

CSS for Styling



1

CSS Cascading Style Sheets

- It's a w3c standard
- to describe the **appearance** of information in a document (web page) defined by html elements
 - how display, not what to display
 - appearance? **colors, backgrounds, fonts, layouts, borders, etc.**
- history
 - **css**(1996), **css2.1**(2004), **css3**(2012)
- it can be embedded in HTML document
 - Inline
 - Internal (embedded): using the `<style>` element, or
 - External: placed in separate .css file



2

The good, the bad and the... ugly!

```
<p>
<font face="Arial">Shashdot.</font>
News for <b>nerds!!</b> You will <i>never</i>, <u>EVER</u>
be
<font size="+4" color="red">BORED</font> here!
</p>
```

HTML

Slashdot. News for **nerds!!** You will never, EVER be **BORED** here!

output

- ❑ Tags such as ``, `<i>`, `<u>`, and `` are **discouraged** in strict HTML `` ``
- ❑ Why is this bad?



3

<https://codepen.io/pavelsuraba/pen/lDHya>

Dancing text

Pavel Suraba

Follow

HTML

CSS

JS

```

1 <html lang="en">
2 <head>
3   <meta charset="UTF-8" />
4   <link href="https://fonts.googleapis.com?
5     family=Graduate" rel="stylesheet" type="text/css">
6   <title>Document</title>
7 </head>
8 <body>
9   <h1>Make me dance!</h1>
10 </body>
11 </html>
```

```

1 ::selection {
2   background: #0e444d;
3   text-shadow: none;
4 }
5
6 h1 {
7   position: relative;
8   top: 100px;
9   text-align: center;
10  text-transform: uppercase;
11  font-size: 60px;
12  color: #e67e22;
13  text-shadow: 2px 2px 3px #000;
14 }
```

```

1 var dance = {
2   init: function() {
3     this.dance();
4   },
5   config: {
6     newSize: 40,
7   },
8   dance: function(config) {
9     var newText = '';
10    hi = $('h1'),
11    text = $('h1').text(),
```

MAKE ME DANCE!

can distribute the work more easily. Faster development

- **writers need not be designers**
- **designers need not be programmers**
- **programmers don't need to understand the text content**

4

Inline CSS

An inline CSS is used to apply a unique style to a single HTML element.
An inline CSS uses the style attribute of an HTML element.
This example sets the text color of the `<h1>` element to blue:

```
<h1 style="color:blue;">This is a Blue Heading</h1>
```

Internal (embedded) CSS

An internal CSS is used to define a style for a single HTML page.
An internal CSS is defined in the `<head>` section of an HTML page, within a `<style>` element:

```
<html>
<head>
  <style>
    body {background-color: powderblue;}
    h1  {color: blue;}
    p   {color: red;}
  </style>
</head>
<body>

  <h1>This is a heading</h1>
  <p>This is a paragraph.</p>

</body>
```

External CSS

```
<html>
<head>
  <link rel="stylesheet" href="styles.css">
</head>
<body>

  <h1>This is a heading</h1>
  <p>This is a paragraph.</p>

</body>
```

6

Inline styles: the style attribute

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

HTML

This is a paragraph
This is another paragraph

output

- ❑ Higher precedence than embedded or linked styles
- ❑ Used for one-time overrides and styling a particular element
- ❑ *Bad style and should be avoided when possible (why?)*

7

Basic CSS rule syntax (for internal/embedded, external)

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

CSS

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

CSS

- ❑ A CSS file consists of one or more **rules**
- ❑ Each rule starts with a **selector**
- ❑ A selector specifies an HTML element(s) and then applies style **properties** to them

Embedding style sheets: <style>

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

HTML

- ❑ CSS code can be embedded within the head of an HTML page
- ❑ *Bad style* and should be avoided when possible (why?)

