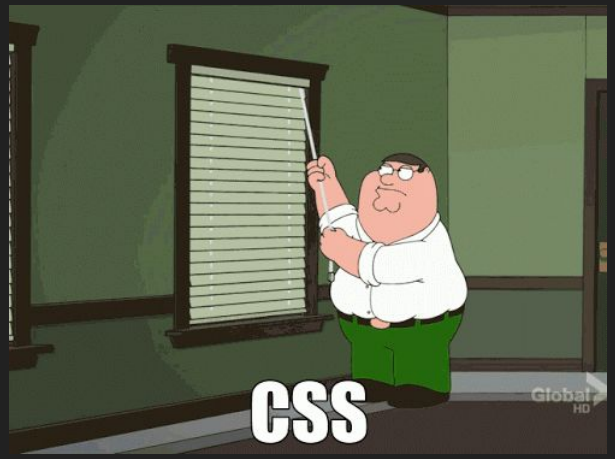
http://codepen.io/thebabydino/pen/mOJvyB



CSS Basics Lesson

Week 3

Basic Principle of CSS

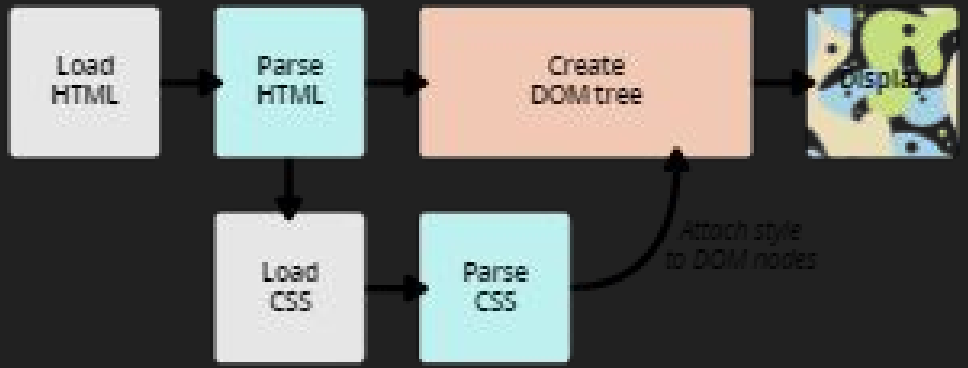
- CSS changes how the website looks by essentially listing a bunch of characteristics for each tag
  - The characteristics are called properties, and the tags it applies to is the selector, ***both of them are case sensitive***
  - Later on, you can select more than just tags to modify with CSS, which makes the reason for the name selector more obvious

CSS Syntax

- Very simple syntax
  - Selector followed by a list of properties in curly brackets
  - Ex: http://codepen.io/cgodfrey/pen/KNpjLv
  - There's lots of CSS properties, you'll get to know them over the course of the year
    - https://developer.mozilla.org/en-US/docs/Web/CSS/Reference
    - That's a list of all of them just for reference purposes
  - CSS is very forgiving, it ignores everything it doesn't understand
    - This can make it hard to find errors or figure out why it isn't working

How Does CSS Work?

- It’s not necessary to really know now, but if you want to become a developer it’s really good to know
  - Once the browser loads both the HTML and CSS, it combines both together into into something called the DOM (Document Object Model) and applies the CSS to each object (created in HTML)

