



CS3220 Web and Internet Programming

More CSS

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More CSS Selectors

- ◆ Pseudo-class selectors
- ◆ Combined selectors

CSS Pseudo-Class ...

- ◆ A CSS pseudo-class is a keyword preceded by a colon (:) that is added on to the end of selectors to specify that you want to style the selected elements only when they are in certain state

... CSS Pseudo-Class

◆ Some pseudo-classes

- `:link`, `:visited`, `:hover`, `:active`
- `:first-of-type`, `:last-of-type`
- `:first-child`, `:last-child`

◆ More at

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

About Styling Links

- ◆ Follow the *LVHA* order
- ◆ For privacy reasons, only certain properties can be used to style `:visited`

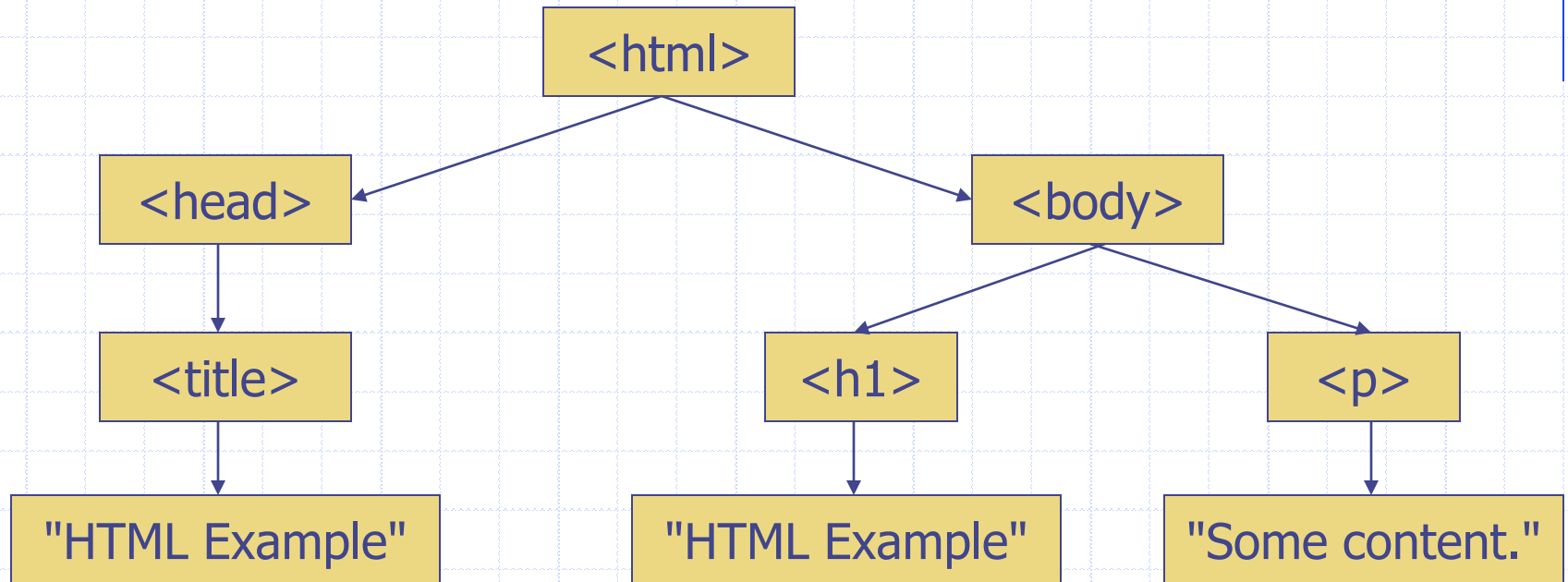
Combine Selectors

AB	Any element matching both A and B at the same time.
A,B	Any element that matches either A or B.
A B	Any element matching B that is a descendant of an element matching A.
A > B	Any element matching B that is a direct child of an element matching A.
A+B	Any element matching B that is the next sibling of an element matching A.
A ~ B	Any element matching B that is among the next siblings of an element matching A.

