Front End & Web

CS 196 – 25 DotStar [Lecture A02]

What is Front End?

Front-end is the side of the product or application that faces the user. In many cases, it is the website for the product. Many of the languages you learn in the first few courses of the Illinois CS curriculum are back-end programming languages such as Java, C++, and Python. Front-end primarily deals with HTML, CSS, and Javascript.
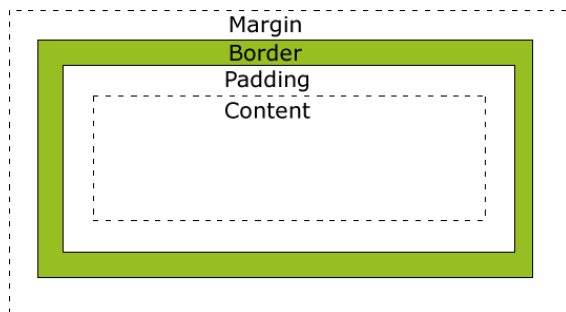
HyperText Markup Language

A markup language that creates the structure of the website. HTML documents use "tags" that help create this structure. These tags each have their own unique attributes on the page. Some common tags include:

    <html>   <div>   <p>   <h1>

Cascading Style Sheets (CSS)

The styles, or customizations applied to the HTML. CSS changes the visual appearance of the standard HTML view. These visual changes include font-size, color, margin, padding, and many other attributes. Most HTML elements follow the "box model":

The CSS attributes are applied in order of specificity. This means that the way in which you apply the attributes determines which changes are actually made to the HTML.

Here is the order:

1. Universal Selectors
2. Type Selectors
3. Class Selectors
4. Attribute Selectors
5. Pseudo-classes
6. ID Selectors
7. Inline Style

JavaScript

Javascript is a dynamic programming language that allows for us to add more functionality to the webpage. Javascript can make calculations, change the DOM, and do a variety of other things.

NOTE: JavaScript has NOTHING to do with Java. Although, JavaScript was created at this university, which is pretty cool.

Good Frameworks and Resources

HTML	Jade
CSS	Bootstrap & Foundation Less & Sass d3.js
JavaScript	AngularJS jQuery EmberJS

GitHub Pages

Once you have your project all set up, you will need to host all of the files. Github pages offers a free service to get started!

https://pages.github.com/