



CS472 WAP

Basic CSS

Cascading Style Sheets (CSS)

Diversity from Unity

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Main Point Preview

- The CSS Properties for color, font, text, background, and lists are the basic properties used on almost every page.
- *There are a lot of details here, but few concepts. As long as you know the general concepts the details will follow with practice. Highest first—capture the fort to control the entire territory.*

<http://www.creativebloq.com/web-design/10-design-concepts-web-developers-need-know-11135255>

The bad way to produce styles



- Tags such as **strong**, **em**, **u**, and **font** are discouraged in strict HTML

<p>

Welcome to GreasyJoe's.

You will never, ever,

<u>EVER</u> beat

OUR prices!

</p>

Welcome to Greasy Joe's. You will **never**, *ever*, EVER beat **OUR** prices!

Content vs. Presentation

- HTML is for content, the information on the page
- CSS is for presentation, how to display the page
- Keeping content separate from presentation is a very important web design principle
- If the HTML contains no styles, its entire appearance can be changed by swapping **.css** files
- <http://csszengarden.com/>

Bad Practices, why?

Embedding style sheets



```
<head>
  <style type="text/css">
    p { font-family: sans-serif; color: red; }
    h2 { background-color: yellow; }
  </style>
</head>
```

Inline styles: the style attribute



```
<p style="font-family: sans-serif; color: red;">
  This is a paragraph
</p>
```

Note: It has higher precedence than embedded or linked styles

Cascading Style Sheets (CSS): `<link>`



- CSS describes the appearance and layout of information on a web page
 - (as opposed to HTML, which describes the content of the page)
- Can be embedded in HTML or placed into separate `.css` file (preferred)

```
<head>  
  <link href="style.css" rel="stylesheet"/>  
</head>
```


Basic CSS rule syntax

- A **CSS** file consists of one or more rules
- A rule's selector specifies HTML element(s) and applies style properties
- The `*` selector, selects all elements
- To add a comment we use: `/* */`

```
selector {  
    property: value;  
    property: value; ...  
}
```

```
p {  
    font-family: sans-serif;  
    color: red;  
}
```

CSS properties for colors



```
p {  
  color: white;  
  background-color: blue;  
}
```

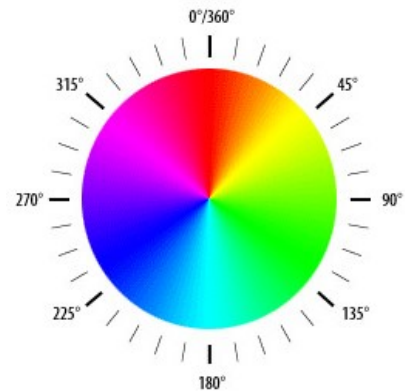
This paragraph uses the style above.

property	description
color	color of the element's text
background-color	color that will appear behind the element

Specifying colors

- **Color names:** aqua, black, blue, fuchsia, gray, green, lime, maroon, navy, olive, purple, red, silver, teal, white, yellow
- **RGB & RGBA codes:** red, green, and blue values from 0 to 255
- **HEX codes:** RGB values in base-16 from 00 (none) to FF (full)
- **HSL & HSLA codes:** HSL stands for hue, saturation, and lightness
 - Hue is degree on color wheel (from 0 to 360) - 0 (or 360) is red, 120 is green, 240 is blue.
 - Hsla demo <https://codepen.io/kman/pen/KwapPZ>
 - [Google css color picker \(good sample site\)](#)

```
h1 { color: red; }  
h2 { color: rgb(128, 0, 196); }  
h3 { color: rgba(128, 0, 196, 0.5); }  
h4 { color: #FF8800; }  
h5 { color: hsla(120, 60%, 70%, 0.3); }
```



CSS properties for fonts

property	description	Values
font-family	which font will be used	serif or “Courier New”
font-size	how large the letters will be drawn	A unit value, percentage, or named value
font-style	used to enable/disable italic style	normal(default), italic, oblique
font-weight	used to enable/disable bold style	normal(default), bold, bolder,...
font	Sets all font properties	style weigh size family
Complete list of font properties		

CSS properties for fonts

```
/* which font will be used */
h1{ font-family: Georgia;}
/* enclose multi-word font names in quotes */
h2 { font-family: "Courier New"; }
/* specify multiple fonts from highest to lowest priority */
h3 { font-family: Garamond, "Times New Roman", serif; }
```

