CSCI 1720 Intermediate Web Design Introduction / Review East Tennessee State University Department of Computing CSCI 1720 Intermediate Web Design

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Introduction My name: Jack Ramsey Office: Nicks 484 Phone: 423-439-5807 Email: ramseyjw@etsu.edu Office hours: TBA *You can arrange to meet me during office hours (it's best to email first, so I can be sure to be available), or other hours by arrangement East Tennessee State University Department of Computing CSCI 1720 Intermediate Web Design

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A Little About Me Degrees: AAS Police Science, 1992 BS Criminal Justice/Criminology, 1995 BS Computer Science, 1997 MAT Education, 2010 MS Computing (IT), 2013 East Tennessee State University Department of Computing CSCI 1720 Intermediate Web Design

A Little About Me Work History: 1985-1988: 1998-1992: U.S. Army, Hunter Army Airfield, Savannah, GA Various convenience stores while in school Charlottesville-Albemarle EOC, Charlottesville, VA 1992-1993: Washington Co. Sheriff's Office, Jonesborough, TN Elizabethton Police Department, Elizabethton, TN 1995-1997: 1997-2009: 2013-2014: Walters State Comm. College, Morristown, TN East Tennessee State University, Johnson City, TN 2014-present: East Tennessee State University Department of Computing E Intermediate Web Design

A Little About Me

I've lived just outside the Greater Elizabethton Metropolis since early

Part of the ETSU family since Spring

Interests outside of computing:

Reading (Sci-Fi, mystery, thrillers) Online gaming Photography Firearms / shooting



Web design & development (HTML &

Interests in computing:

CSS) System administration Amazon Web Services Computer networking Computer/network security Python, Java, JavaScript, PHP, etc.

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Syllabus / Tentative Course Schedule Review

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Review

In CSCI 1710 1210, we learned about the Hypertext Markup Language (HTML 5), Cascading Stylesheets (CSS), web design and development principles, and a little about Hypertext Preprocessor (PHP) and forms

In production environments, HTML and CSS documents are rarely, if ever, hand-coded the way we did it in CSCI $\frac{1}{2710}$ 1210

...but you have to learn to walk before you can run

This class will explore some more advanced tools and concepts that are used in production environments today

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Review

This class (as did CSCl 1210) will focus primarily on front-end web development

As opposed to back-end development, which is the focus of CSCI 2910 (Server Side) and CSCI 3110 (Advanced Web)

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Review

'When we discuss the "frontend" of the web, what we're really talking about is the part of the web that you can see and interact with...designers [who work] strictly in Photoshop and those who code HTML and CSS [and work] with JavaScript and jQuery'

~ http://blog.teamtreehouse.com/i-dont-speak-your-language-frontend-vs-backend

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Review 'The backend usually consists of three parts: a server, an application, and a database. If you book a flight or buy concert tickets, you usually open a website and interact with the frontend. Once you've entered that information, the application stores it in a database that was created on a server.' - http://blog.teamtreehouse.com/l-sbnt-speak-you-language_frontend-us-backend East Tennessee State University Department of Computing CSCI 1720 Intermediate Web Design

Review - HTML

Current standard is HTML 5 (October, 2014)

Plain text files

Use 'markup' – tags – to define document structure

Browsers interpret the tags (elements) to render the structure of a web page when it is downloaded

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Review - HTML

A tag is defined by angle brackets

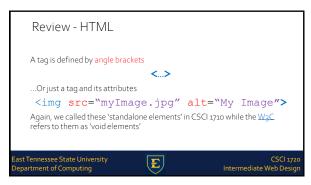
...>

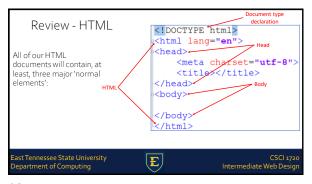
An element is defined either by an opening tag, content, and a closing tag

This is where the content goes
While we referred to these as 'container elements' in CSCI 1710, W3C refers to them as 'normal elements'

