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.
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

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
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.
To specify table borders in CSS, use the `border` property. Once 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.