

CSS

Making Layouts with CSS

Where does it go?

- CSS can be included in
 - The style attribute of an element
 - The <head> tag of a HTML document
 - An external file specified in the <head> tag
- ➔ This order indicates the dominance scheme
 - Dominance absolutely applies only in certain cases

Things to know

- CSS rules applied by specificity
 - Selectors are not overridden simply by order
 - Most specific selector for an element's property wins
- Comments `/* */`
- Not every browser renders content the same

CSS

Basic Layout Properties

Layout & HTML

- By default, elements are rendered top to bottom, left to right
- Elements are divided into two layout categories
 - **inline:** width & height determined by contents
 - ex: `<a>`, ``, ``, ``
 - **block:** height determined by contents; width extends to edge of parent container
 - ex: `<div>`, `<p>`, `<table>`, `<h1>`

Layout & HTML

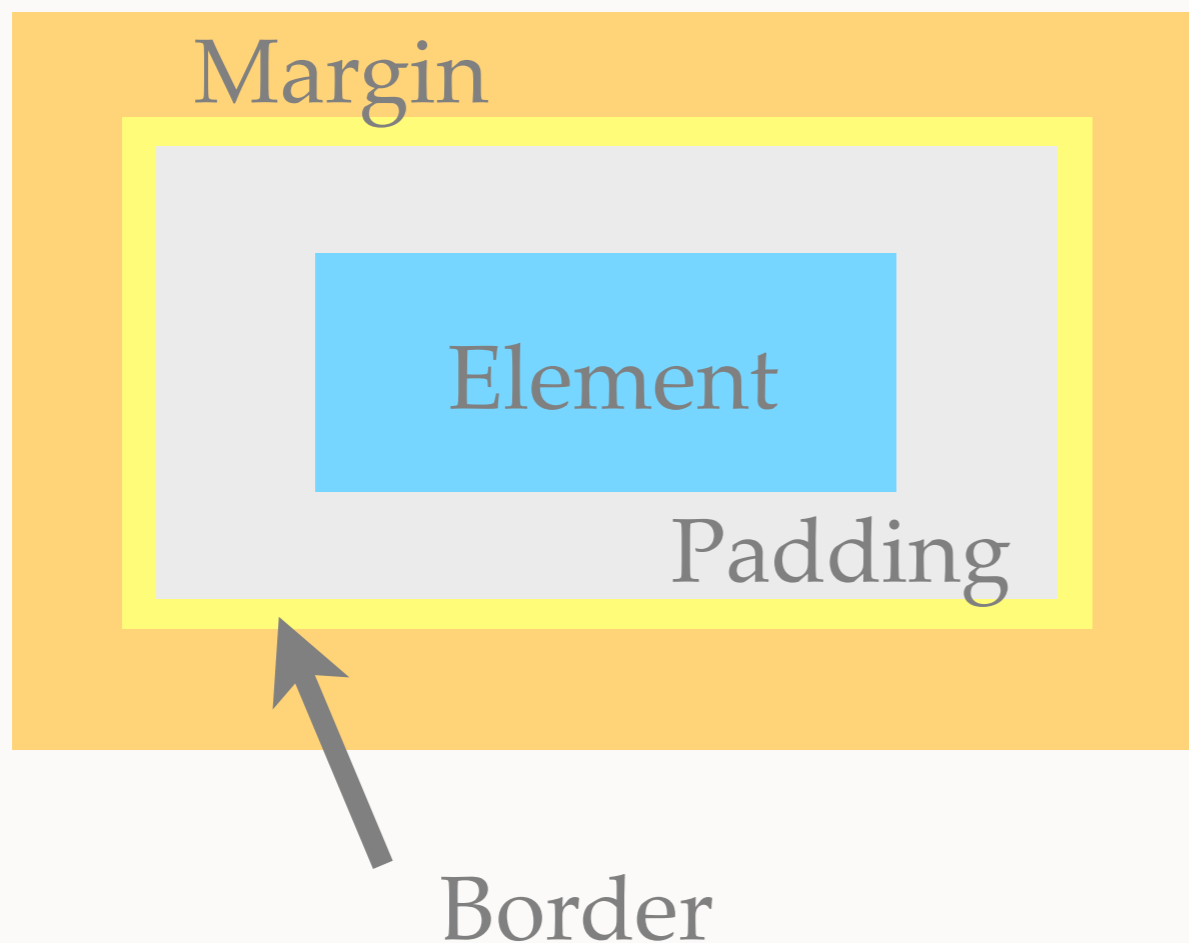
- Elements are rendered from L-to-R until a block is encountered
 - Blocks break flow of inline elements
 - ex: `
`
- CSS Box Model explains spacing between objects rendered according to this scheme

Layout: The Box Model

- Describes how layout properties alter rendering
- Well-illustrated in real-time with Firebug