Attaching a CSS file <link>

```
<head>
...
<link href="filename" type="text/css" rel="stylesheet" />
...
</head>
```

HTML

```
p {
  color: red;
  background-color: yellow;
}
```

CSS

- A page can link to multiple style sheet files
 - In case of a conflict (two sheets define a style for the same HTML element), the latter sheet's properties will be used



10

selectors

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

- wild card *


```
* {
  background-color: gray;
}
```

- single


```
p {
  background-color: grey;
}
```

- group


```
h1, p {
  background-color: ivory;
}
```

- class


```
.class1 { font-style: italic; color: red; }
```

```
...
<div class="class1">...</div>
...
<div class="class1">...</div>
```

- id


```
#s123 { font-style: italic; color: red; }
```

```
<p id="s123">
```



11

Selectors (more)

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

- attribute
 - `a[target] {background-color: yellow;}`
- pseudo classes
 - `a:hover {color: pink;}`
- pseudo elements
 - `p::first-letter {`
 `color: #ff0000;`
 `font-size: xx-large;}`
- combinators
 - descendant selector (space) `selector 1 selector2`
 - child selector (`>`) `selector 1 > selector2`
 - adjacent sibling selector (`+`) `selector 1 + selector2`
 - general sibling selector (`~`) `selector 1 ~ selector2`

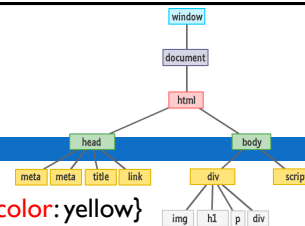


12

cascading principles

□ inheritance

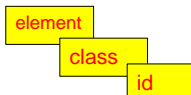
- font, color, list, and text are inherited body {color: yellow;}
- border, layout, margin, padding are not, unless specified



□ Specificity/Precedence

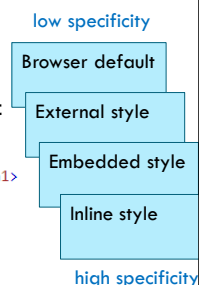
If there are two or more conflicting CSS rules that point to the same element, browser follows some rules to determine which one is most specific and therefore wins out.

- Inline style > Embedded style > External style > Browser default
- id > class > element



```
<h1 class="intro" id="x">This is a heading</h1>
```

```
.intro {background-color: yellow;}
#x {background-color: green;}
h1 {background-color: red;}
```



- same rule? latest rule

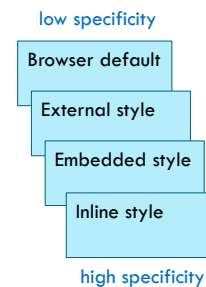
```
h1 {background-color: yellow;}
h1 {background-color: red;}
```

- More https://www.w3schools.com/css/css_specificity.asp

13

Cascading Style Sheets

- Properties of an element cascade together in this order:
 - ▣ browser's default styles
 - ▣ external style sheet files (in a <link> tag)
 - ▣ internal style sheets (inside a <style> tag in the page's header)
 - ▣ inline style (the style attribute of the HTML element)



14

CSS comments /*...*/

```

/* This is a comment.
It can span many lines in the CSS file. */
p {
  color: red;
  background-color: aqua;
}

```

CSS

- CSS (like HTML) is usually not commented as rigorously as programming languages such as Java
- The // single-line comment style is **NOT** supported in CSS
- The <!-- ... --> HTML comment style is also **NOT** supported in CSS

15

CSS styles

- (Text) color
- Font
- Text
- Background
- Box model
 - padding, margin, border
- display, visibility
- float
- width, height, position.....

17

CSS properties for (text) colors

```
p {
  color: red;
  background-color: yellow;
}
```

CSS

This paragraph uses the style above

output

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

18

Specifying colors

```
p { color: red; }
h2 { color: rgb(128, 0, 196); }      /* order doesn't matter */
h4 { color: #FF8800; }
```

CSS

This paragraph uses the first style above

This h2 uses the second style above.

