# Web Presentation (CSS) for Formatting
## (continued)
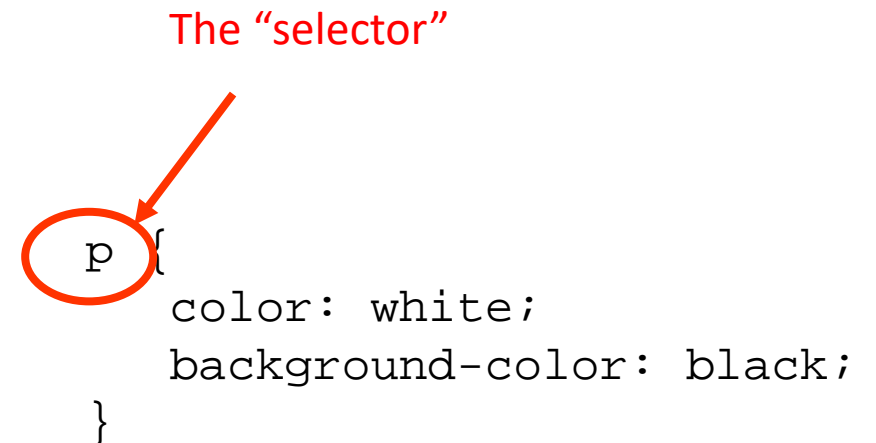
Seven Selectors

# CSS style rules can be configured for:

✓ 1. HTML element selector

2. class selector

3. id selector

4. descendant selector

5. pseudo selector

6. grouped selector

7. compound selector

The "selector"

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

# HTML element selectors

HTML

CSS

<p>**blah blah blah**</p>

p {

    font-weight: bold;

    color: red;

}

*Result: ALL <p> elements are styled*

# Class selectors

HTML

```
<p class="loud">
    blah blah blah
</p>
```

CSS

```
.loud {
    font-weight: bold;
    color: red;
}
```

*Result: elements that have the "loud" class applied are styled; can be used multiple times in the HTML document and combined with other classes*

# ID selectors

HTML

```
<p id="big-message">
      blah blah blah
</p>
```

CSS

```
#big-message{
        font-weight: bold;
        color: red;
}
```

*Result: <p> elements that have the "loud" ID applied are styled;*
*can be used once only in any HTML document*

# Descendant selectors

HTML

```
<header>
  <p>blah blah blah</p>
</header>

<p>blah blah more blah</p>
```

CSS

```
header p {
        font-weight: bold;
        color: red;
}
```

*Result: <p> elements are styled only if they appear nested inside a <header> element*

# Descendant Selectors

To be more-specific, separate selectors with a space…

CSS

```
.main-menu ul {
        /* target only unordered lists that appear nested inside an
            element with the class "main-menu" */

        margin: 0;

        padding-left: 0;
}
```

HTML

```
<nav class="main-menu">

        <ul>

        ...
```

Descendant Selectors are very important when building navigation menus!

# CSS Pseudo-classes

- Pseudo-classes and the anchor element
  - **link** – default state
    for a hyperlink

  - **visited** – a hyperlink that
    has been visited

  - **focus** – triggered when
    the hyperlink has focus

  - **hover** – triggered when
    the mouse moves over the hyperlink

  - **active** – triggered when the hyperlink is being clicked

```
a:link     {color:#000066;}
a:visited {color:#003366;}
a:focus    {color:#FF0000;}
a:hover   {color:#0099CC;}
a:active  {color:#FF0000;}
```

# CSS Structural Pseudo-classes

| Pseudo-class | Purpose |
|---|---|
| :first-of-type | Applies to the first element of the specified type |
| :first-child | Applies to the first child of an element (CSS2 selector) |
| :last-of-type | Applies to the last element of the specified type |
| :last-child | Applies to the last child of an element |
| :nth-of-type(n) | Applies to the "nth" element of the specified type Values: a number, odd, or even |

# Pseudo Class Selectors

```css
a:link { color: red; }        /* unvisited link; default */
a:visited { color: purple;}/* visited link */
a:hover { color: green; }   /* mouse over link */
a:active { color: blue; }   /* selected link */


----


p:first-child {/* Every <p> element that is the first child of its parent */}
p:last-child  {/* Every <p> element that is the last child of its parent */}
p:before {
    /* Insert content before every <p> element */
    content: "- start here: ";

}
p:after {
    /* Insert content after every <p> element */
    content: "! ...the end.";

}
```

