Cascading Style Sheets

* Language used to specify the presentation aspects (e.g layout and formatting) of structurally marked up documents
* developed by Hakon Wium Lie (HTML Cascading Style Sheets /CHSS) and Bert Bos (Stream-based Sheet Proposal / SSP)
* Versions:
  + CSS 1
  + CSS 2
  + CSS 2.1
  + CSS 3 (structural semantic markup/modularizes CSS 2.1)
* Declaration Block
  + Properties
    - Visual, aural, paged, interactive
    - Margins, borders, and padding
    - Colors and background
    - Fonts
    - Text formatting
    - Lists and tables
    - Positioning and dimensions
    - Miscellaneous
  + Values
    - Keywords
    - Numbers
      * int, real numbers in decimal notation
    - Length
      * Length Units
        1. em
        2. px
        3. in
        4. cm
        5. mm
        6. pt (point 1/72”)
        7. pc (pica 1/6”)
    - Percentages
    - Colors
      * Rgb (\_,\_,\_)
      * Rgba (\_,\_,\_,\_) a: alphachannel/opacity
      * Hsl: hue, saturation, lightness hsl (\_,\_,\_) and hsla (\_,\_,\_,\_)
    - Strings
    - URLs and URIs
    - Counters
    - Initial values, inherited values, important rules
    - Specified, computed, used, and actual values
    - Others which are also used as the same, but not lengths:
      * angles: transformation
        1. deg
        2. rad
        3. grad
        4. turn
      * time: animation
        1. ms
        2. s
      * frequencies: speech
        1. hz
        2. khz
      * resolution

CSS Rule Precedence

* By origin and importance
  + user important declarations
  + author important declarations
  + author normal declarations
* By specifically
  + Inline styles (1) or not (0)
  + Number of ID attributes in selector
  + Number of other attributes and pseudo-classes in selector
  + Number of element names and pseudo-elements in selector
* By order
  + The later overrides previous declarations

\*\*CSS Comments

* /\* \*/

CSS Statements

* At Rules
  + @charset
  + @import
  + @media
  + @page

CSS Rule Sets (aka CSS Rule)

* Consists of a selector, followed by a declaration block, which contains zero or more semi colon (;) separated declarations, which in turn consists of a property name, followed by a property value.

CSS Selector

* Selector
  + Structure used as a condition in a CSS rule to determine without element in the doc tree are matched by the selector.
* Selector syntax
  + chain of one or more sequences of simple selectors separated by comminatory, with 1 pseudo element possibly appended in the last sequence
    - Sequence of simple selectors
      * Chain of simple selectors
    - Group of selectors
      * Comma-separated list of selectors representing the union of all elements selected by each selector
    - Simple Selector
      * Type Selector
      * Universal Selector
        1. p{}
        2. h1{}
      * Attribute Selector
        1. [attr]
        2. [attr=val]
        3. [attr~=val]
        4. [attr|=val]
        5. [attr^=val]
        6. [attr$=val]
        7. [attr\*=val]
      * Class Selector
      * ID Selector
      * Pseudo-class
        1. Dynamic pseudo-calass
        2. Link pseudo-class

:link

:visited

* + - * 1. User action pseudo-class

:target (css3)

* + - * 1. Target pseudo-class

1. :lang()
   * + - 1. UI element states pseudo-class

:enabled

:disabled:

:checked

intermediate

* + - * 1. Structural Pseudo classes

:root

:first-child (css3)

:last-child (css3)

:only-child (css3)

:nth-child (css3)

:nth-child() (css3)

:nth-last-child() (css3)

:first-of-type(css3)

:last-of-type (css3)

:only-of-type (css3)

:nth-of-type() (css3)

:nt-last-of-type() (css3)

:empty

* + - * 1. Negation pseudo-class

:not (css3)

* + - * Combinators
        1. Descendant combinators (white space; space, tab, line feed, carriage, return from feed)
        2. Child combnators (>)
        3. Sibling combinators

Adjacent sibling combinatory (+)

General sibling combinatory (~)

* + - * Pseudo elements
        1. ::first-letter (css3), :first-letter
        2. ::first-line (css3), :first-line
        3. ::before (css3), :before
        4. ::after (css3), :after

XHTML Stylesheets

* Author styles
  + external stylesheets
  + embedded styles
  + inline styles
    - Persistent
    - Preferred
    - Alternate
* User styles
* User agent styles (ex: default css2.1 stylesheet for html4)