This h4 uses the third style above.

output

- color names: aqua, black, blue, fuchsia, gray, green, lime, maroon, navy, olive, purple, red, silver, teal, white, yellow, ivory
- RGB codes: red, green, and blue values from 0 (none) to 255 (full)
- hex codes: RGB values in base-16 from 00 (0, none) to FF (255, full)

19

Representing Colour

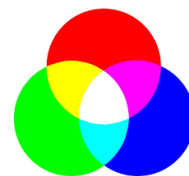
Our retina recognize three types of color: Red, Green, Blue .

Other colors perceptible by eye can be made by combining RGB.

Colour is typically represented using the RGB colour model

- Three integers (in the range 0..255) describe the amount of Red, Green, and Blue required to reproduce the colour

255,255,255	White	0,0,0	Black
255,0,0	Red	0,255,0	Green
0,0,255	Blue	255,255,0	Yellow
255,165,0	Orange	128,0,128	Purple



picker

Other colour models

- Cyan, Magenta, Yellow, and black (CMYK) – e.g., colour printers
- Hue, Saturation, and Luminance (HSL)
- Luminance, Blue, Red (YUV)



20

Specifying colors (grouping styles)

```
p, h1, h2 {
  color: green;
}
h2 {
  background-color: yellow; /* rgb(255,255,0) */
}
```

CSS

This paragraph uses the above style.

This h2 uses the above styles.

output

- A style can select multiple elements separated by commas
- The individual elements can also have their own styles



21

CSS styles

- (Text) color
- Font
- Text
- Background
- Box model
 - padding, margin, border
- display, visibility
- float
- width, height, position.....



22

CSS properties for fonts

property	description
font-family	which font will be used
font-size	how large the letters will be drawn
font-style	used to enable/disable <i>italic</i> style
font-weight	used to enable/disable bold style

[Complete list of font properties](http://www.w3schools.com/css/css_font.asp) (http://www.w3schools.com/css/css_font.asp)

23

font-family

```
p {
  font-family: Georgia;
}
h2 {
  font-family: "Courier New";
}
```

CSS

This paragraph uses the first style above.

This h2 uses the second style above.

output

- Enclose multi-word font names in quotes

24

More about font-family

```
p {
  font-family: Garamond, "Times New Roman", serif;
}
```

CSS

This paragraph uses the above style.

output

- We can specify multiple fonts from highest to lowest priority
- Generic font names:
 - serif, sans-serif, cursive, **FANTASY**, monospace
- If the first font is not found on the user's computer, the next is tried
- Placing a generic font name at the end of your font-family value, ensures that every computer will use a valid



Supported font family?

25

font-size

```
p {
  font-size: 24pt;
}
```

CSS

This paragraph uses the style above.

output

- units: pixels (px) vs. point (pt) vs. m-size (em)
16px, 16pt, 1.16em
- vague font sizes: xx-small, x-small, small, medium, large, x-large, xx-large, smaller, larger
- percentage font sizes, e.g.: 90%, 120%



26

font-size

```
p {
  font-size: 24pt;
}
```

CSS

This paragraph uses the style above.

output

- pt specifies number of point, where a point is 1/72 of an inch onscreen. Fixed/absolute. For printing
- px specifies a number of pixels on the screen. Fixed/absolute
- em specifies number of m-widths, where 1 em is equal to the font's current size. Scalable/relative.
 - text-indent: 2em margin: 8em



27

font-weight, font-style

```
p {
  font-weight: bold;
  font-style: italic;
}
```

CSS

This paragraph uses the style above.

output

- Either of the above can be set to `normal` to turn them off (e.g. headings)



28

Body styles

```
body {  
    font-size: 16px;  
}
```

CSS

- Applies a style to the entire body of your page
- Saves you from manually applying a style to each element

CSS styles

- (Text) color
- Font
- Text
- Background
- Box model
 - padding, margin, border
- display, visibility
- float
- width, height, position.....

