

# **BTI220 - Internet Architecture and Development**

## **Week 6: More on CSS**

# Agenda

- CSS text, font
- Box model
- CSS margin, border, padding, shorthand
- CSS3 shadow effects



# CSS Selector Review

□ [css-group-tags.html](#)



# Formatting Text:

## font-family Properties

- A **font family** or a **font face** is the typeface that will be applied by a web browser to some text.
- The **font family** can use a specific named font, but the actual appearance will depend on the browser and the fonts installed on the system.
  - e.g., a default installation of I.E. always displays **serif** and **Times** as Times New Roman, and *sans-serif* and *Helvetica* as Arial.
- A font-family (or face in HTML) consists of a set of related fonts, grouped as font families

# Formatting Text: font-family

```
<!-- font.html -->
<!DOCTYPE html>
<html lang="EN">
<head>
  <title> FONT </title>
  <meta charset="UTF-8">
  <style type="text/css">
    p.serif {font-family: Times New Roman, Times, serif;}
    p.sansserif {font-family: Arial, Helvetica, sans-serif;}
    /* if Arial is not available, choose Helvetica, ... */
    p {background-color: grey;}
  </style>
</head>
<body>
  <h1> CSS font-family </h1>
  <p class="serif"> This is a paragraph, shown in the
    Times New Roman font. </p>
  <p class="sansserif"> this is a paragraph, shown in the
    Arial font. </p>
</body>
</html>
```

□ font.html

# Formatting Text: font-family

- The web browser will only be able to apply a font if it is available on the system on which it operates, which is not always the case.
- So, list in preferential order font families to use when rendering text.
- The font list is separated by commas.
- To avoid unexpected results, the last font family on the font list should be one of the five **generic families** which are by default always available in HTML and CSS.

# Generic Font Family

Family	Example (browser dependent)
serif	The quick brown fox jumps over the lazy dog. 0123456789
sans-serif	The quick brown fox jumps over the lazy dog. 0123456789
cursive	The quick brown fox jumps over the lazy dog. 0123456789
fantasy	The quick brown fox jumps over the lazy dog. 0123456789
monospace	The quick brown fox jumps over the lazy dog. 0123456789

# CSS Web Safe Font Combinations

## ➤ Examples

### Serif Fonts

font-family	Example text
Georgia, serif	<b>This is a heading</b> This is a paragraph
"Palatino Linotype", "Book Antiqua", Palatino, serif	<b>This is a heading</b> This is a paragraph
"Times New Roman", Times, serif	<b>This is a heading</b> This is a paragraph

### Monospace Fonts

font-family	Example text
"Courier New", Courier, monospace	<b>This is a heading</b> This is a paragraph
"Lucida Console", Monaco, monospace	<b>This is a heading</b> This is a paragraph



# Formatting Text: font-size

- Font size for different elements

h1 { font-size:250%; } –size relative to regular size (scales well)

p { font-size: 20pt; } –actual size in points,

div { font-size:20px; } –actual size in pixels,

a { font-size: smaller; } – smaller than regular size, default medium,

h1 { font-size: 1.5em; } – size relative to regular size (scales well)

# Font-size: Property values

Value	Description
xx-small	Sets the font-size to an xx-small size
x-small	Sets the font-size to an extra small size
small	Sets the font-size to a small size
medium	Sets the font-size to a medium size. This is default
large	Sets the font-size to a large size
x-large	Sets the font-size to an extra large size
xx-large	Sets the font-size to an xx-large size
smaller	Sets the font-size to a smaller size than the parent element
larger	Sets the font-size to a larger size than the parent element
<i>length</i>	Sets the font-size to a fixed size in px, cm, etc.
%	Sets the font-size to a percent of the parent element's font size
inherit	Specifies that the font size should be inherited from the parent element