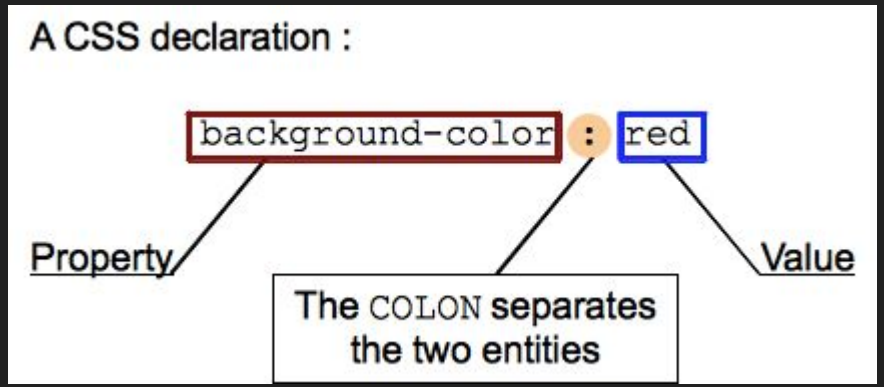


How to include the CSS in your webpage

- It’s easy when something does it for you like in repl.it, but not in a local editor
  - There are three different ways, each one has its pros and cons
    - External stylesheet: `<link rel="stylesheet" href="style.css">`
      - The only thing that changes is the href, where the file is saved
      - It’s the most efficient, but it makes your website take the longest to load
    - Internal stylesheet: `<style>`
      - Simply write all the CSS in the `<head>` and surround it by the style tag.
      - Quicker to load, but might have to copy/paste in multiple places
    - Inline stylesheet:
      - Going back to the week 2 powerpoint, we went over attributes within the tags
      - `<p style="color:red;">This is my first CSS example</p>`
      - There should never be a real reason for us to do this, just know that it exists

Details of CSS Syntax

- CSS files contain selectors and properties, but properties are broken down more
  - Properties describe the things you want to change (font, width, height, etc.)
  - Values describe what you are changing it to (Comic Sans, 10px, 20px, etc.)
  - A property combined with a value creates a declaration
  - A block of declarations combined with a selector makes a ruleset
  - http://codepen.io/cgodfrey/pen/KNpOvR



CSS Statements

- Other than rulesets, the only other thing in a CSS file is statements
  - These are begun with the @ character, followed by an identifier, then a block of code
  - Probably the only one we'll use this year is `@import "filename.css"`, just know that they exist, this is just a basic introduction

Make CSS readable

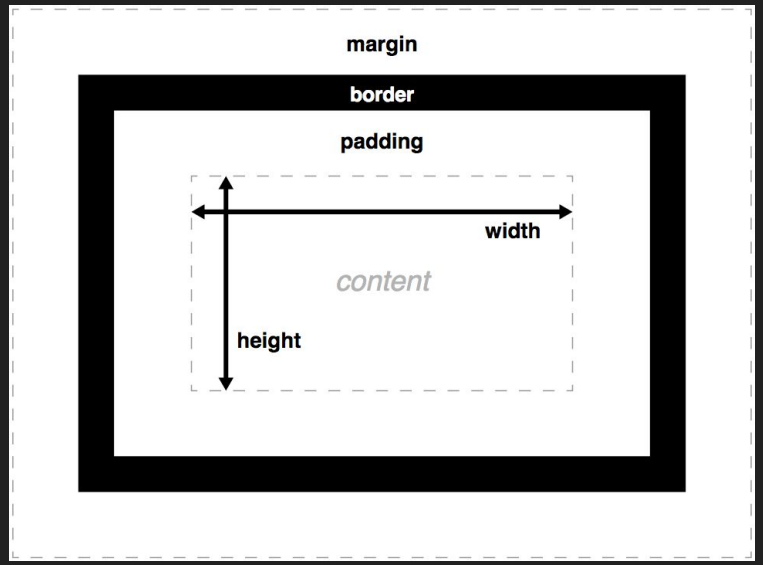
- Comments - Like C++: `/* This is a comment */` , can straddle multiple lines
- Whitespace
  - Make the selector of a ruleset on its own line, and the closing curly brace on its own line as well
- Shorthand - only use this once you understand it, and include a comment
  - The line `padding: 10px 15px 15px 5px;` can replace:

```
padding-top: 10px;
padding-right: 15px;
padding-bottom: 15px;
padding-left: 5px;
```

  - In this case, it starts at the top and goes clockwise. Just know this syntax exists

Box Model

- The box model is a way to show how different elements interact with each other on the webpage
  - When you're working, it can be seen by going to the developer's console



Box Model - The Parts

- Content - defined by width and height
  - This is the part of the box that content (and all of the element's children) are displayed
- Padding - defined by values for top/bottom/left/right
  - Padding vs margin is confusing - http://stackoverflow.com/questions/5958699/difference-between-margin-and-padding