CSS properties for text

property	description
text-align	alignment of text within its element
text-decoration	decorations such as underlining
line-height, word-spacing, letter-spacing	gaps between the various portions of the text
text-indent	indents the first letter of each paragraph

[Complete list of text properties](http://www.w3schools.com/css/css_reference.asp#text) (http://www.w3schools.com/css/css_reference.asp#text)

31

text-align

```
h2 { text-align: center; }
blockquote { text-align: justify; }
```

CSS

The Gollum's Quote

We wants it, we needs it. Must have the precious. They stole it from us.
Sneaky little hobbitses. Wicked, tricky, false!

output

- text-align can be left, right, center, or justify

32

text-decoration

```
p {
  text-decoration: underline;
}
```

CSS

This paragraph uses the style above.

output

- ❑ can also be `overline`, `line-through`, `blink`, or `none`
- ❑ effects can be combined:


```
text-decoration: overline underline;
```



33

CSS styles

- ❑ (Text) color
- ❑ Font
- ❑ Text
- ❑ Background
- ❑ Box model
 - padding, margin, border
- ❑ display, visibility
- ❑ float
- ❑ width, height, position.....



40

CSS properties for backgrounds

property	description
background-color	color to fill background
background-image	image to place in background
background-position	placement of bg image within element
background-repeat	whether/how bg image should be repeated
background-attachment	whether bg image scrolls with page
background	shorthand to set all background properties

41

background-image

```
body {
  background-image: url("images/large.jpg");
}
```

image can be online



- background image/color fills the element's content
- Can be on body, or a component <p>

46

background-repeat

```
body {
  background-image: url("images/small.jpg");
}
```

CSS



Background Repeat

By default, the background image will repeat.

YORK
UNIVERSITY

- can be repeat (default), repeat-x, repeat-y, or no-repeat

50

background-repeat

```
body {
  background-image: url("images/small.jpg");
  background-repeat: no-repeat;
}
```

CSS

Background No Repeat

You can avoid the image from being repeated by setting to "no-repeat".



YORK
UNIVERSITY

- can be repeat (default), repeat-x, repeat-y, or no-repeat

51

background-repeat

```
body {
  background-image: url("images/small.jpg");
  background-repeat: repeat-x;
}
```

CSS

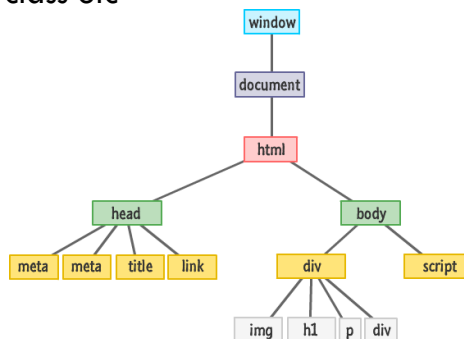


- can be repeat (default), repeat-x, repeat-y, or no-repeat



52

- So far basic styles
- Before going further, let's pause here review
 - inheritance, conflicting rules, class, id, <div>, pseudo class etc



57

Inheriting styles

RECALL

```
body {font-family: sans-serif; background-color: yellow; }
p { color: red; background-color: aqua; } /* override */
a { text-decoration: underline; }
h2 { font-weight: bold; text-align: center; }
```

CSS

This is a heading

A styled paragraph. [Previous slides](#) are available on the website.

- A bulleted list

output

- when multiple styles apply to an element, they are inherited
- a more tightly matching rule can override a more general inherited rule



58

Styles that conflict

RECALL

```
p, h1, h2 { color: blue; font-style: italic; }
h2 { color: red; background-color: yellow; }
```

CSS

This paragraph uses the first style above.