# Formatting Text: other text properties

- { **font-weight**: bold; } or "lighter", "normal", "bolder"
- { font-weight: 700 ; } or 100, 200, 300, 400(normal), 500, 600, 700 (bold), 800, 900
- { **font-style**: italic; } or "normal", "oblique"
- { **text-align**: center; } or "left" (normal), "right", "justify"
- { **text-indent**: 4em; } first-line indent, can use %, pt, px
- { **text-indent**: -4em; } hanging indent

# Formatting Text

## other text properties

- { **text-decoration**: underline; } or "underline", "line-through", "blink", "none"
- { **text-transform**: capitalize; } or "uppercase", "lowercase", "none"
- { **font-variant**: small-caps; } or "normal"
- **Shorthand:**  
h2 { **font**: italic small-caps bolder "Lucida","Arial"; text-decoration:underline; text-align:right; color:red; background-color:silver;}

❑ font-2.html, text.html

# CSS3 Text Effect

## ➤ Text shadow:

- Specify horizontal shadow, the vertical shadow, the blur distance, and the color of the shadow.

```
h1  
{  
  text-shadow: 5px 5px 5px red;  
}
```

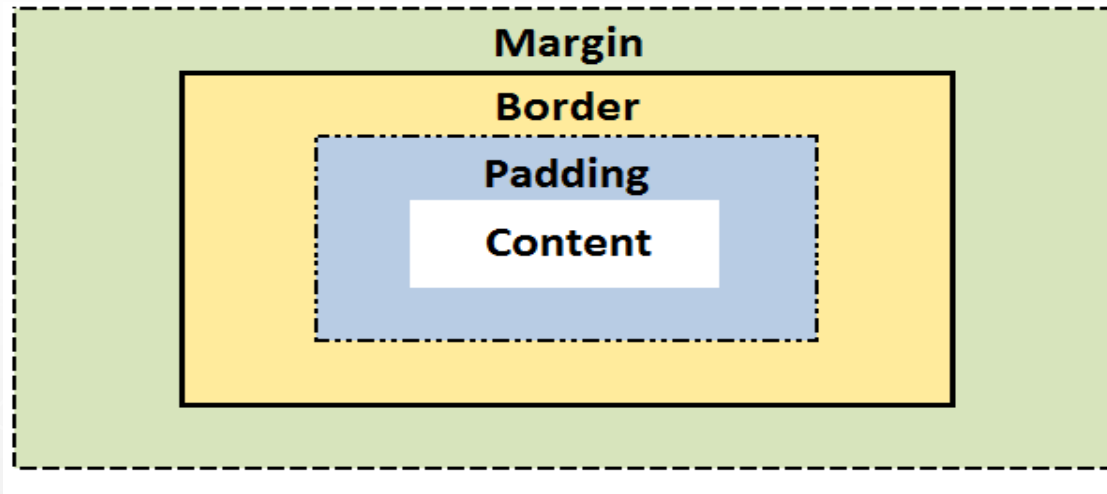
❏ [text\\_css3.html](#)

# CSS3 Text Effect

- CSS3 **word wrapping**
- If a word is too long to fit within an area, it expands outside
- In Css3, the word-wrap property allows to force the text to wrap
- Even if it means splitting it in the middle of a word.
- E.g.  
P.wrap { **word-wrap: break-word;** }

