MIDTERMS

CSS

-The CSS or Cascading Style Sheet was developed by Hakon Wium Lie.

-The language is used to specify the presentation

version history

- CSS Level 1 (CSS 1, W3C Recommendation, Dec 1996)

- CSS Level 2 (CSS 2, W3C Recommendation, May 1998)

- CSS Level 2 Revision 1 (CSS 2.1, W3C Recommendation June 2018)

- CSS Level 3

modular approach to CSS development has opposed to the monolithic specification of CSS 2.1

Sources of styles for HTML documents

- author styles

-external(s.k.a linked) stylesheets

-separating style sheet to the HTML document

-embedded (a.k.a internal) stylesheets

-inline styles

-User styles

-some browser provide (non-standard) alternatives through plugins/extensions

The source of a file

At - Rules

@charset

import

Namspace

Media

Supports

Page

Font-face

Keyframes

**CSS Rules Sets** ( a.k.a CSS Rules, Styles Rules)

-consists of a selector, followed by a brace-enclosed declaration block, which contains zero or more semi-colon separated property

**CSS Selectors**

-Selector

-Structure that is used as a condition in a CSS rule to determine which elements in the document tree are matched

-Selector Syntax

-sequence of simple selectors separated by Combinators

-Selector group

-coma-separated list of selectors representing the union of all elements selected by each of the selectors in the list

-Attribute selectors

-type-selector

-univesal selector

Combinators

Descendant combinators (whitespace , i.e, space tab, line feed, carriage return,form feed)

Child combinators(>)

Sibling combinator

-adjacent sibling combinators(+)

-general sibling combinators(-)

\*siblings are allowed after the targeted selector

**pseudo -elements**

CSS3

:first-letter ::first-letter

:first-line ::first-line

:before ::before

:after ::after

Simple Selectors

-universal selector

-type selector - different type of selector

p,h1

-ID selector

nav, #main, #info

-class selectors

-attribute selectors

-pseudo-classes

-dynamic pseudo-classes

:link, visited

**CSS Rule Precedencs**

An HTML element may be the subject of the selectors of multiple style rules

Resolution:

-by origin and importance

-by specificity

Calculating a selector’s specify

-by order

Last is prioritize

!important rule that override normal rule

The importance of user and author is reserved in normal declaration

Transition declaration -

CSS Declarations

-properties

Shorthand properties

-Allows author to specify the values of several properties the values of several properties with a single property ( ex background, border-top)

-Vendor specific extensions ( a.k.a vendor prefixes )

-Used by browser vendors as a prefix for the names of new experimental or non standards CSS properties, lately , vendors moving only from vendor prefixes in favor of user contrlled flags or preferences

Ex, -webkit-, -moz-, -o-, -ms-

-custom properties aka CSS variables (experimental)

Property names prefixed with --, representing a value that can be reused throughout the document using the var() function

Ex root{--kulay: #bada55;}

h1{color: var(--kulay);}

//color:var(kulay, blue);

-values

Value processing

declared , cascaded, specified, computed, used, actual values

Value types

Keywords

CSS-wide keywords

Initial

Inherit

Unset

Property specific keywords

-numbers

-integers or reals in (scientific) decimal notation

-dimensions

-length, angle, duration(or time), frequency, resolution

-length units

Font-relative: em, cx,ch, rem

Viewport percentage: vw, vh, vmin, vmax

Absolute:cm, mc, in, pt, pc, px

-angle units

deg, grad, rad, turn

Used in some gradient and transform functions

-duration(or time) units:

s,ms

Used in animation, transition and related protperties

-frequency

Hz,kHz

Initially introduces in CSS2 for the (obsolated) aural mediatype

\*reintroduced in (CSS3 but is currently unused

-resolution units:

Dpi, dpcm, dppx

Used in media queries

\*svg is resolution proof)

-percentages

Number with % suffix

Calculated as a percentiles

-URLs and URIs

url() function with an absolute or relative

Colors

Color keywords: red

RGB hexadecimal notation:

Ex #ff0000

HSL function

Ex (0,100%,50%)

Color wheel, saturation, lightness

Current color, transparent

Strings

-delimited be single quotes(‘) or double quotes(“)

Ex: content

functions(CSS3)

-miscellaneous types

CSS Preprocessors, Frameworks, and Polyfills

-CSS preprocessors

-generate CSS using a custom language syntax that typically includes features that typically includes features that don’t exist in pure CSS(Ex. Variables, control flow, nesting, mixins, functions, etc.)

ex. Sass, Less, Stylus, etc.

-CSS Frameworks

Provides predefined CSS design functionality that can be reused, extended, or customized

Ex. Bootstrap, Foundation, Materialize

Fills

-provide features that developers expect browser to provide natively