

Hypertext Markup Language

- ❖ Language used to markup documents in the WWW
 - Structure
 - Presentation
- ❖ Versions
 - HTML 2.0, 3.2, 4.0
 - HTML 4.01
 - Strict – deprecated
 - Transitional – still make use the deprecated
 - Frameset – using frames
 - HTML 5 (working draft)
- ❖ Head
 - title, base, link, meta, style, script
- ❖ Body
 - Grouping elements (div, span)
 - Headings (h1 – h6)
 - Paragraphs, line breaks, horizontal rules (p , br , hr)
 - Lists (ul, ol, li, dl, dt, dd, dir, menu)
 - Tables (table, th, tr, td, thead, tfoot, tbody, colgroup, col)
 - Structured text
 - Phrase elements (em, strong, dfn, code, samp, kbd, var, cite, abbr, acronym)
 - Quotations (blockquote, q)
 - Subscripts and superscripts (sub, sup)
 - Preformatted texts (pre)
 - Font styles and alignments (tt, i, b, big, small, strike, s, u, font, basefont, center)
 - Document changes (ins, del)
 - Links and anchors (a)
 - Objects, images, applets (object, img, param, applet)
 - Scripts (script, noscript)
 - Miscellaneous (address, bdo)
 - Frames, noframes, iframe
 - Frameset (for frameset DTD)
 - article, aside, nav, section
 - header, footer
 - main
 - address
 - DIV

XHTML

- Author Style
- User Style
- User Agent Style

Cascading Style Sheets

- Language used to specify the presentation aspects (i.e. layout and formatting of structurally marked up (e.g. HTML, XML, XHTML, SVG, etc.) document).
- Developed by Hakon Wium Lie (HTML Cascading Style Sheets / CHSS) and Bert Bos (Stream-based Style Sheet Proposal/ SSP)
- Version:
 - CSS 1 (December 17, 1996)
 - CSS 2.1 (June 7, 2011)
 - CSS 3 (structural semantic markup / modularizes CSS 2.1)
- CSS preprocessors, CSS frameworks
 - sass, less, bootstrap, foundation, materialize, etc.

Reset CSS

- Standard Style Sheet that contains all the default

CSS Statement

- @ charset
- @ import
- @ media
- @ font-face
- @ keyframe
- @ page

CSS Rule Sets (a.k.a CSS Rules, Style Rules)

- Selector, Declaration block, Property declarations, Property name, Property value.
- Selector-Structure used as a condition in CSS.
- Selector Syntax-chain of one or more sequence of simple selectors separated by combinators with one pseudo-element possibly appended to the last sequence.
- Simple Selector
 - Type Selector.
 - Universal Selector – matches everything
 - Attribute Selector
 - Class Selector
 - ID Selector
 - Pseudo class
 - Dynamic Pseudo-classes
 - Link pseudo-classes
 - :link
 - :visited
 - User action pseudo-classes
 - :hover
 - :active
 - :focus
 - Target pseudo
 - :target^{CSS3}
 - Language Pseudo-class
 - :lang()
 - UI Element States pseudo-classes
 - :enabled^{CSS3}
 - :disabled^{CSS3}
 - :checked^{CSS3}
 - :indeterminate^{CSS3}
 - Structural pseudo-classes
 - :root^{CSS3}
 - :first-child
 - :last – child^{CSS3}
 - :only – 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}
 - :nth – last – of – type()^{CSS3}

- :empty^{CSS3}
 - Negation pseudo-class
 - :not()^{CSS3}
- Combinators
 - Descendant combinator (whites-space, i.e. space, tab, carriage return, form feed)
 - Child combinatory (>)
 - Sibling combinators
 - Adjacent sibling combinatory(+) – succession
 - General sibling combinatory (-) css3 – follows particular siblings
- Pseudo-elements
 - ::first – letter^{CSS3}, :first-letter
 - ::first – line^{CSS3}, :first-line
 - ::before^{CSS3}, :before
 - ::after^{CSS3}, :after

CSS Rule Preferences

- By origin and importance
 - User agent important declarations
 - User important declarations
 - Author important Declarations
 - Author normal Declarations
 - User normal Declarations
 - User agent normal Declarations
- By specificity
 - Inline Style (more specific)
 - Number of ID selectors
 - Number of class selectors, attribute selectors, and pseudo-classes
 - Number of type selectors and pseudo-elements
- By order

CSS Declaration

- Properties
 - Shorthand properties
 - Vendor-specific extensions (a.k.a vendor prefixes)
- Values
 - Keywords
 - Numbers (integer and reals in decimal notation)
 - Dimensions
 - Length units:
 - Font-relative: em, ex, ch, rem
 - Viewport-percentage: vw, vh, vmin, vmax
 - Absolute lengths: cm, mm, q, in, pt, pc, px
 - Angle units: deg, grad, rad, turn
 - Duration units: s, ms
 - Frequency Units: hz, khz
 - Resolution units: dpi, dpcm, dppx
 - Percentages
 - URLs and URIs
 - Colors
 - Strings
 - Functions:
 - calc(), attr(), counter(), counters(), linear-gradient(),
 - radial-gradient(), translate(), scale(), rotate(), etc.