WEEK 1: FRONT-END INTRO TO CSS



HTML

- Structure
- = Skeleton

CSS

- Design
- = Clothes

Javascript

- Function
- = Muscle



What 3 elements are essential in HTML?



What 3 elements are essential in HTML?

HTML tags



What 3 elements are essential in HTML?

- HTML tags
- Head tags



What 3 elements are essential in HTML?

- HTML tags
- Head tags
- Body tags



Images

- tag
- Image tags rely a lot on HTML attribute (like href)
- src attribute
 - Defines the image source (relative or absolute path)
 - Example:
- Height and width attributes, e.g
 -



TODAY'S OUTLINE

- 1. Divs and Spans
- 2. IDs and Classes
- 3. Intro to CSS
- 4. CSS Properties



HTML without CSS



Goal Today

Style websites and make beautiful pages



Divs and Spans

- <div></div> tags are the primary tags we will use from now on
 - They are essentially tags with no special properties (like or <h1>)
 - You customize them with CSS
 - They are stacked vertically, meaning you cannot have two divs side by side unless you alter the CSS



Divs and Spans

- tags are used from time to time
 - Like a div tag, they have no special properties
 - You customize them with CSS
 - They are stacked horizontally, meaning you can have two spans side by side





- IDs and Classes are both attributes to HTML elements
- They look like this: <div id="main-content"> or
 class="intro">



IDs

 Unique to a single HTML file (no other IDs on page can have the same ID)

Classes

There can be one or more of the same class on a given page



IDs and Classes are very important concepts for CSS.

This is how CSS will select certain elements and style them





- CSS stands for Cascading Style Sheets
- They go in another file with an extension of .css
 - Link to the CSS file from your HTML file (in the <head></head> tags)

```
<link rel="stylesheet" type="text/css" href="/
path/to/style.css">
```



• Basic structure of CSS:



 A selector can be the HTML element name, ID or Class name



Sample CSS document

```
@font-face {
       font-family: 'akashiregular';
       src: url('../fonts/akashi-webfont.eot');
       src: url('../fonts/akashi-webfont.eot?#iefi
            url('../fonts/akashi-webfont.woff') fo
11
12
            url('../fonts/akashi-webfont.ttf') for
            url('../fonts/akashi-webfont.svg#akash
       font-weight: normal;
       font-style: normal;
15
17
   body {
       background: #2e2e2e url(../images/bg-main.j
       color: #d6f1ff;
21
       font-family: Verdana, Helvetica, sans-serif
       font-size: 20px;
       text-align: center;
```



color

- Changes the color of your text
- Value is either a default color value (red, blue, etc.), RGB or HEX value
- background-color
 - Changes the background color of your HTML element



- text-align
 - Values: left, center, right, justify
- text-decoration
 - · Values: underline, overline, line-through



- font-size
 - Value in px (ex: 16px or 24px)
 - Other ways to define font too (but we won't go over them)
- font-weight
 - Values: normal, bold, bolder, or lighter
 - Or use values from 100, 200, ..., to 900
 - 400 = normal, 700 = bold



Fonts

There are two types of fonts: Serif and Sans-serif





Common Web Fonts

- Some fonts are considered "web-safe" meaning you can use them for your website without any trouble
- Examples are

Times New Roman, Times New Roman: abcdefghijklmnopqrstuvwxyz / 1234567890

Georgia, Georgia; Georgia: abcdefghijklmnopqrstuvwxyz / 1234567890



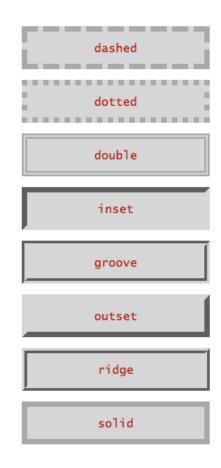
CSS Properties – Font-Family

```
1. body { /*the outer layer of the site and global style attributes*/
            font-family: "Museo Sans", "Open Sans", "Helvetica Neue", Helvetica, Arial, sans-serif;
            margin: 0px;
 4. }
 5. a {
           color: inherit;
           text-decoration: none;
            outline: none;
 9. }
10. .img_scaled {
11.
            width: 100%;
12. }
13. #logo {
            height: 50px;
14.
15.
            float: left;
16. }
17. #header_container {
            position: absolute;
18.
19.
            height: 80px;
```



border

- Takes in 3 values, space-separated
- 1st value: border-width in px (pixels)
- 2nd value: border-style
- 3rd value: color
- Example: border: 1px solid #999;
 Thin solid gray border around your element





Centering a Div

- Text or Div Element
 - Centering text is easy, use text-align: center
 - What if you want to center a <div> that has a certain width?