# Grouped Selectors

To style multiple selectors at once…

CSS

```
.lead, h1, h2 {
    font-weight: normal;
}
```

# Compound Selectors

**Normal classes in CSS**

CSS

```
.lead {
   //target all elements with the
      class "lead"
   font-size: 18px;
}
```

HTML

Works on any element that uses "lead"…

```
<div class="lead">...
```
--or--
```
<p class="lead">...
```

**A compound selector in CSS**
**To be more-specific, combine selectors with element targets with no space in-between…**

CSS

```
p.lead {
   //target only paragraphs
      with the class "lead"
color: #333333;
}
```

HTML

Only…

```
<p class="lead">...
```

# The Box Model

Content, Padding, Border, and Margin

# The Normal Flow

- a.k.a. the "natural" document flow

- The top-to-bottom flow of a document

- Nothing is side-by-side (mostly)

- One long column that's as wide as the "container"
  - On the web, the container is the web browser's viewport

# The Box Model – CSS properties that work together

- **Content**
  - Text & web page elements in the HTML element
- **Padding**
  - Area between the content and the border
- **Border**
  - Between the padding and the margin
- **Margin**
  - Determines the empty space between the element and adjacent elements

top

margin

border

padding

left

content

right

padding

border

margin

bottom
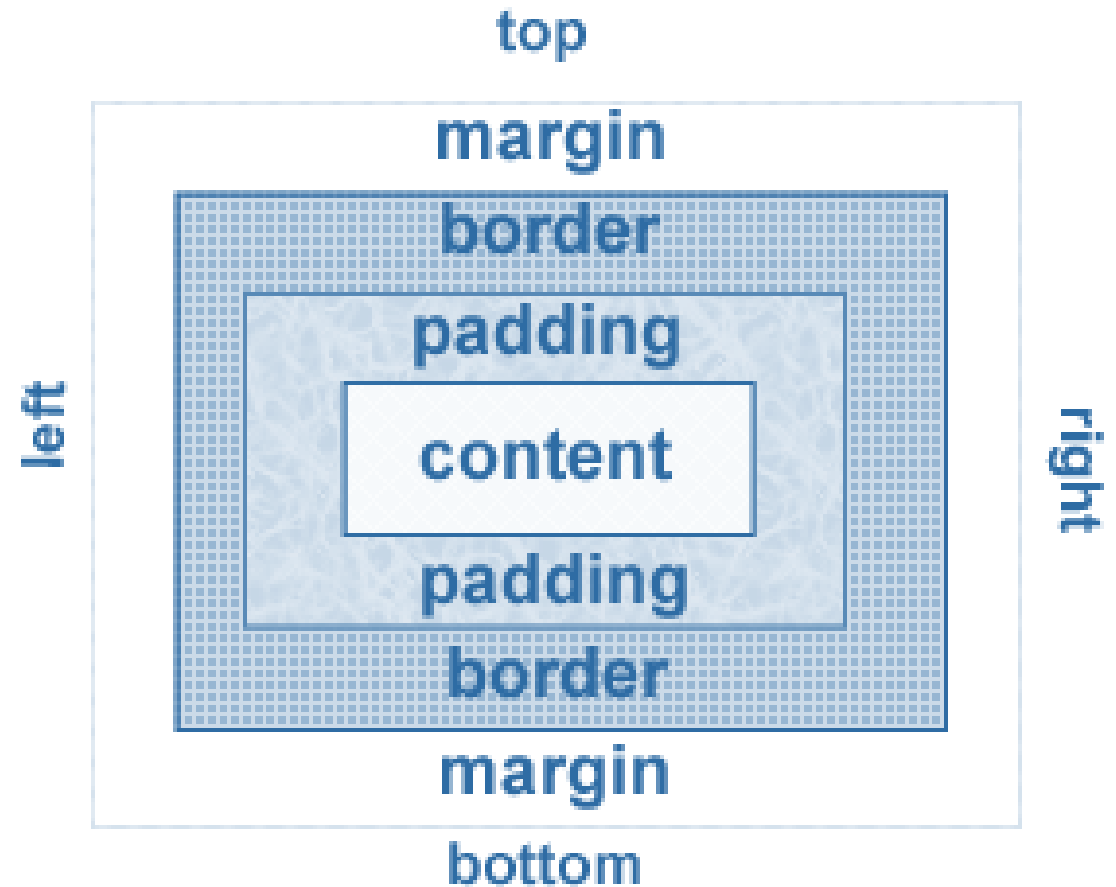
Note: the box model applies to both BLOCK elements and INLINE elements (but works best on BLOCK elements)