This heading uses both styles above.

output

- when two styles set conflicting values for the same property, the **latter** style takes precedence
- Inherit italic



59

selectors

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

RECALL

□ single

```
p {
  background-color: grey;
}
```

□ group

```
h1, p {
  background-color: ivory;
}
```

□ class

```
.class1 { font-style: italic; color: red;}
```

```
...
<div class="class1">...</div>
...
<div class="class1">...</div>
```

□ id

```
#s123 { font-style: italic; color: red;}
```

```
<p id="s123">
```

□ pseudo classes

```
a:hover {color: pink;}
```

combinators

- descendant selector (space)
selector 1 selector 2



60

CSS ID selectors

```
<p>Coding Horror! Coding Horror!</p>
<p id="mission">Our mission is to combine programming and
<q>human</q> factors with geekiness!</p>
```

HTML

Coding Horror! Coding Horror!

Our mission is to combine programming and “human” factors with geekiness!

output

- Applies style only to the paragraph that has the ID of mission



62

CSS ID selectors

```
<p>Coding Horror! Coding Horror!</p>
<p id="mission">Our mission is to combine programming and
<q>human</q> factors with geekiness!</p>
```

HTML

```
#mission {
  font-style: italic;
  font-family: "Garamond", "Century Gothic", serif;
}
```

CSS

Coding Horror! Coding Horror!

Our mission is to combine programming and "human" factors with geekiness!

output



- Applies style only to the paragraph that has the ID of mission

63

CSS class selectors

```
<p class="shout">Coding Horror! Coding Horror!</p>
<h2 class="special">See our special deal on Droids!</h2>
<p class="special">Today only!</p>
```

HTML

Coding Horror! Coding Horror!

See our special deal on Droids!

Today only!



output

64

CSS class selectors

```
<p class="shout">Coding Horror! Coding Horror!</p>
<h2 class="special">See our special deal on Droids!</h2>

<p class="special">Today only!</p>
```

HTML

```
.special {
  background-color: yellow;
  font-weight: bold;
}

.shout {
  color: red;
  font-family: cursive;
}
```

p.special?

CSS

Coding Horror! Coding Horror!

See our special deal on Droids!

Today only!



output

65

Sections of a page <div>

```
<div class="shout">
<h2>Coding Horror! Coding Horror!</h2>
<p>See our special deal on Droids!</p>
</div>
<p>We'll beat any advertised price!</p>
```

HTML

```
.shout {
  color: red;
  font-family: cursive;
}
```

CSS

Coding Horror! Coding Horror!

See our special deal on Droids!

We'll beat any advertised price!

- Tag used to indicate a logical section or area of a



- Has no appearance by default but you can apply styles to it

71

Inline Sections

```
<h2>Coding Horror! Coding Horror!</h2>
<p>See our <span class="special">special</span> deal on
Droids!</p>
<p>We'll beat <span class="shout"> any advertised </span>
price!</p>
```

HTML

```
.special {
  background-color: yellow;
  font-weight: bold;
}
.shout {
  color: red;
  font-family: cursive;
}
```

CSS

Coding Horror! Coding Horror!

See our **special** deal on Droids!



We'll beat **any advertised** price!

output

- has no onscreen appearance, but you can apply a style or ID to it, which will be applied to the text inside the span

72

Pseudo-class selectors

class	description
:active	an activated or selected element
:focus	an element that has the keyboard focus
:hover	an element that has the mouse over it
:link	a link that has not been visited
:visited	a link that has already been visited
:first-letter	the first letter of text inside an element
:first-line	the first line of text inside an element
:first-child	an element that is the first one to appear inside another

```
a:link { color: green; } /* unvisited link */
a:visited { color: red; } /* visited link */
a:hover { color: blue; } /* mouse over link */
```

73

CSS context selectors

```
selector1 selector2 {
  properties
}
```

CSS

- applies the given properties to selector2 only if it is inside a selector1 on the page

```
selector1 > selector2 {
  properties
}
```

CSS

- applies the given properties to selector2 only if it is *directly* inside a selector1 on the page

Context selector example

```
<p>Eat at <span>Greasy's Burger</span>...</p>
<ul>
  <li>The <span>greasiest</span> burgers in town!</li>
  <li>Yummy and greasy at the same time!</li>
</ul>
```

HTML

```
li span { text-decoration: underline; }
```

CSS

Eat at Greasy's Burger...