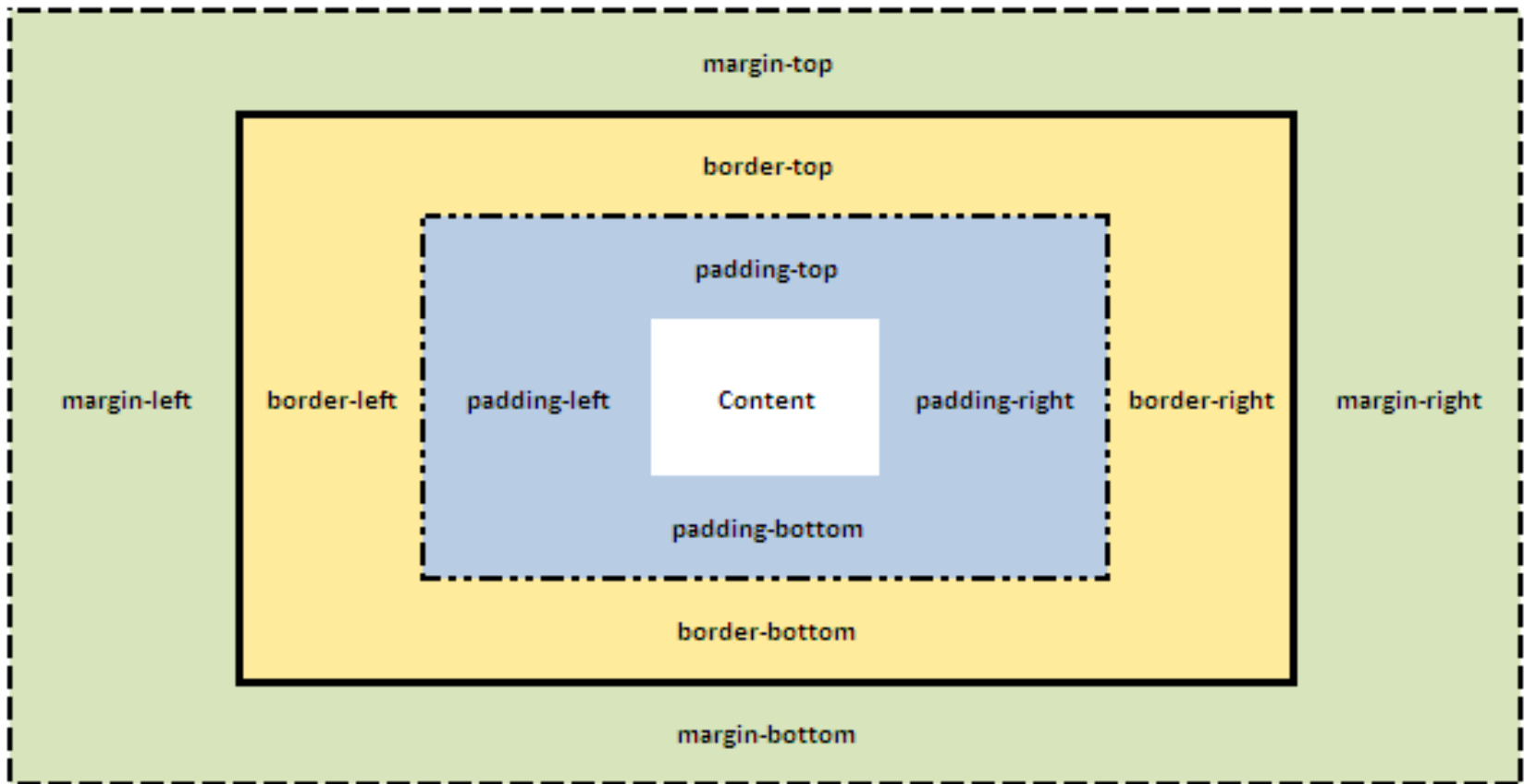
❑ [text\\_css3.html](#)

# The CSS Box model



- All elements can be considered to be box.
- The box model is the specification that defines how a box and its attributes relate to each other.
- A box is made up of four distinct parts, from the outside one to the inside one:
  - **margin**, **border**, **padding**, and **content**.

# The CSS Box model



❏ [box-model.html](#)



# CSS Properties for Box Model

- CSS margin
- CSS border
- CSS padding
- CSS Shortcut



# CSS margin

- CSS Margins define the white space around an HTML element's border. See the "Box model".

margin	Applies to all sides
<code>margin: 6px; /* this is a shortcut */</code>	Applies a margin to all sides of an element
<code>margin-top</code>	Applies a margin to the top of an element
<code>margin-right</code>	Applies a margin to the right of an element
<code>margin-bottom</code>	Applies a margin to the bottom of an element
<code>margin-left</code>	Applies a margin to the left of an element

❏ [box-margin.html](#)

# Margin Collapsing

- Top and bottom margins of blocks are sometimes combined (collapsed) into a single margin whose size is the largest of the margins combined into it, a behavior known as margin collapsing.
- e.g.