Tree Structure of HTML Document ...

```
<html>
  <head>
    <title>HTML Example</title>
  </head>
  <body>
    <h1>HTML Example</h1>
    <p>Some content.</p>
  </body>
</html>
```

... Tree Structure of HTML Document



Common terminology:

parent, child, sibling, ancestor, descendant

Combined Selector Examples

```
#menu1 > a:link
```

```
#menu1 a:link
```

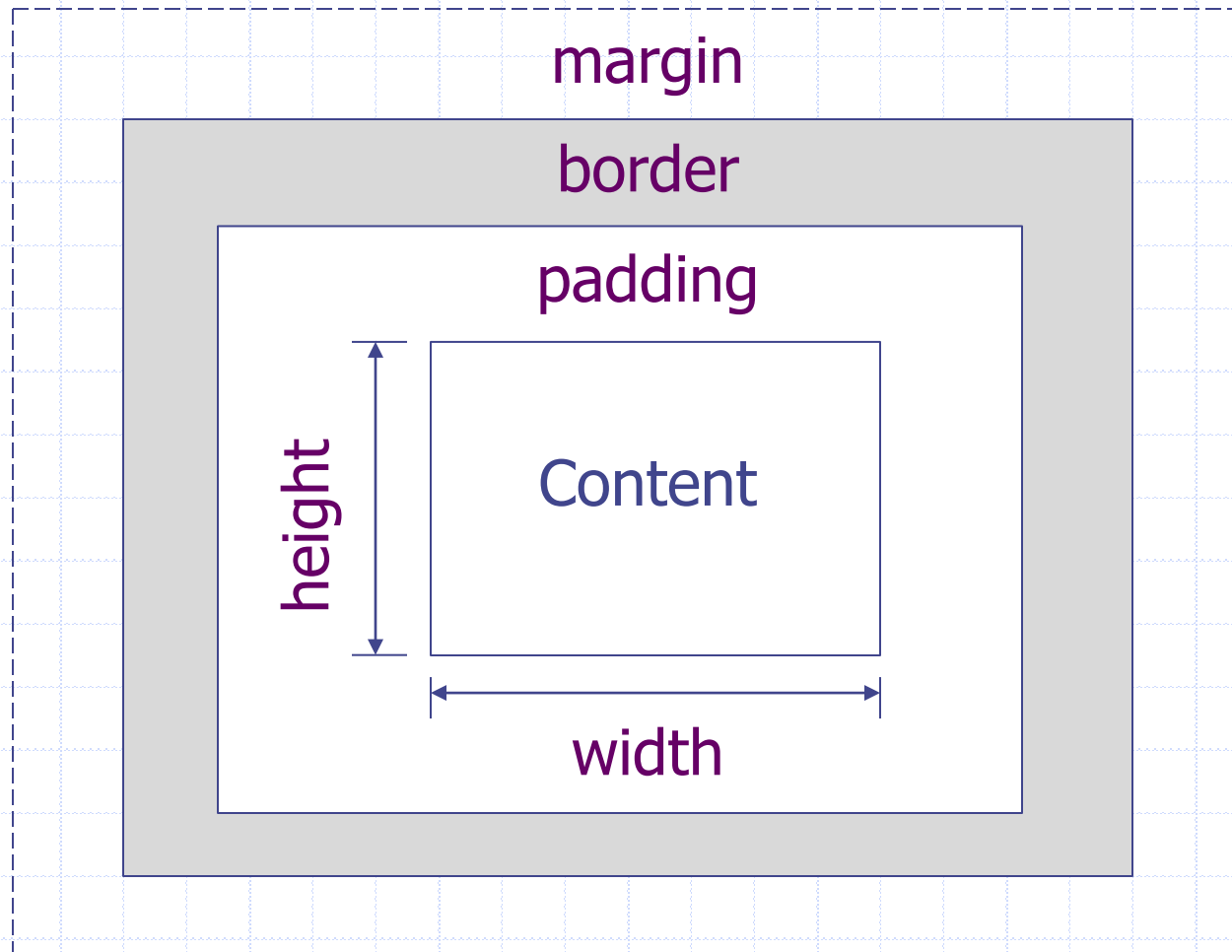
```
div + div {...}
```

```
div ~ div {...}
```

The CSS Box Model ...

- ◆ Each element is represented as a rectangular box that consists of several layers: *content*, *padding*, *border*, and *margin*.

... The CSS Box Model



Border Properties

- ◆ `border-width`

- ◆ `border-style`

- solid, dashed, dotted, double, and [more](#)

