CIS 155 Notes

* Tree Concept (HTML)
  + Every HTML file can be viewed as an (upside down) tree
    - Have a “Main” element with…
      * Nested Elements that are Children of the “Main” Element
    - Can think of it as a family tree…
      * A diagram of a diagram

        Description automatically generated with medium confidenceGrandparent, parent, children, grandchildren
* Relational Selectors (CSS)
  + How to code a Child Element
    - Parent-Element > Child-Element { }

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Description automatically generated

* + How to code a General Sibling
    - Tags within the same “indentation”
    - Sibling-Tag-Above ~ Sibling-Tag-Below { }
      * Only affects the Sibling tags below it

A close up of a sign

Description automatically generated

* + How to code a Descendant
    - Affects tags anywhere down the tree from the “Main” tag
    - Main-Tag Descendant-tag { }

A close up of a text

Description automatically generated

* + How to code Adjacent Sibling
    - Affects the tag that comes right after the “Main” tag
    - Main-Tag+Next-Tag { }

A close up of a sign

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A white screen with black text

Description automatically generatedUse this to as a reference to understand the stuff above

* How to code Combination Selectors
  + A Selector for a class within an element
    - Combines Tag Names with Classes
    - Tag.Class { }

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* + Multiple Selectors
    - Put commas between the tags you want to select
    - Tag, tag, tag { }
    - Second example in picture reads as
      * All p tags and li descendants of ul.speakers

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Description automatically generated

Use this to help understand the examples above

A computer screen shot of a program

Description automatically generated

* How to code Attribute Selectors
  + Attributes are anything that come right after the tag name followed by an “=”
  + Attribute is specified in the code in [x]

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Description automatically generated

Use this to help understand the above

A white screen with text

Description automatically generated

* Common Pseudo-Classes & Pseudo-Elements
  + Pseudo-Classes
    - A close-up of a text

      Description automatically generatedNot necessarily coded in the HTML but they kind of represent the state of your webpage
  + Pseudo-Elements
    - A close up of a text

      Description automatically generatedWorks like Pseudo-Classes
* How do Cascade Rules Work?
  + What happens when styles applied to an element conflict?
    - 1: Style rule w/ highest specificity selector wins!
    - 2: If same specificity, style rule applied last wins
  + If multiple style sheets, the last one will override previous
  + User style sheets: Users can create special style sheets for their browsers
    - People w/ poor vision could enlarge the font sizes
  + If you want to improve the precedence of a style rule put a “!important” at the end

A close up of a sign

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* How to create & use custom properties (variables)
  + CSS Variables

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Description automatically generated

A screenshot of a computer code

Description automatically generated

* + When declaring a custom property
    - Put it at the top of the document
    - Syntax
      * { --variable: value; }
  + To use a custom property
    - Syntax EX:
      * { color: var(--custom\_property); }

Need this for Module 4 CYOW Assignment

Github Repository Link

<https://github.com/I-AJ-T/my-website>

Github Pages Link

<https://i-aj-t.github.io/my-website/>

* Type Selector
  + Lines:
    - 11 (header)
    - 17 (p)
* ID Selector
  + Lines:
    - 4 (#logic\_pic)
    - 32 (#summon\_text)
* Class Selector
  + Lines:
    - 27 (.heading\_text)
    - 56 (.section\_heading\_text)
    - 74 (.important\_text)
    - 80 (.important\_text\_1)
    - 86 (.important\_text\_2)
* Relational Selector
  + Lines
    - 23 (header > h1)
    - 38 (p#summon\_text a)
* Combination Selector
  + Lines
    - 50 (h1.overview\_text)
    - 64 (p.list\_heading)
    - 68 (ul, ol li)
* Pseudo-Class
  + Line
    - 43 (p#summon\_text a:hover)
* Pseudo-Element
  + Line
    - 60 (.section\_heading\_text::first-letter)

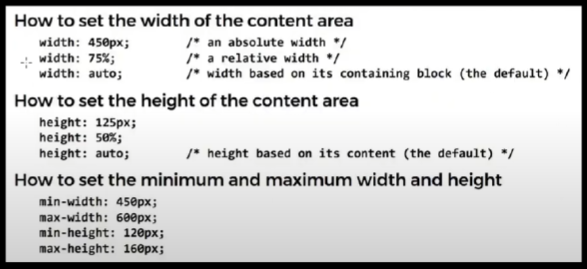
Mod 5 Lecture Notes:

* CSS Box Model
  + Web browsers place each block element in a box
  + Margin
    - Space between border and edge of box
  + Padding
    - Space between content area and border

A diagram of a rectangular object with arrows

Description automatically generated

* How to set Widths & Heights
  + Auto is the default for width & height if you don’t set it
  + Can use relative or absolute measurements for width & height
  + Min- & max- width & height will become useful later when we learn more about Responsive Web Design



* How to set Margins
  + Can set margins individually or all at once
  + For setting margin property (which sets all 4 directions)
    - If you specify 1 value
      * It’s all 4 sides
    - If you specify 2 values
      * It’s top/bottom & then left/right
    - If you specify 3 values
      * It’s top, left/right, bottom
    - If you specify 4 values
      * It’s clockwise from the top
  + Margins for 2 elements on top of each other collapse
    - Meaning only larger margin counts

A screenshot of a computer

Description automatically generated

* How to set Padding
  + Same as Margins, except padding never collapses

A screenshot of a computer

Description automatically generated

* Using a “Reset Selector”
  + A universal selector that sets all margins & padding to 0
  + Useful for getting rid of all default margins/padding that elements might have so you can code your own

A yellow rectangular sign with black text

Description automatically generated

* How to set borders
  + Lots of different ways to customize borders
  + You can add borders to a single side of a box, just some sides, or to all sides

A white text on a white background

Description automatically generated

A white background with black text

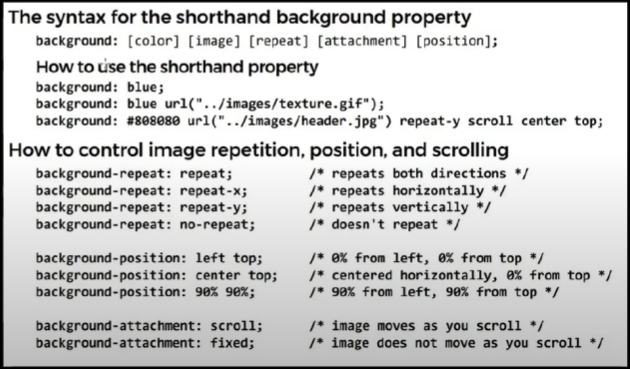
Description automatically generated

* How to set rounded corners & shadows to borders
  + Border-radius
    - Used for rounding corners
    - Radius of a circle defines the rounded edge
  + Box-shadow
    - Is similar to text-shadow
  + This takes some experimenting to find the right parameters

A screenshot of a computer program

Description automatically generated

* How to set background colors & images
  + Can set a background color or image for any box
  + Default for background image is that it will repeat horizontally & vertically & tile across the box
  + Web Accessibility Note
    - You have to make sure a background image doesn’t make text harder to read



* How to set background gradients

A screenshot of a computer program

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