# CSS CASCADING STYLE SHEETS

#### CSS

## Stylesheet Language

- Defines a Web page's appearance
- CSS separates style and content
- Consists of a plain text file with rules for the display of HTML elements
- Formatting includes fonts and colors as well as layout and position
- Can be created outside of your HTML and applied to multiple Web pages
- Well-formed HTML is important for your CSS to work properly

## History

- Prior to CSS, Web pages were commonly styled with HTML tags and structured with tables
- This was both tedious and inefficient Nine different style sheet languages were proposed, two were chosen as the foundation
- CSS Level 1 emerged as a W3C
   Recommendation in December 1996
- Browsers began to support CSS over the next few years

# Using CSS

- CSS can be applied in three different ways to a Web page:
- In an external .css file

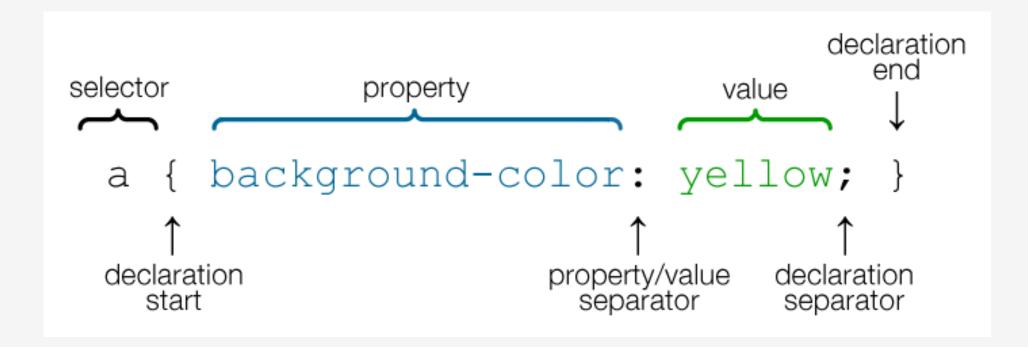
rel="stylesheet" type="text/css" media="all" href="/css/style.css" />

- In the <head> section of an HTML document
   The <style> tag is used to insert CSS
- <u>Inline</u> with HTML code
  <h1 style="color:red; margin:20px">The Text</h1>

#### Selectors

- Specific Elements
   h1, h2 -h6, body, p, etc
- Id
   An attribute Identifier unique to
   the document
- Class
   An attribute Identifier that groups
   multiple elements in a document

#### Structure



## Whitespace

• Whitespace between properties and selectors is ignored.

```
body{overflow:hidden;background:#000000;}

is functionally equivalent to this one:

body {
    overflow: hidden;
    background: #000000;
}
```

## Cascading

- The principle of the "cascade" is applied when style rules are in conflict
- Three primary factors determine which style rule wins out:
- Inheritance
- Specificity
- Location

#### CSS 3

http://css3please.com

- Latest standard for CSS
- CSS2 is best supported
- CSS<sub>3</sub> is still evolving but offers new features for designers and developers
- Modern browsers support many aspects of CSS<sub>3</sub>
- Backwards compatible with CSS2

CSS3

Taxonomy & Status (October 2014)

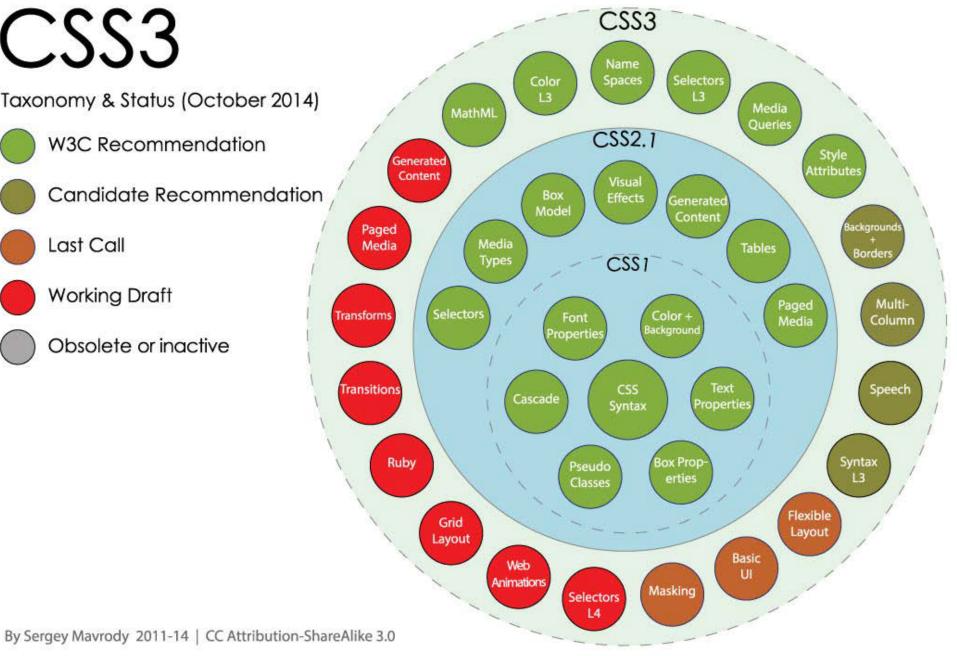
W3C Recommendation

Candidate Recommendation

Last Call

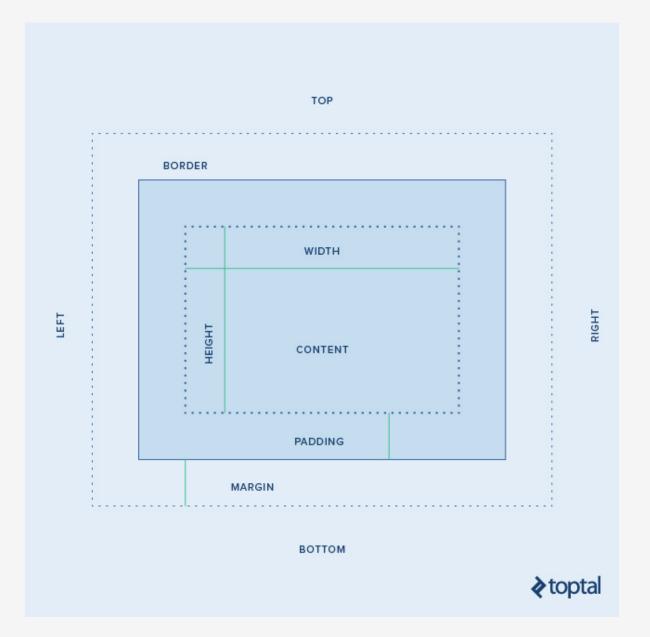
Working Draft

Obsolete or inactive



### The Box Model

All HTML elements can be considered as **boxes**. In **CSS**, the term "box model" is used when talking about design and layout. The **CSS box model** is essentially a **box** that wraps around every HTML element. It consists of: margins, borders, padding, and the actual content.



Selector

div	all DIV tags
div, span	all DIV tags and all SPAN tags
div span	all SPAN tags inside DIVs
#content	An element with ID content
#box *	all elements inside #box
ul#box	UL tag with ID "box"
span.box	all SPAN tags with CLASS "box"
*	All elements
a:link, a:active, a:visited, a:hover	links in normal state, in clicked state, and in visited state link with mouse over it
div > span	all SPANs one-level deep in a DIV

## Positioning

Position	places elements on screen, e.g. absolute, fixed, relative
Float	stacks elements horizontally in a particular direction, e.g. left
Top, left, right, bottom	specifies the offsets used in absolute, fixed, and relative positions, e.g. top:10px;left:10px
display	sets how the element is placed in the doc flow, e.g. block, inline, none
Z-index	sets the stacking order of elements, e.g. z-index of 1 is below z-index of 2
overflow	sets what happens to content outside of container, e.g. auto, hidden

Text

font-family	font used, e.g. Helvetica, Arial
Font-size	text size, e.g. 6opx, 3em
Font-weight	how bold the text is, e.g. bold
Font-style	what style the text is, e.g. italic
color	text color, e.g. #ooo, #abcdef
Text-decoration	sets a variety of eects on text, e.g. underline, overline, none
Text-align	how text is aligned, e.g. center
Line-height	spacing between lines, e.g. 2em
Letter-spacing	spacing between letters, e.g. 5px
Text-indent	indent of the first line, e.g. 2em
Text-transform	applies formatting to text, e.g. up-per case, lowercase, capitalize
vertical-align	align relative to baseline, e.g. text-top

## Borders and Lists

border	sets border style for all borders, in the format: border: (solid, dashed, dotted, double) (width) (color), e.g. border: solid 1px #000
border-top border-bottom border-left border-right	sets border style for a specific border (same property syntax used for padding and margin, e.g. margin-left)
list-style-type	sets style of bullets, e.g. square
list-style-position	sets how text wraps when bulleted, e.g. outside, inside
list-style-image	sets an image for a bullet, e.g. list-style-image:url(bullet.png)

Others

background	sets background of an element, in the format: background: (color) (image) (repeat) (position), e.g. background: #000 url(bg.png) repeat-x top left
cursor	sets shape of cursor, e.g. pointer
outline	a border drawn around an element that doesn't affect the box model
border-collapse	sets how borders within tables behave, e.g. collapse
clear	sets on what side a new line starts in relation to nearby floated elements, e.g. left, right, both