- The greasiest burgers in town!
- Yummy and greasy at the same time!

output

li, span ?

CSS styles

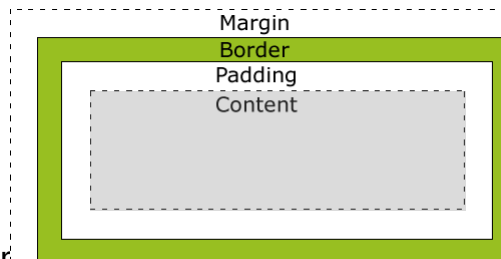
- (Text) color
- Font
- Text
- Background
- Box model
 - padding, margin, border
- display, visibility
- float
- width, height, position.....

78

The CSS Box Model

- Every element composed of:

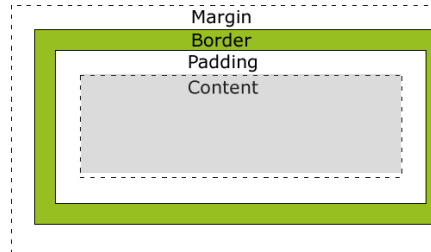
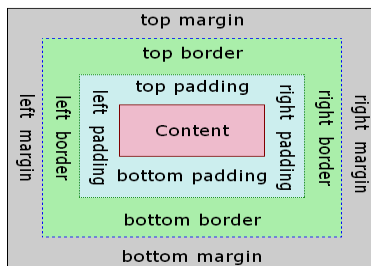
- content
- a **border** around the element
- **padding** between the content and the border
- a **margin** between the border and other content



79

The CSS Box Model (cont.)

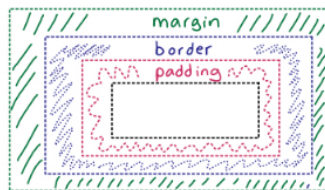
- Box width = content width + L/R padding + L/R border + L/R margin
- Box height = content height + T/B padding + T/B border + T/B margin



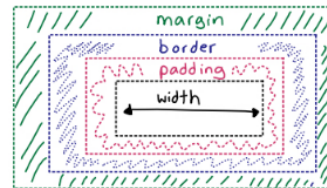
80

the box model

boxes have padding,
borders, and a margin

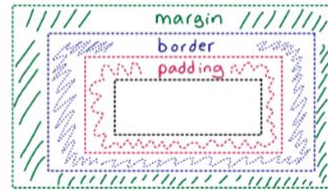


width doesn't include
margin/border/padding
by default



81

CSS properties for borders



```
h2 { border: 5px solid red; }
```

CSS

This is a heading.

property	description
border	thickness/style/size of border on all 4 sides

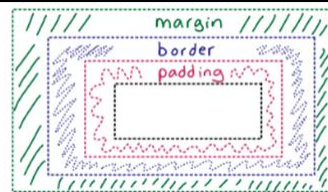
- **Thickness:** px, pt, em, or thin, medium, thick
- **Style:** none, hidden, dotted, dashed, double, groove, inset, outset, ridge, solid
- color



YORK
UNIVERSITY

85

CSS properties for borders



```
h2 { border: thin dashed green; }
```

CSS

This is a heading.

property	description
border	thickness/style/size of border on all 4 sides

- **Thickness:** px, pt, em, or thin, medium, thick
- **Style:** none, hidden, dotted, dashed, double, groove, inset, outset, ridge, solid
- color

YORK
UNIVERSITY

86

More border properties

property	description
border-color, border-width, border-style	specific properties of border on all 4 sides
border-bottom, border-left, border-right, border-top	all properties of border on a particular side
border-bottom-color, border-bottom-style, border-bottom-width, border-left-color, border-left-style, border-left-width, border-right-color, border-right-style, border-right-width, border-top-color, border-top-style, border-top-width	properties of border on a particular side

[Complete list of border properties](http://www.w3schools.com/css/css_border.asp)

http://www.w3schools.com/css/css_border.asp



87

A dotted border.

