

# Adding CSS to your HTML

Lecture 3  
CGS 3066 Fall 2016

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# Making your document pretty

- ▶ CSS is used to add presentation to the HTML document.
- ▶ We have seen 3 ways of adding CSS.
- ▶ In this lecture, we will look at different CSS properties and values.



# CSS Colors

- ▶ Colors in CSS are most often specified by:
  - ▶ a valid color name - like "red"
  - ▶ an RGB value - like "rgb(255, 0, 0)"
  - ▶ a HEX value - like "#ff0000"
- ▶ HTML and CSS support 140 standard color names. They can be found here:  
[http://www.w3schools.com/colors/colors\\_names.asp](http://www.w3schools.com/colors/colors_names.asp)
- ▶ RGB color values can be specified using this formula: `rgb(red, green, blue)`, with each parameter values between 0 and 255.
- ▶ RGB values can also be specified using hexadecimal color values in the form: `#RRGGBB`, where RR (red), GG (green) and BB (blue) are hexadecimal values between 00 and FF (same as decimal 0-255).

# The CSS Box Model

Each HTML element can be imagined to be a 4 layered box.



- ▶ **Content** - The content of the box, where text and images appear
- ▶ **Padding** - Clears an area around the content. The padding is transparent
- ▶ **Border** - A border that goes around the padding and content
- ▶ **Margin** - Clears an area outside the border. The margin is transparent

# Page background

- ▶ You can set the page background to a certain color or picture.
- ▶ for color, just use the “background-color” property.
- ▶ If you want to set a background image, use the “background-image” property.
- ▶ You can adjust settings using the “background-repeat”, “background-position”, and “background-attachment” properties.

## All the borders

- ▶ We can use the CSS border property to specify the style, width and color of the borders for elements.
- ▶ border just displays a border on all 4 sides. We can specify which part of the border to display by specifying border-top, border-left, border-right or border-bottom.
- ▶ You can choose from one of 10 available border styles including dotted, dashed, solid, double and none using the border-style property.
- ▶ You can change the width and color of the border using the border-width and border-color properties respectively.

# Margins and Padding

- ▶ The `margin` properties set the size of the white space outside the border.
- ▶ The `padding` clears an area around the content (inside the border) of an element.
- ▶ We can also specify different values for the top, left, right and bottom parts of the margin or padding.
- ▶ All the `margin` and `padding` properties can have the following values:
  - ▶ length - specifies a padding in px, pt, cm, etc.
  - ▶ % - specifies a padding in % of the width of the containing element
  - ▶ inherit - specifies that the padding should be inherited from the parent element
- ▶ You can set the `margin` property to `auto` to horizontally center the element within its container.

# Text Formatting

- ▶ The `color` property is used to set the color of the text.
- ▶ The `text-align` property is used to set the horizontal alignment of a text. We can set alignment to `left`, `right`, `center` or `justify`.
- ▶ The `text-decoration` values are used to decorate text. We can set the values to `underline`, `overline`, `line-through` or `none`.
- ▶ The `text-transform` property can be used to turn everything into uppercase or lowercase letters, or capitalize the first letter of each word

# Fonts

- ▶ Fonts can be classified into three broad categories: serif, sans-serif and monospace.
- ▶ Using CSS, we can change the font family, size, weight, variant, etc.
- ▶ It is convention to assign several, increasingly generic font families as a fallback.
- ▶ The font-style property is used to choose between normal and italicized text.
- ▶ The font-weight property is used to choose between normal and boldfaced text.
- ▶ The font-variant property is used to choose between regular text and Small Caps text.
- ▶ The font-size property is used to specify size of text.
- ▶ Size can be specified in pixels (absolute) or in em (relative).

# List Styles

- ▶ The `list-style-type` property is used to specify the type of list item marker.
- ▶ You can choose from various alternatives including `circle`, `square`, `lower-alpha`, `upper-roman`, etc.
- ▶ The `list-style-image` property specifies an image as the list item marker.
- ▶ The `background` property is used to set a background color for the list.

# Table Styles

- ▶ To specify table borders in CSS, use the `border` property. One can specify the border style, thickness and color.
- ▶ Usually, each individual cell has separate borders. The `border-collapse` property is used to collapse them into the table border.
- ▶ We can set the width and height of elements using the `width` and `height` properties.
- ▶ Horizontal alignment is done using `text-align`, vertical alignment using `vertical-align`.
- ▶ We can set background colors for cells using `background-color`.
- ▶ A cell can be made to span multiple rows using `rowspan` and multiple columns using `colspan`.

# The position property

- ▶ The position property specifies the type of positioning method used for an element.
- ▶ There are four different position values:
  - ▶ **static**: default. positioned according to the normal flow of the page.
  - ▶ **relative**: positioned relative to its normal position.
  - ▶ **fixed**: positioned relative to the viewport, which means it always stays in the same place even if the page is scrolled.
  - ▶ **absolute**: positioned relative to the nearest positioned ancestor.
- ▶ When elements are positioned, they can overlap other elements..
- ▶ The z-index property specifies the stack order of an element. An element can have a positive or negative stack order.