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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* + 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

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

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

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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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Use this to help understand the examples above

A computer screen shot of a program

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* 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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Use this to help understand the above

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* 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

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

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A screenshot of a computer code

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* + 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); }
* How to use AI for coding