# HTML Structure Matters – nested vs. stacked

```
<div>
    This is the outer box
    <div>
        This is the inner
        box
    </div>
</div>
```
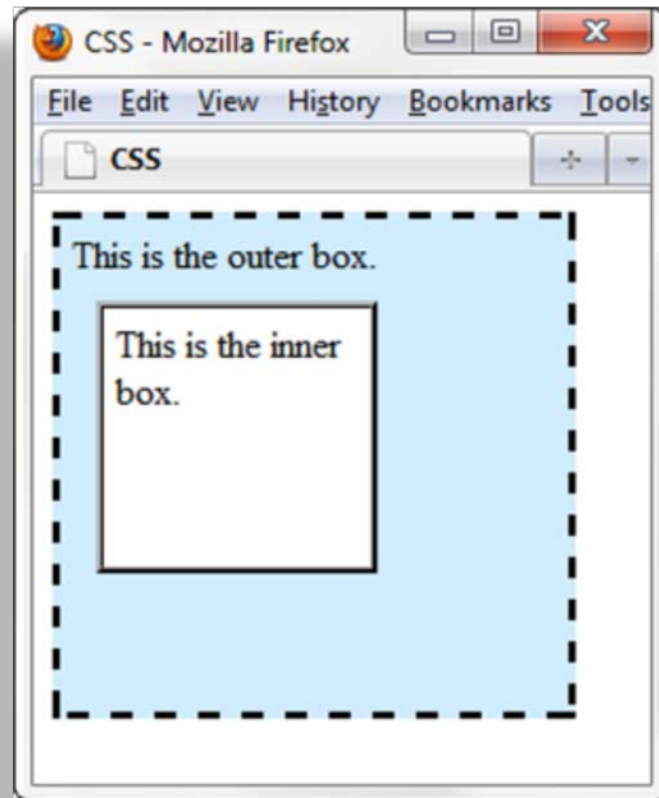
```
<div>
    This is the first box
</div>
<div>
    This is the second box
</div>
```
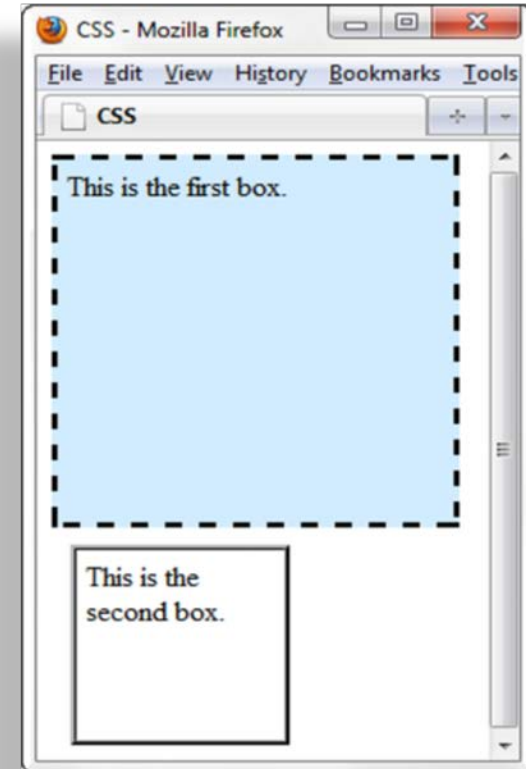
# The Float Property

Wrapping text around another element

# The Float

- For small elements
  - photos, tables, figures …whatever

- Lets the text flow around it

- Changes based on the width of the viewport

```
img { float: right; }
```
-- or –
```
img { float: left; }
```

Note: there is <u>no</u> `float: center`

# Float fix 1 – "clear"

- The `clear` property
  - In the HTML, whatever comes next needs to "clear" the float

```
img { float: left; }
h2 { clear: left; }
```

