**Advanced CSS Notes**

**Lecture 3-Pillars of Writing Good HTML & CSS:**

# **Responsive design:**

Build one website that works good across all devices.

-fluid layouts

-media queries

-responsive images

-correct units

-desktop-first vs. mobile-first

**Maintainable and scalable code:**

-clean

-easy to understand

-growth

-reusable

-how to organize files

-how to name classes

-how to structure HTML

**Web performance:**

-Less HTTP requests

-Less code

-Compress code

-use a CSS preprocessor

-Less images (images by far are what make up most of the data of a website, can slowdown download speeds. Good to compress when possible)

-Compress images

**How CSS Works Behind the Scenes**

Loads HTML, Parse HTML, Document Object Model (DOM) where entire html document is stored, Load CSS and parses: resolve conflicting CSS declarations, process final CSS values, CSS Object Model (CSSOM), render tree, website rendering: the visual formatting model, finally renders website.

**How CSS is Parsed, Part 1: The Cascade and Specificity**

.selector {

Declaration block

}

**Cascade:** Process of combining different stylesheets and resolving conflicts between different CSS rules and declarations, when more than one rule applies to a certain element.

Looks at CSS code written by Author, User and Browser(weight) and decides importance, specificity, source code in order to determine which one takes precedence. GO in order: ! important, Author, User, Browser

**-The universal selector \* has no specificity value (0, 0, 0, 0)**

**-Rely more on specificity than on the order of selectors;**

**-Rely on order when using 3rd-party stylesheets (i.e. bootstrap etc.)-always put your author stylesheet last in the <head>**

**Specificity In Practice**

If something isn’t working CHECK SPECIFICITY!!!!

**How CSS Is Parsed, Part 2: Value Processing**

No matter what unit you use for size, it will always be converted to pixels.

Browsers don’t recognize decimals so the unit size will be rounded

-Each and every CSS property needs to have a value, even if you don’t declare one. If there is no declared value then the value will be 0, unless there is a parent value.

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