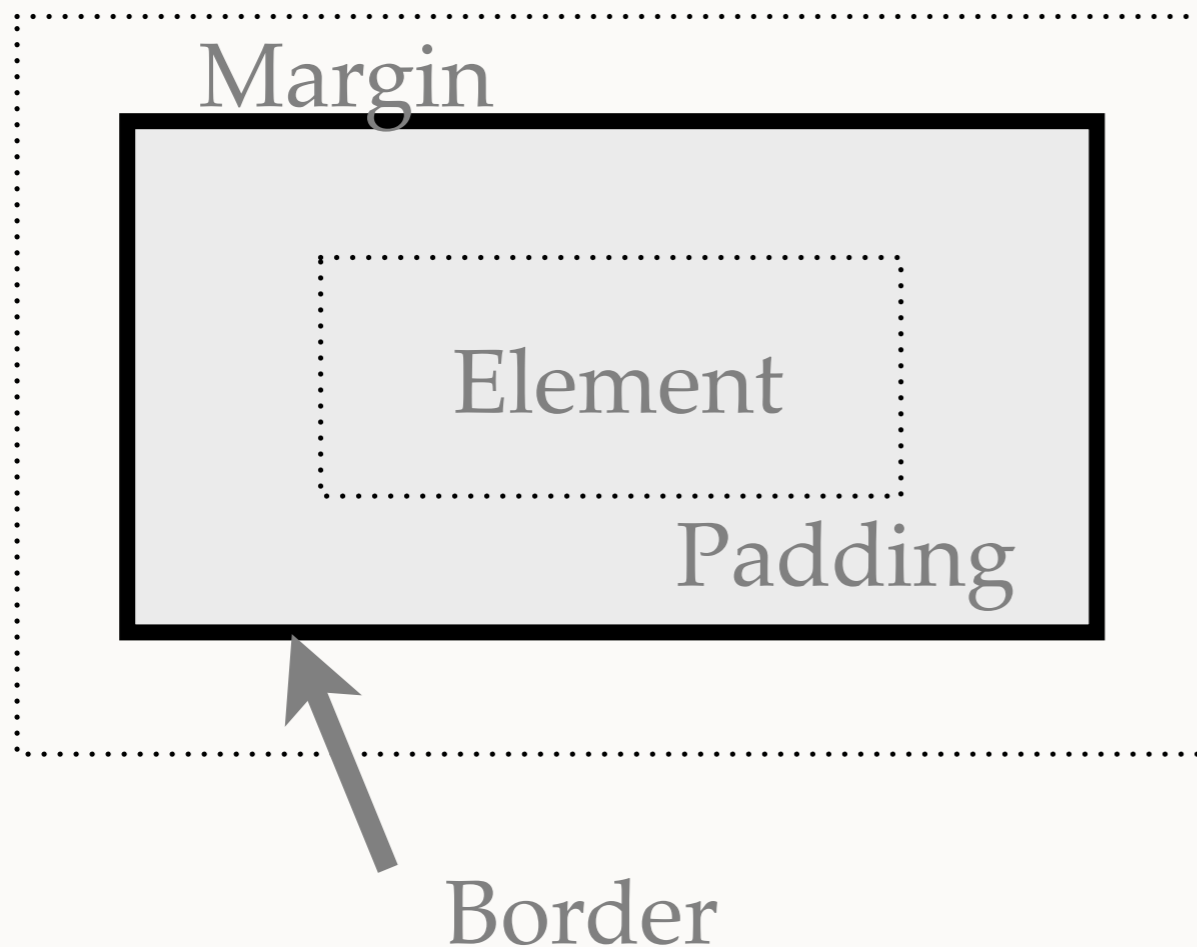


How to change attributes



- Element
 - width, height
- Padding
 - padding macro
- Border
 - border macros
- Margin
 - margin macro

How it's seen



- Background color extends to border
- Margin is invisible

About Macro Properties

- Macro properties take multiple values, separated by spaces
- `border: <border-width> <border-style> <border-color>`
 - ex: `border: 1px solid #000000;`
- Each constituent value corresponds to a property that can be set itself

CSS

Advanced Layout Properties

How?

- ◆ Standard layout model does not provide capabilities for side-by-side elements
 - × Use tables to layout page-- NO.
 - ✓ Use <div>s with creative CSS to layout page
 - ➔ Maintains semantics of document
- ! It is recommended that you view this section of the slides interactively:

http://sipb.mit.edu/iap/webdesign/course_materials/lecture_2/floats.html

Using Floats

- ◆ What is it?
 - ◆ Any block element given
 - ◆ `float: left;` or `float: right;`
- ◆ Floats break from the normal layout flow
 - ◆ Rendered to either side of parent
 - ◆ Objects around them flow around it
 - ◆ ex: an inset figure in a paper

Using Floats

- ◆ Floated `<div>`s can be used to place block content side-by-side
 - ➔ Enables traditional layout schemes
- ◆ Elements floated to the same side are rendered in order
- ◆ To interrupt aligned layout (next “row”), use
 - ◆ `clear: (left | right | both);`

The Problem with Floats

- ◆ Usage is very common & valid, but feature was not designed for this purpose
 - Unexpected behavior (padding & margin)
- ◆ Floats must be given an explicit width
- ◆ A non-floated element containing only a float has 0 height
 - Floats (blocks) may also need a height