A dashed border.

A solid border.

A double border.

A groove border. The effect depends on the border-color value.

A ridge border. The effect depends on the border-color value.

An inset border. The effect depends on the border-color value.

An outset border. The effect depends on the border-color value.

No border.

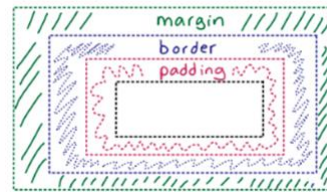
A hidden border.

A mixed border.



88

Another border example



```
h2 {
  border-left: thick dotted pink;
  border-bottom-color: rgb(0, 128, 128);
  border-bottom-style: double;
}
```

CSS

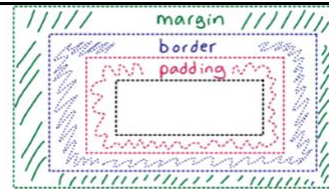
This is a heading.

- each side's border properties can be set individually
- if you omit some properties, they receive default



89

CSS properties for padding



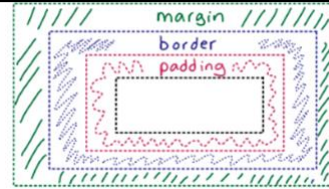
property	description
padding	padding on all 4 sides
padding-bottom	padding on bottom side only
padding-left	padding on left side only
padding-right	padding on right side only
padding-top	padding on top side only
Complete list of padding properties http://www.w3schools.com/css/css_reference.asp#padding	



90

Padding example 1

```
p {border: 3px solid black; }
h2 {border: 3px dashed black; }
```



This is heading

This is paragraph.

No padding (0)

```
p { padding: 20px; border: 3px solid black; }
h2 {padding-left:40px; border: 3px dashed black; }
```

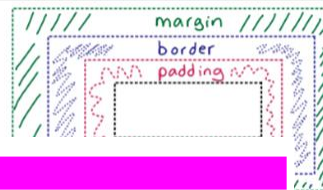
CSS

This is heading

This is a paragraph

92

Padding example 2



This is heading

This is paragraph.

```
p, h2 {
  padding-left: 200px;
  padding-top: 30px;
  background-color: fuchsia;
}
```

CSS

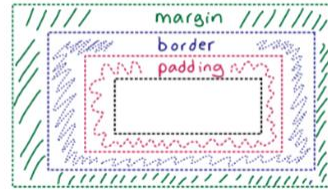
This is a paragraph

This is a another paragraph

- ☐ each side's padding can be set individually
- ☐ notice that padding shares the background color of the element

93

CSS properties for margins



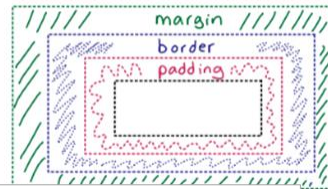
property	description
margin	margin on all 4 sides
margin-bottom	margin on bottom side only
margin-left	margin on left side only
margin-right	margin on right side only
margin-top	margin on top side only
Complete list of margin properties http://www.w3schools.com/css/css_reference.asp#margin	

CS380



94

Margin example



```
p {
  background-color: fuchsia;
}
```

This is a paragrph

This is a anotparagraph

```
p {
  margin-left: 40px;
  background-color: fuchsia;
}
```

This is a paragrph

This is a anotparagraph

```
p {
  margin: 40px;
  background-color: fuchsia;
}
```

This is a paragrph

This is a anotparagraph



97

CSS styles

- (Text) color
- Font
- Text
- Background
- Box model
 - padding, margin, border
- display, visibility
- float
- width, height, position.....

CSS display property

```
p {
  display: block
}
```

CSS

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

output

- display: inline, block, none ...