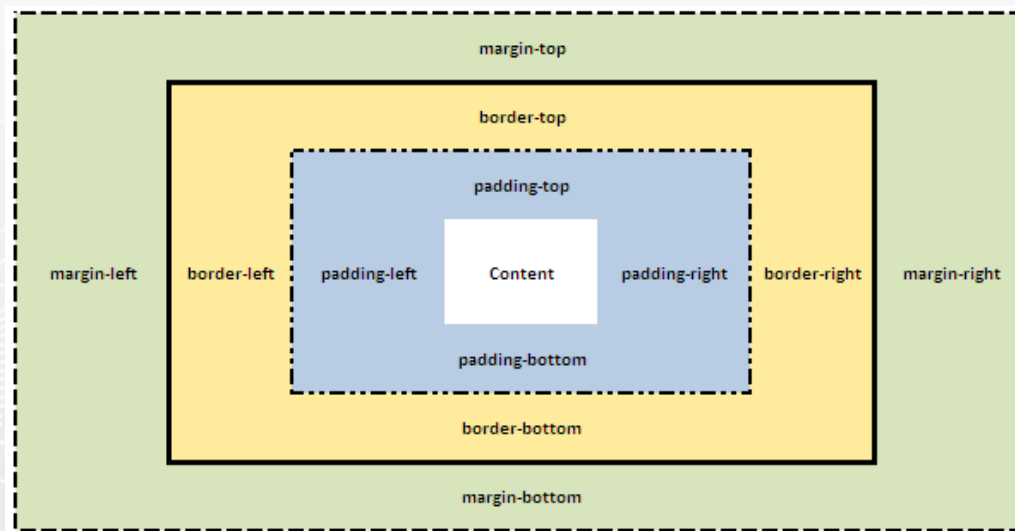
```
h1 { margin: 0 0 25px 0; background: #cfc; }  
p { margin: 20px 0 0 0; background: #cf9; }
```



<http://www.sitepoint.com/web-foundations/collapsing-margins/>

# CSS Shorthands for Box Model

- CSS Shortcuts allow for a property to have a single or multiple values.
- Shortcuts/shorthand order: **CLOCKWISE**:
  - top -> right-> bottom-> left



# The margin Shorthand Property

- To set all the margin properties in one declaration

## Examples:

- **margin:10px 5px 15px 20px;**
  - ▶ top margin is 10px
  - ▶ right margin is 5px
  - ▶ bottom margin is 15px
  - ▶ left margin is 20px
- **margin:10px 5px 15px;**
  - ▶ top margin is 10px
  - ▶ right and left margins are 5px
  - ▶ bottom margin is 15px
- **margin:10px 5px;**
  - ▶ top and bottom margins are 10px
  - ▶ right and left margins are 5px
- **margin:10px;**
  - ▶ all four margins are 10px

# CSS border

- The **border** property allows for setting the **width**, **style** and **color** and of the borders around an element.
- The **border style** property value for the border **must be stated**, otherwise no border will show up.

# CSS border

## ➤ The **border-width** Property

<b>border-width</b>	<b>Applies to all sides</b>
<code>border-width: 6px;</code> <code>border-style: solid;</code>	Applies a solid border to all sides
<code>border-top-width</code>	Applies only to the top border
<code>border-right-width</code>	Applies only to the right border
<code>border-bottom-width</code>	Applies only to all bottom border
<code>border-left-width</code>	Applies only to the left border

## ➤ The **border-width** can be set in pixels, ems, or one of the three pre-defined values: **thin**, **medium**, or **thick**.