- ◆ `border-color`

- ◆ `border [width] [style] [color]`

About CSS Units

- ◆ Absolute units, e.g. `px` and `pt`
- ◆ Relative units, e.g. `em`
- ◆ Viewport percentage units, e.g. `vh` and `vw`
- ◆ More information at <https://developer.mozilla.org/en-US/docs/Web/CSS/length>

border-<side> Properties

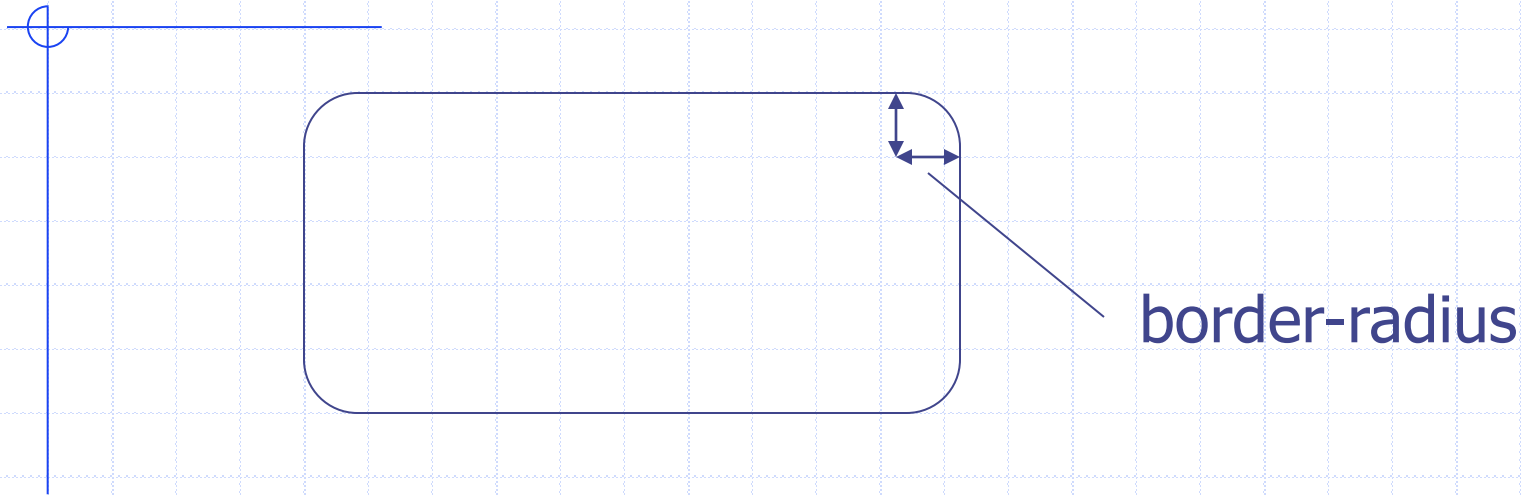
◆ <side> can be `top`, `bottom`, `left`, and `right`, e.g.

```
border-top-width: 1px;
```

```
border-bottom-color: red;
```

```
border-left: 1px solid black;
```

Create Rounded Corner with `border-radius`



- ◆ Four corners can be controlled individually
- ◆ See more at http://www.w3schools.com/css/css3_borders.asp

About Table Borders

- ◆ The *separated model* (default) sets borders on individual cells
 - `table {border-collapse: separate;}`
 - Gap between cell borders; cannot set border on `<tr>`
- ◆ The *collapsed model* sets continuous borders from one end of the table to the other
 - `table {border-collapse: collapse;}`
 - No gap between cell borders; can set border on `<tr>`

About Width and Height

- ◆ Can use absolute (e.g. `px`) or relative (e.g. `%`) values
- ◆ Default value is `auto`
- ◆ `min-width`, `max-width`, `min-height`, `max-height`
- ◆ Need to set `display` property to `inline-block` in order to set width/height for inline elements

About Margin and Padding ...

- ◆ Can use absolute (e.g. `px`) or relative (e.g. `%`) values
- ◆ Set margin to `auto` usually centers an element
- ◆ The four sides of margin/padding can be set individually or all at once
 - top, bottom, right, left

... About Margin and Padding ...

◆ Use of the `margin` and `padding` property

`margin/padding: <all>;`

`margin/padding: <top_and_bottom> <left_and_right>;`

`margin/padding: <top> <left_and_right> <bottom>;`

`margin/padding: <top> <right> <bottom> <left>;`

`margin-<side>/padding-<side>`

... About Margin and Padding

- ◆ Top and bottom margins of blocks are sometimes combined into a single margin whose size is the largest of the margins combined into it, i.e. *margin collapsing*

Background Properties ...

- ◆ background-color

- ◆ background-image

- Property value is a URL to the image, e.g.
`url("img/background.gif")`

- ◆ background-repeat

- repeat, repeat-x, repeat-y, no-repeat

- ◆ background-position

- left top, left center, left bottom, and so on

... Background Properties

- ◆ background-attachment
 - scroll (default), fixed
- ◆ background [color] [image]
[repeat] [attachment]
[position]