# Float fix 2 – "overflow"

- The `overflow` property
  - In the HTML, the floated element needs to be inside a block element that gets the `overflow` property
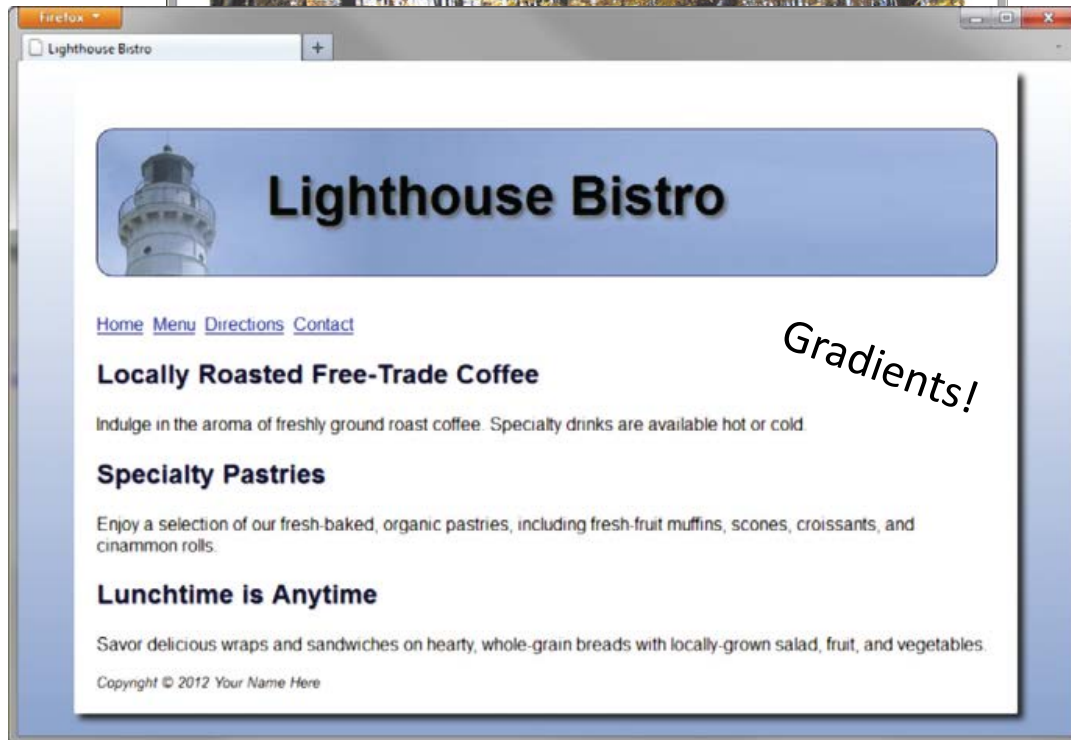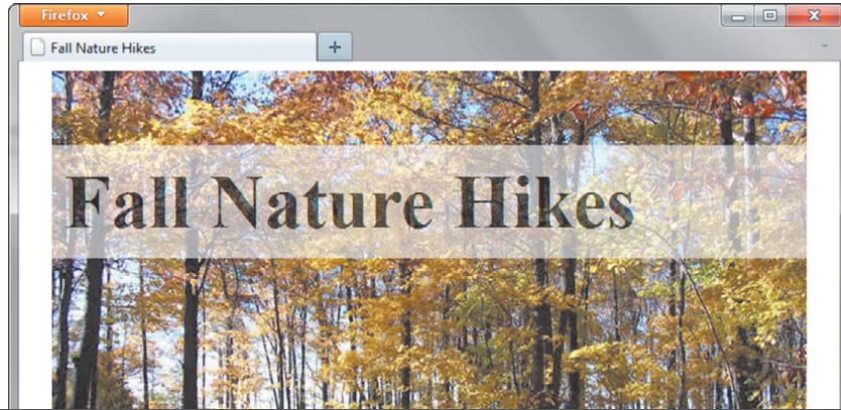
```
div { overflow: auto; }
img { float: right; }
```

# New(er) CSS3 Properties

W3C's Latest Addition to the Web Standard

`background-color:#FFFFFF;`
`opacity: 0.6;`



`border-radius: 15px;`


**Logo with Rounded Corners**

`border-radius: 15px 30px 100px 5px;`


**Logo with Rounded Corners**

`box-shadow: 5px 5px 5px #828282;`



Gradients!