Centering a Div

Center me! I want this box to be in the center! :)



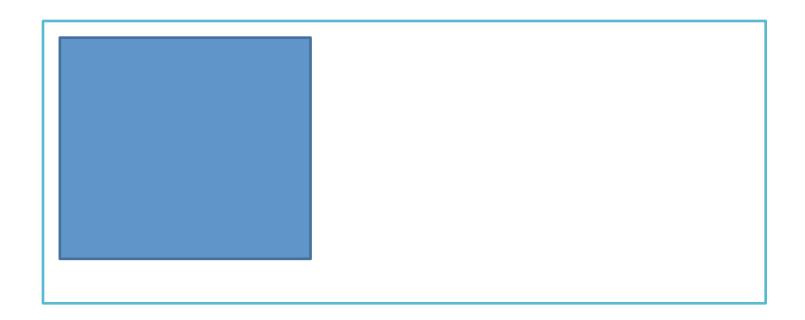
Centering a Div

To center a <div>, add 2 CSS properties to the element:

- margin-left: auto;
- margin-right: auto;



Centering an Image





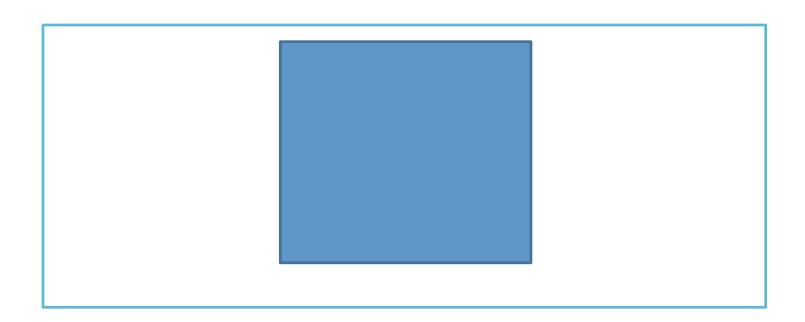
Centering a Image

To center an image, add:

- margin-left: auto;
- margin-right: auto;
- display: block



Centering an Image





COLOR

What is a white color?

What is a black color?



COLOR

What is a white color?
ALL colors

What is a black color?

Means no color



Color on the Web

Color on the Web Can be represented in three ways:

- A default color value
- Hex Value
- RGB Value



Color on the Web

- Default Color
 - 16 pre-defined CSS colors
 - Example: red, blue, black, white, maroon, etc.
 - Too limited may not be what you want!

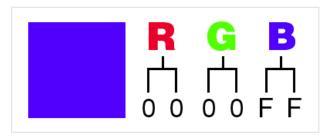


Color on the Web

- Hex Color (Hexadecimal)
 - Millions of ways to define a color!
 - Syntax: Pound sign # followed by 6 digits/ characters from 0 to 9 and A to F
 - Example: #FF0000 (red), #339CCD (light blue), #888888 (gray)



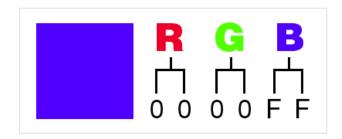
CSS Color - Hex



- Hex values are 6 digits, or 3 bytes. Each byte is 2 digits and represents a "color"
- Red corresponds to the 1st byte, Green to the 2nd, Blue to the 3rd
- A "0" indicates *no color*. Increasing the value to 1, 2, etc. increases the color. An "F" indicates *full color* (*lightest*)
 - Example: #0000FF Equivalent to "no reds", "no greens", "full blues" = Pure Blue



CSS Color - RGB



RGB colors

- Syntax: *rgb(255, 0, 0)*
- rgb(...) takes in 3 values: red, green, blue
- Similar to Hex. 0 in rgb is 00 in hex, 255 in rgb is FF in hex
- Examples:
 - rgb(255, 0, 0) vs. #FF0000
 - rgb(51, 156, 205) vs #339CCD



Summary

Divs and Spans CSS Properties Next workshop is a handson lab:

