

CSSText+Color

ART326

CSS



From Garden to Plate

A *potager* is a French term for an ornamental vegetable or kitchen garden. Often flowers (edible and non-edible) and herbs are planted with the vegetables to enhance the garden's beauty. The goal is to make the function of providing food aesthetically pleasing.

What to Plant

Plants are chosen as much for their functionality as for their color and form. Many are trained to grow upward. A well-designed potager can provide food, cut flowers and herbs for the home with very little maintenance. Potagers can disguise their function of providing for a home in a wide array of forms - from the carefree style of the cottage garden to the formality of a knot garden.

```
body {  
    font-family: Arial, Verdana, sans-serif;}  
h1, h2 {  
    color: #ee3e80;}  
p {  
    color: #665544;}
```

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Understanding the “Rules”

A CSS formatting instruction is called a **rule**.

A rule consists of two parts:

01. a **selector** – identifies the element or elements (two types of custom selectors: class and ID).
02. one or more **declarations** – contains the formatting specifications.
Made up of a property and a value.

SELECTOR

DECLARATION 1

DECLARATION 2

p

{property: value; property: value;}

nav p

{font-weight: bold; margin: 5px;}

What is a Selector?

In CSS, a selector **does the selecting**.

elect which HTML element(s) the rules
i

nderstandi selectors allow you
to style ANY element in your HTML markup.

```
selector {  
    property; value;  
    property; value;  
}
```



Declarations

Made up of the property/value pair.

There can be more than one declaration in a single rule.

semicolon separate declarations.

Writing Convention: Web designers typically write each declaration on its own line.

4 Types of Selectors

Element Selector: Selects all elements based on element name.

p {} [ALL PARAGRAPHS]

img {}

h2 {}

Element Selector : http://www.w3schools.com/css/tryit.asp?filename=trycss_syntax_element

Compound Selector: Combines two or more selectors to target a specific element inside of another.

p img {} [ALL IMAGES INSIDE A PARAGRAPH TAG]

4 Types of Selectors

Class Selector [.]: Most Versatile. May be applied to any number of elements on a page.

```
.intro {text-size: 1em;}
```

```
<p class="intro">Hello</p>
```

Class Selector: http://www.w3schools.com/css/tryit.asp?filename=trycss_syntax_class

ID Selector [#]: “Building Block Selectors.” Points to specific, unique components in a page layout.

```
#header {width: 300px;}
```

```
<div id="header"></div>
```

ID Selector: http://www.w3schools.com/css/tryit.asp?filename=trycss_syntax_id

Big Ideas of CSS

What happens if 2 rules conflict?

Do rules higher up or lower down on the stylesheet take precedence?

Is it necessary to repeat styles on every tag nested inside of another tag?

Theories:

Cascade

Inheritance

Specificity

Cascade Theory

The last rule declared, also known as the rule closest to the actual content, takes priority.

When trying to determine which CSS rule will be honored, browsers typically use the following hierarchy (from least to most powerful):

Browser defaults

External or embedded style sheets.

Inline styles

d

< >

</ >

Inheritance Theory

Just like children inherit their smashing good looks from their parents, nested items inherit some styles from their parents.

Rule of thumb: properties related to text –font size, color, style, etc. are passed down.

```
div {font-family: Verdana; font-size: 18px;}
```

```
h1 {color: #000000;}
```

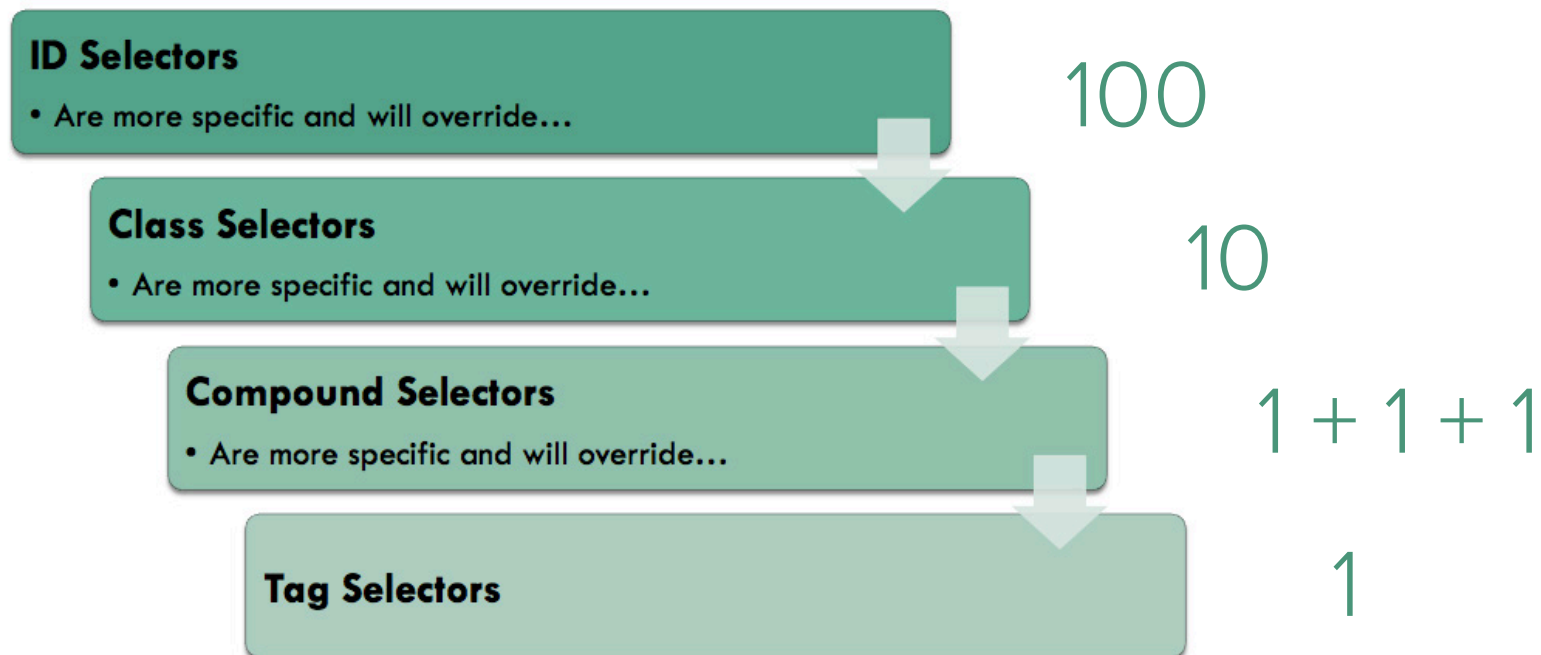
```
<div><h1>Hello.</h1></div>
```

Specificity Theory

Refers to the **weight** a selector has when a style rule conflict occurs.

The type of selector is used to determine the winner.

The more specific the selector, the more weight it is given to override the conflicting declaration.



div

d

<div>

< >

</div>

</ >

CSS Selector Tips



Heavy Compound Selectors

Tip #1: Avoid Excess Weight

Simplify. When writing compound selectors, ask yourself, “Is it absolutely necessary to apply all of that weight?”

For example, when writing:

#container #nav ul li a

Is it necessary to include the #container?

#nav ul li a

ID Selectors

Tip #2: Use ID's [#] Sparingly.

ID's can only be used one time.

Therefore, use them sparingly.

I recommend using them to build **structure**, and then use tag selectors or class selectors for everything else.

Tag Selectors

Tip #3: Use Tag Selectors First.

For example, to target following image, use an `img` tag selector, instead of a class or id.

`#content img {}`

```
<section id="content">
```

```
  <p>This is the content.</p>
```

```
  
```

```
</section>
```

Tag Selectors

Tip #4: Use a CSS Reset.

CSS Resets, reset browser defaults.

html, body, div, h6, h5, h4, h3, h2, h1, p, ul, li

{

margin: 0;padding: 0;

}

Remove the Excess

Tip #5: Delete Empty Selectors.

Again, simplify.

Is a selector empty? Delete it.

Is a declaration disabled? Delete it.

Did you list the same selector twice? Delete it.

Birds of a Feather

Tip #6: Group Selectors.

If you ever need to apply the same style property to a number of elements, you can group the selectors into one rule by separating them with a comma.

```
h1, h2, p, em, img { border: 1px solid blue; }
```

Text

Font Families

font-family

Font families declare multiple fonts to ensure one is used. These are called **font stacks**.

All font families, with the exception of generics, must be capitalized.

```
body {      font-family: Georgia, Times, serif;      }  
h1, h2 {    font-family: Arial, Verdana, sans-serif;    }  
.credits {  font-family: "Courier New", Courier, monospace;  }
```


Font Sizes

font-size

Can be set using px, ems, percentages. The most popular way to specify is using ems and percentages (relative).

To use ems:

Set body font-size to 100%

Set headlines: <h1>2em, <h2>1.6em, <h3>1.3em

Set paragraphs to 1 em= 100%

Try it: http://www.w3schools.com/css/tryit.asp?filename=trycss_font-size_percent_em

Units

px (pixels)

Commonly used; allow precise control

% (percentage)

Default browser size (16px); 75% = 12px; 200% = 32px

em

relative and equal to the current font size

PIXELS

h1	32px
h2	24px
h3	18px
body	16px

=

PERCENTAGES

h1	200%
h2	150%
h3	112.5%
body	100%

=

EMS

h1	2em
h2	1.5em
h3	1.125em
body	1em
p	1em

Font Weight

 and are structural (HTML).

font-weight (CSS)

normal: Default font weight, corresponds to 400 weight.

bold: Standard bold weight, corresponding to 700 weight.

Example: <http://htmlandcssbook.com/code-samples/chapter-12/font-weight.html>

Open Sans

Select styles

Glyphs

About

License

Light 300

Almost before we knew

Light 300 italic

Almost before we knew it

Regular 400

Almost before we knew

Regular 400 italic

Almost before we knew

Semi-bold 600

Almost before we knew

Semi-bold 600 italic

Almost before we knew

Bold 700

Almost before we knew

Bold 700 italic

Almost before we knew

Extra-bold 800

Almost before we knew

Extra-bold 800 italic

Almost before we knew

Font Style

font-style (CSS)

normal: The default, also referred to as “roman” or “upright”.

italic: Displays a version of the font in an italics style.

Example: <http://htmlandcssbook.com/code-samples/chapter-12/font-style.html>

Line Height

line-height

Adjusts the spacing
between the baselines
of the lines of text (leading).

Online type needs more
white space than print.

Browsers typically center text
vertically in the overall line height.

Default Line Height *(Leading)*

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas metus diam, eleifend eget sollicitudin ac, rhoncus eu elit. Donec condimentum justo a enim facilisis ac pharetra elit vestibulum. Nunc blandit nibh nec ligula porta condimentum. Duis eros sapien, venenatis non eleifend vitae, tincidunt blandit diam. Pellentesque sit amet mi felis, vel fermentum est. Curabitur pharetra odio in diam varius porta.

1.5em Line Height *(Leading)*

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas metus diam, eleifend eget sollicitudin ac, rhoncus eu elit. Donec condimentum justo a enim facilisis ac pharetra elit vestibulum. Nunc blandit nibh nec ligula porta condimentum. Duis eros sapien, venenatis non eleifend vitae, tincidunt blandit diam. Pellentesque sit amet mi felis, vel fermentum est. Curabitur pharetra odio in diam varius porta.

Text Alignment

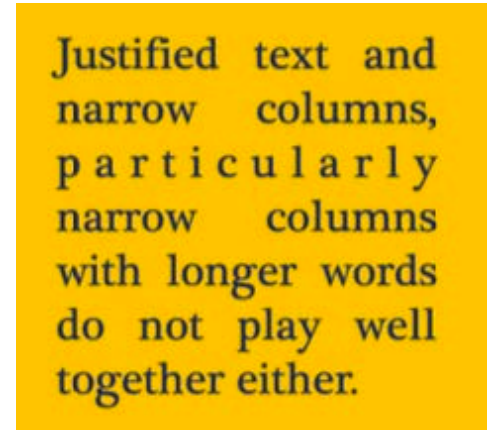
text-align

left; sets the rag to the left.

right; sets the rag to the left.

justify; sets the text justified.

tip: Justified text only works if long words are hyphenated, and HTML/CSS provide no support for hyphenation. Simply put, avoid justified text on the web.



Example: <http://htmlandcssbook.com/code-samples/chapter-12/text-align.html>

Letter Spacing

letter-spacing

Letter-spacing on the web is risky because you cannot always guarantee the size of the typeface, along with the typeface you will be spacing.

In the case that you do use letter spacing, specify in ems to ensure that the amount of tracking/kerning is applied in proportion to the text size.

```
<span class="kern">W</span>ashington
```

```
.kern { letter-spacing: -0.1em; }
```

Example: <http://htmlandcssbook.com/code-samples/chapter-12/letter-and-word-spacing.html>

The Measure

The **measure** is the number of characters in a single line of text.

rule of thumb: Optimal line length is typically 10 to 12 words, or between 45–75 characters.

CSS + Links

Add the “a” selector.

If you have multiple links throughout, you may need to create a compound selector for more specificity.

For example: “section a”

TO CHANGE COLOR: Choose “color” property.

TO REMOVE UNDERLINE: “text-decoration: none;”

HOVERS: “a:hover: {color: #000};”

Examples: http://www.w3schools.com/cssref/tryit.asp?filename=trycss_sel_link_more1

Text Decoration

text-decoration

Underline: underlines the element.

tip: use border-bottom instead.

Overline: line over the text.

Line-through: line through the text.

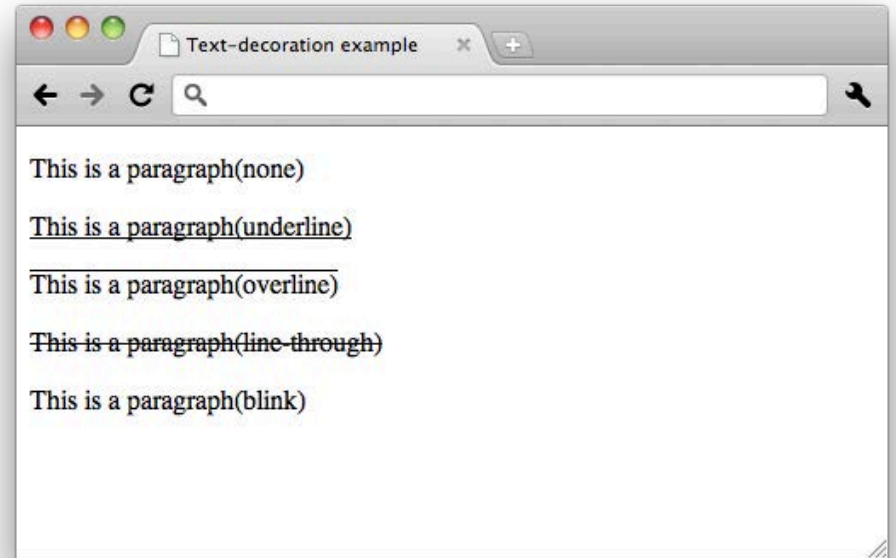
Blink: text flashes on and off.

tip: pretend this option does not exist.