❑ [border-width.html](#)

# The border-width Shorthand

Example	Description
<code>border-width:6px;</code>	adds a border - 6px to all four sides
<code>border-width:6px 12px;</code>	adds a border - 6px to top and bottom - 12px to the right and left
<code>border-width:6px 12px 10px;</code>	adds a border - 6px to the top, 12px to the right, 10px to bottom and 12px to the left
<code>border:6px solid red;</code>	Width, style, color!

❑ [border-short.html](#)



# CSS border

## ➤ The **border-style** property

- can have from **one to four values** from the list of
  - dotted , dashed , solid , double , groove , ridge , inset , outset , hidden.

border-style	Applies to
border-style:solid; /* default width of 3px */	Applies a solid border to all sides
border-top-style	Applies the style only to the top border
border-right-style	Applies the style only to the right border
border-bottom-style	Applies the style only to all bottom border
border-left-style	Applies the style only to the left border

❑ [border-style.html](#)

# CSS border

- The **border-color** property

<b>border-color</b>	<b>Applies to</b>
<code>border-color: #ff0000;</code> <b><code>border-style: solid;</code></b>	Applies a solid border to all sides
<code>border-top-color</code>	Applies only to the top border
<code>border-right-color</code>	Applies only to the right border
<code>border-bottom-color</code>	Applies only to all bottom border
<code>border-left-color</code>	Applies only to the left border

❑ [border-color.html](#)

# The Border Shorthand Property

- shorthand property: specify all the individual border properties in one property.
- The **border** property is a shorthand for the following individual border properties:
  - border-width
  - border-style (required)
  - border-color

**border: 5px solid red;**

❑ [border-short.html](#)

# CSS padding

- CSS Padding property defines the white space around the inside of an HTML element's border. See the "Box model".

padding	Applies to all sides
padding:6px; /* this a short cut */	Applies padding to all sides of an element
padding-top	Applies padding to the top of an element
padding-right	Applies padding to the right of an element
padding-bottom	Applies padding to the bottom of an element
padding-left	Applies padding to the left of an element

❑ [box-padding.html](#)

# CSS3 Rounded Corners

➤ Property: **border-radius**

➤ Example:

```
div { border: 2px solid #a1a1a1;  
      padding: 10px 40px;  
      background: grey;  
      width: 300px;  
      border-radius: 250px;  
      /* border-radius: 10%; */  
      -moz-border-radius: 25px; /* Firefox 3.6 and earlier */  
}
```

❑ [boxShadow roundedCorners.html](#)

# CSS3 Rounded Corners

`border-radius:2em;`

is **equivalent** to:

`border-top-left-radius: 2em;`  
`border-top-right-radius: 2em;`  
`border-bottom-right-radius: 2em;`  
`border-bottom-left-radius:2 em`

# CSS3 Box Shadow

- CSS3 provides not only text-shadow but also box-shadow effects.
- Property: **box-shadow**
- box-shadow value: h-shadow v-shadow blur spread color inset;
  - ❑ [boxShadow roundedCorners.html](#)

# CSS3 Box Shadow

Value	Description
<i>h-shadow</i>	Required. The position of the horizontal shadow. Negative values are allowed
<i>v-shadow</i>	Required. The position of the vertical shadow. Negative values are allowed
<i>blur</i>	Optional. The blur distance
<i>spread</i>	Optional. The size of shadow
<i>color</i>	Optional. The color of the shadow. The default value is black. Look at CSS Color Values for a complete list of possible color values.
<i>inset</i>	Optional. Changes the shadow from an outer shadow (outset) to an inner shadow

❏ [css-ball.html](http://css-ball.html)

<http://www.cssmatic.com/box-shadow>



# Resourceful Links

## ➤ CSS Reference

<http://reference.sitepoint.com/css>

## ➤ Box model - CSS | MDN

[https://developer.mozilla.org/en-US/docs/Web/CSS/box\\_model](https://developer.mozilla.org/en-US/docs/Web/CSS/box_model)

## ➤ CSS Properties

<http://reference.sitepoint.com/css/propertyref>

## ➤ CSS Selectors

<http://reference.sitepoint.com/css/selectorref>

# Thank You!

