More CSS

CS 115 Computing for the Socio-Techno Web
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Announcements

• Check google groups mail
• Assignment 2 posted, due date pushed to Friday
• Assignment 0 feedback out
Welcome to Amazon.com Books!

One million titles, consistently low prices.

(If you explore just one thing, make it our personal notification service. We think it's very cool!)

Spotlight! -- August 16th

These are the books we love, offered at Amazon.com low prices. The spotlight moves EVERY day so please come often.

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Grab a Coke, Get a Deal.
(Hey, isn't that the same thing?)

Mass consumption. Instant gratification. Ahh, spring is in the air. Chances are you'll probably have some free time. And what do you know, we have just what you need to fill it. The Coca-Cola Card. Get one, then use it to get deals across the nation. You can save at participating amusement parks, restaurants, stores. Of course, this will make you thirsty. So you'll need a Coke. What comes next is more of the same. But hold the applause. Your thirst is thanks enough.

This site is best viewed with your eyes open and SHOCKWAVE 6.0. Oh yeah, NETSCAPE 4.04 helps as well.

WORLD OF COCA-COLA
Classic webpage
CSS Colors

• Can use predefined colors (e.g., yellow, white, red, purple, blue).
• Can specify a color by the red, green and blue components
• The following are equivalent:
  • red
  • rgb(255,0,0)
  • #ff0000
• CRGBA adds alpha channel to specify the opacity for a color
  • RGBA color specification – rgba(RED, GREEN, BLUE, ALPHA)
  • Alpha value of 0 (transparent) to 1.0 (opaque)
  • E.g., rgba(125, 125, 125, 0.5);
• References: http://www.w3schools.com/css/css3_colors.asp
Number bases

• Decimal → Base 10 (e.g. 2375)
  • What people use, why?
• Binary → Base 2 (e.g. 100110)
  • What computers use
• Hexadecimal → Base 16 (a4f90)
  • HTML colors among other things
• Octal → Base 8
• Let’s see some examples on the doc cam
Hexadecimal

- Each digit is the coefficient for a power of 16
- Need single digits larger than 9
  - a=10, b=11, c=12, d=13, e=14, f=15
- Each digit is the coefficient for a power of 16
- Example: 4-digit hex number
- Hexadecimal colors
  - Three 2-digit hex numbers
  - #12fe9b
  - Same as rgb(18, 254, 155)

\[
b\times 16^3 + 4\times 16^2 + f\times 16^1 + d\times 16^0
\]
\[
11\times 4096 + 4\times 256 + 15\times 16 + 13\times 1
\]
\[
= 46333
\]
Setting Size

- Length units - centimeters (cm), millimeters (mm), etc.
- Whitespace cannot appear between number and the unit.
- Two types of length units:
  - Relative (e.g., em, rem)
  - Absolute (e.g., cm, pt, pc)

  - Relative
    - em → Relative to the size of the current font
    - 3em → 3 times size of current font
      - http://www.sitepoint.com/power-em-units-css/

- Preferred → relative and percentages
  - http://www.w3schools.com/cssref/css_units.asp
CSS Comments

• Comments → Surrounded by /* */
  • You can use them to disable styles
More on kinds of selectors

• Class Selectors ➔ Allow us to apply the same rules to many elements
  • Use when you need to apply a style many times in your document
  • Created with a period (also known as full stop)

• ID Selectors ➔ Similar to class selectors but appear only once in the document
  • Used when you need to apply a style only once in your document
  • Created using #
More on kinds of selectors

• Type Selectors → Those based on the name of an HTML tag (e.g., p, table, etc.)
  • p { color: red; }

• Pseudo-classes → attached to selectors to specify a state

• Four popular pseudo-classes are:
  • a:link → initial color of a link
  • a:visited → color for a visited link
  • a:hover → color when mouse hover over link
  • a:active → color during the clicking of the link
  • Order is important (LoVeHAte)
More on Kinds of Selectors

- **Descendant selector**
  - Override the type, class, and id selector styles
  - Typically with two elements where the second is a descendant
  - Example → li a {font-size: 2em}

- **Universal selector**
  - Applies to all elements
  - Example: * {font-family: arial, Helvetica; }

- **Pseudo-elements**
  - Allows you to style an item that is not marked by elements
  - Two pseudo-element examples → :first-letter and :first-line
Some selector examples

• `a[href] { }` → A link with a title attribute
• `.myPrefStyle{ }` → Any elements with the class `myPrefStyle` (same class name can appear in many elements)
• `#mySchedule { }` → An element with id `mySchedule` (only one element on the page)
• `div.myPrefStyle{ }` → A div with the class `myPrefStyle`
• `div#mySchedule{ }` → A div with the id `mySchedule`
• `div table { }` → A table with a div ancestor
• `input[type = "submit"] { }` → An input with a type attribute that has the value submit
Box model

[Diagram showing the box model with Margins, Borders, Paddings, and Contents, along with their respective edges: Margin edge, Border edge, Padding edge, Content edge.]
Box model

- CSS box model → box around an HTML element with the following components: margin, border, padding, content
- Box model allow us to define space between different elements
- Four sections can be identified:
  - Content → what lies in the middle of the box (text, image, etc.)
  - Padding → surrounds the content
  - Border → surrounds the padding and represents the box border
  - Margin → surrounds the border

- Note → Need to specify a border-style for border to appear
Box model

- Margin
- Border
- Padding
- Content
Box model padding and margin

• You can adjust individual padding/margin properties by using:
  • padding-bottom, padding-left, padding-top, padding-right
  • margin-bottom, margin-left, margin-top, margin-right

• The margins, borders, padding, and background properties of block elements (e.g., body, p, etc.) are not passed to their child block-level elements
Shorthand property

• Shorthand Property \(\rightarrow\) allows you to specify several properties by using only one
• If you don’t specify one of the properties a default value will be used
• Commonly used shorthand properties
  • background
  • font
  • list-style
  • margin
  • border
  • padding
• Example \(\rightarrow\) border: 2em solid green;
Background properties

- background-color
- background-image → location of image
- background-repeat → how image repeats. Possible values for repetition:
  - no-repeat → one instance of the image
  - repeat → tile
  - repeat –y → repeats on the y-axis (repeat –x → repeats on the x-axis)
- background-attachment → indicates attachment of the image to the containing element. Possible values are:
  - scroll → default value
  - fixed → image will stay stationary as the scrolling takes place
- background-position → top, bottom, center, left, right (combinations valid)
Generic font families

- sans-serif → (e.g., Verdana, Helvetica, Arial)
- serif → (e.g., Times New Roman, Georgia, Times)
- monospace → (e.g., Courier, MS Courier New)
- cursive → (e.g., Lucida Handwriting)
- fantasy → (e.g., Whimsey, Comic Sans)
- Browser can choose an available font from that family