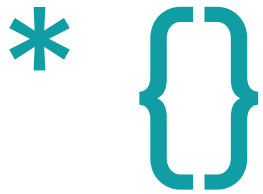
None: removes all decoration.

Used to take underlines off of links.

Example: <http://htmlandcssbook.com/code-samples/chapter-12/letter-and-word-spacing.html>



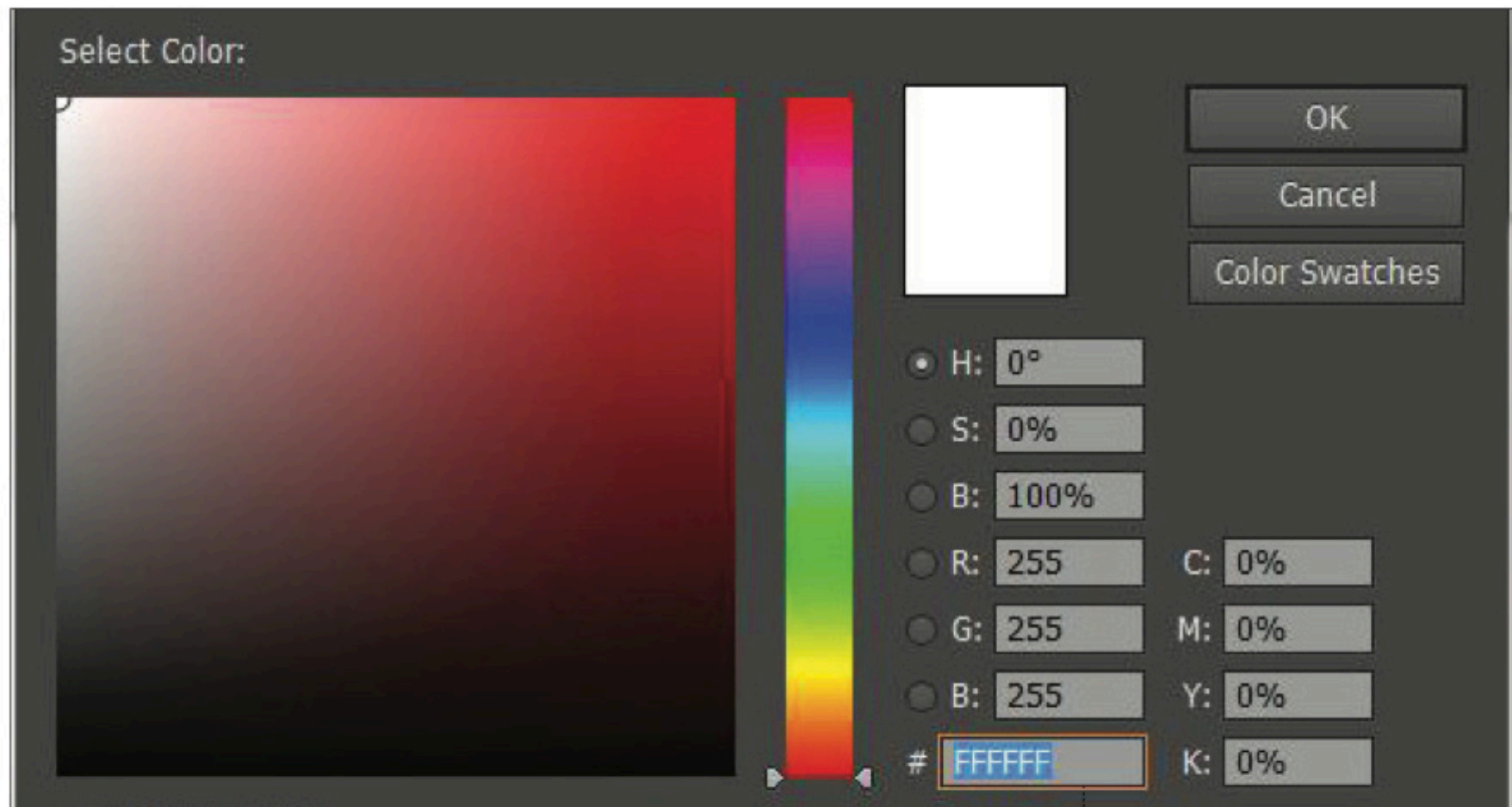
The Universal Selector



Targets ALL elements on a page.