The display property

```
h2 { display: inline; background-color: yellow; }
```

CSS

This is a heading This is another heading

output

property	description
display	sets the type of CSS box model an element is displayed with

- **values:** none, inline, block, run-in, compact, ...
- use sparingly, because it can radically alter the page layout



101

The visibility property

```
p.secret {
  visibility: hidden;
}
```

CSS

output

- hidden elements will still **take up space onscreen**, but will not be shown
 - to make it not take up any space, set **display** to **none** instead
- can be used to show/hide dynamic HTML content on the page in response to events



102

CSS styles

- (Text) color
- Font
- Text
- Background
- Box model
 - padding, margin, border
- display, visibility
- float
- width, height, position.....

106

The CSS float property

```
img.headericon {
  float: right; width: 130px;
}
```

CSS

Ghostbusters is a 1984 American science fiction comedy film written by co-stars Dan Aykroyd and Harold Ramis about three eccentric New York City parapsychologists-turned-ghost capturers.



output

property	description
float	side to hover on; can be left, right, or none (default)

- removed from normal document flow; underlying text wraps around as necessary

107

Common error: container too short

8

```
<p>
Mario is a fictional character in his video game
series.....</p>
```

HTML

```
p { border: 2px dashed black; }
img { float: right; }
```

CSS

Mario is a fictional character in his video game series. Serving as Nintendo's mascot and the main protagonist of the series, Mario has appeared in over 200 video games since his creation.



output

108

The overflow property

9

```
p { border: 2px dashed black;
  overflow: hidden; } # auto
img { float: right; }
```

CSS

Mario is a fictional character in his video game series. Serving as Nintendo's mascot and the main protagonist of the series, Mario has appeared in over 200 video games since his creation.



output

109

The overflow property (cont.)

property	description
overflow	specifies what to do if an element's content is too large; can be auto, visible, hidden, or scroll

CSS styles summary

- (Text) color
 - Font
 - Text
 - Background
 - Box model
 - padding, margin, border
 - display, visibility
 - float
 - width, height, position.....
- p {property:value ; ... }
 p, h2 { }
 #id { }
 . class{ }

CSS styles

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

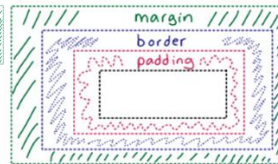
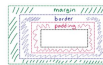


- (Text) color
- Font
- Text
- Background
- Box model
 - padding, margin, border
- display, visibility
 - none, hidden
- Floating
- width, height, position.....

property	description
font-family	which font will be used
font-size	how large the letters will be drawn
font-style	used to enable/disable <i>italic</i> style
font-weight	used to enable/disable bold style

property	description
text-align	alignment of text within its element
text-decoration	decorations such as underlining
text-indent	indents the first letter of each paragraph

property	description
background-color	color to fill background
background-image	image to place in background
background-repeat	whether/how bg image should be repeated



112

W3C CSS Validator

- jigsaw.w3.org/css-validator/
- checks your CSS to make sure it meets the official CSS specifications
- browser dev tools
 - firefox: right-click → inspect element
 - or web developer → web developer tools Ctrl-Shift-I
 - Chrome: Ctrl-Shift-I



113

advanced topics: rwd

4

□ responsive web design

1. setting viewport

```
<head>
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
```

2. sizes relative to viewport (fluid elements)

```
img{max-width: 100%;}
```

For your information



114

references & more reading

5

browser dev tools

- Firefox: right-click → inspect element
- Chrome: Ctrl-Shift-I

□ CSS validator

<https://jigsaw.w3.org/css-validator/>

□ CSS Tutorial

<https://www.w3schools.com/css/>

□ CSS Selector Reference

https://www.w3schools.com/cssref/css_selectors.asp

□ CSS Pseudo Classes

https://www.w3schools.com/css/css_pseudo_classes.asp

□ Using grid layouts in CSS

<https://cssreference.io/property/grid-template-columns/>
https://www.w3schools.com/cssref/pr_grid-row.asp



115