- If first font not found on user's computer, the next is tried.
- Placing generic font name at end of font-family ensures always find use a valid font

CSS generic font names: serif, sans-serif, monospace, *cursive*, ❄️❄️■▼❄️▲

- Serifed fonts easier to read on printed pages, harder to read on computer screens,

font-size, font-weight, font-style



```
p {  
  /* how large the letters will be drawn */  
  font-size: 14vw;  
  /* used to enable/disable bold style */  
  font-weight: bold;  
  /* used to enable/disable italic style */  
  font-style: italic;  
}
```

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course has a lot
of fun!***



Size Units



- **Units:** pixels (**px**), point (**pt**), m-size (**em**) (**rem**), viewport (**vh**, **vw**)
 - **pt** specifies number of points, where a point is 1/72 of an inch on screen
 - **px** specifies number of pixels on the screen
 - **em** relative to the font-size of the element (2em means 2 times the size of the current font)
- **Vague font sizes:** xx-small, x-small, small, medium, large, x-large, xx-large, smaller, larger
- **vw** and **vh** represent 1% of viewport width and height

• <https://webflow.com/blog/how-and-why-to-use-vh-and-vw-in-webflow>

• https://www.w3schools.com/cssref/tryit.asp?filename=trycss_unit_vw_

CSS properties for text

Text has to do with words and layout and spacing of letters and words


Property	Description	Values
text-align	alignment of text within its element	left, center, right, justify
text-decoration	decorations such as underlining	underline, overline, line-through, blink, none
text-indent	Indent first line	a size(px, pt, %, em)
line-height	vertical size of each line	a size(px, pt, %, em)
letter-spacing	Horizontal gap between letters	a size(px, pt, %, em)
word-spacing 	Horizontal gap between words	a size(px, pt, %, em)
text-overflow 	How to handle too-long text	clip, ellipsis, ellipsis-word
text-shadow	A “drop shadow” next to text	Two distances(px, pt, %, em) plus an optional shadow color

CSS properties for text



```
h2 {  
  /* also overline, line-through, blink, or none. Effects can be combined */  
  text-decoration: underline overline;  
  /* Shadow is specified as X-offset, Y-offset, and optional color */  
  text-shadow: -2px 5px gray;  
}  
  
p {  
  /* Alignment of text within its element, left, right, center, or justify */  
  text-align: center;  
  /* Space between the lines in two paragraphs */  
  line-height: 30px;  
  /* Space between words in <p> elements should be 30 pixels */  
  word-spacing: 30px;  
  /* Indent the first line of all <p> elements with 50 pixels */  
  text-indent: 50px;  
}
```

CSS properties for background

Property	Description	Values
background-color	color to fill background	A color
background-image	image to place in background	url(image URL)
background-position	placement of bg image within element	Two tokens for x/y as top, bottom, left, right, center, or a size(pt, px, %, em)
background-repeat	whether/how bg image should be repeated	repeat(default), repeat-x, repeat-y or no-repeat
background-attachment	whether bg image scrolls with page	scroll(default), fixed
background-size 	scaling of bg image	a size(pt, px, %, em), cover, or contain
background	shorthand to set all background properties	



Background

```
body {  
    /* image to place in background */  
    background-image: url("../images/draft.jpg");  
  
    /* How bg image should be repeated */  
    /* repeat (default), repeat-x, repeat-y, or no-repeat */  
    background-repeat: repeat-x;  
  
    /* placement of bg image within element. two tokens, can  
       be top, left, right, bottom, center, a percentage, or  
       a length value in px, pt, etc */  
    background-position: 370px 20px;  
}
```

The `list-style-type` property



- `none` : No marker
- `disc` (default), `circle`, `square`
- `decimal` : 1, 2, 3, etc.
- `decimal-leading-zero` : 01, 02, 03, etc.
- `lower-roman` : i, ii, iii, iv, v, etc.
- `upper-roman` : I, II, III, IV, V, etc.
- `lower-alpha` : a, b, c, d, e, etc.
- `upper-alpha` : A, B, C, D, E, etc.
- `lower-greek` : alpha, beta, gamma, etc.

```
ol { list-style-type: lower-roman; }
```

```
i. first item  
ii. second item  
iii. third item
```

Main Point

- The CSS Properties for color, font, text, background, and lists are the basic properties used on almost every page.
- *There are a lot of details here, but few concepts. As long as you know the general concepts the details will follow with practice. Highest first—capture the fort to control the entire territory.*

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