Color





HEX CODES

The “color” Property

Color names (color: DarkCyan;)

See 140 CSS3 color names: <http://www.learningwebdesign.com/colornames.html>

HEX codes (color: #ee3e80;)

The hex number corresponds to #RRGGBB.

RGB values (color: rgb (100,100,90;) between 0 and 255

Compare HEX + RGB: http://www.w3schools.com/html/html_colors.asp

Here are a few examples of how to make an h1 gray:

```
h1 { color: gray;}
```

```
h1 { color: #666666;}
```

```
h1 { color: #666;}
```

The “color” Property

Color names (color: DarkCyan;)

See 140 CSS3 color names: <http://www.learningwebdesign.com/colornames.html>

HEX codes (color: #ee3e80;)

The hex number corresponds to #RRGGBB.

RGB values (color: rgb(100,100,90;)) between 0 and 255

Compare HEX + RGB: http://www.w3schools.com/html/html_colors.asp

HSL values (hsl(120, 100%, 50%);) CSS3; hue, saturation, lightness, alpha

Here are a few examples of how to make an h1 gray:

```
h1 { color: gray;}
```

```
h1 { color: #666666;}
```

```
h1 { color: #666;}
```

```
h1 { color: 0, 0%, 50%;}
```


HSLA

HUE: the colloquial idea of colors. It is often represented as a color circle and is expressed as an angle between 0 and 360 degrees.

SATURATION: the amount of gray in a color; expressed as a percentage.

LIGHTNESS: the amount of white or black in a color, and is expressed as a percentage with 0% being white, 50% being normal, and 100% being black.

ALPHA: transparency; a number between 0.0 (fully transparent) and 1.0 (fully opaque).

Opacity

sets the opacity for the entire element (bg color + text)

```
<style type="text/css">
```

```
p.one { background-color: rgb(0,0,0); opacity: 0.5; }
```

```
p.two { background-color: rgb(0,0,0); background-color: rgba(0,0,0,0.5); }
```

```
</style>
```



Images



CSS + Images

Allows for different looks and eases updating.

To wrap text around an image:

On image, float: left or right.

Padding: Space between image and border. Can use to create frames.

Borders: Can experiment with shadows.

Background Images

Background images are referenced through the CSS.

Every single element on the page can have one.

By default, background images repeat.

divs need a width and a height.

Always supply a background color, just in case your image fails to load!

On `<body>`: <http://htlandcssbook.com/code-samples/chapter-16/background-image-body.html>

On `<p>`: <http://htlandcssbook.com/code-samples/chapter-16/background-image-element.html>

background-size

Specifies the size of the background image.

Before CSS3, the background image size was determined by the actual size of the image.

Allows us to reuse the background image in different contexts.

```
div {  
  
  background:url(flower.gif);  
  
  background-size:80px 60px;  
  
  background-repeat:no-repeat;  
  
}
```

Multiple Background Images

CSS3 allows you to add several background images to one element.

```
body {  
  
    background-image: url(img_flwr.gif), url(img_tree .gif);  
    background-position: center bottom, left top;  
  
}
```

CSS Comments

```
/* hidden CSS */
```


Exercise 2



Stylize your online resume using these CSS properties (internally):

- font-family
- font-size (value in pixels)
- font-weight (normal or bold)
- font-style (normal, italic or oblique)
- color (HEX codes: <https://color.adobe.com>)
- spacing adjustments (margin and padding)
- additional CSS styling to improve design