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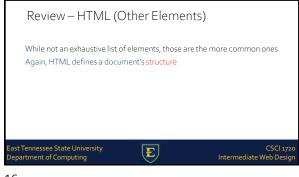
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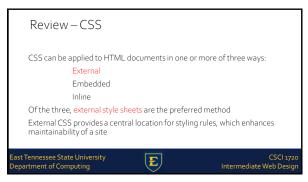
```
Review – HTML (Other Elements)
     Some of the elements we explored include
              div
                               strong
                                                         header
              p
span
h1 - h6
br
                               em
blockquote
                                                         footer
img
             br
hr
ol,ul
li
                               table
                                                               method
                                     tr, th, td nav
                                                               input
                               textarea
                               article section
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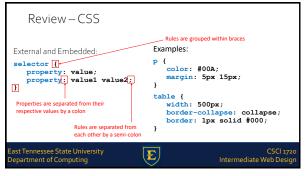


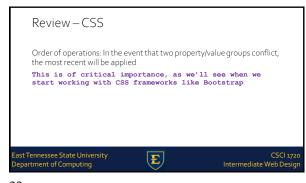
Review — HTML Comments Comments in HTML are denoted as follows: <!-- This is a comment --> With longer and more involved HTML documents, it's a good idea to include comments to help you (or whoever) maintain the documents East Tennessee State University Department of Computing CSCI 1720 Intermediate Web Design

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Review — CSS Cascading Style Sheets (CSS) was a second major topic of CSCI 1210 CSS provides style (as opposed to structure) Its primary responsibility is modification of how HTML elements are presented when a web page is loaded by a browser East Tennessee State University Department of Computing CSCI 1770 Intermediate Web Design

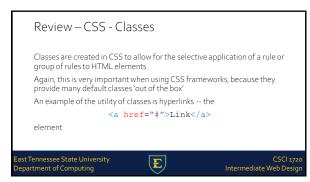


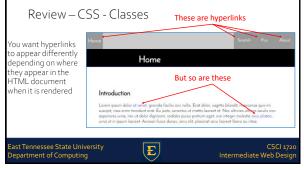


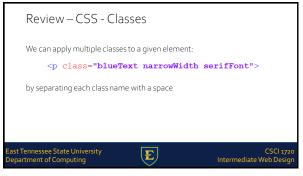


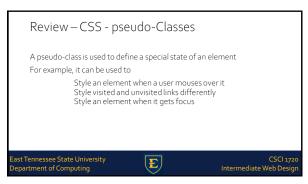
Review — CSS Order of operations: The order in which CSS rules that conflict are applied is: In-line Embedded External Browser default East Tennessee State University Department of Computing CSCI 1720 Intermediate Web Design

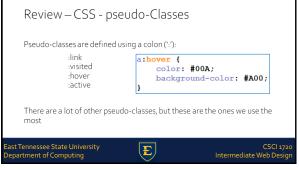


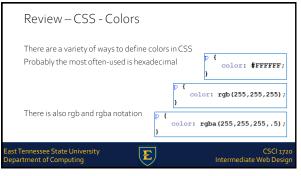


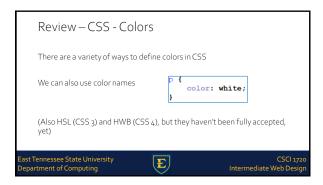




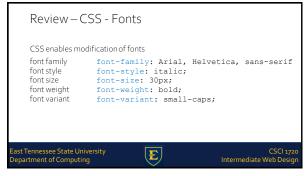












Review - CSS - Position The CSS position property enables modification of where elements will be displayed when a page loads Values for the position element are default static relative to the element's static position absolute positioned relative to the nearest positioned ancestor if an absolute positioned element has no positioned ancestors, it uses the document body, and moves along with page scrolling fixed positioned relative to the viewport; stays in same place, even if the page is scrolled East Tennessee State University Department of Computing E Intermediate Web Design

Review - CSS - Position The CSS position property enables modification of where elements will be displayed when a page loads Property Description Sets the bottom margin edge for a positioned box bottom Clips an absolutely positioned element left Sets the left margin edge for a positioned box Specifies the type of positioning for an element right Sets the right margin edge for a positioned box Sets the top margin edge for a positioned box Sets the stack order of an element East Tennessee State University Department of Computing E Intermediate Web Design

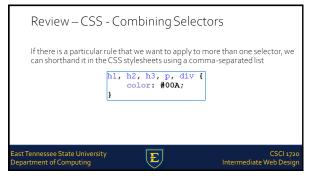
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Review — CSS - Combinators A combinator is something that explains the relationship between the selectors descendant selector (space) all descendants child selector (>) immediate children adjacent sibling selector (+) adjacent sibling selector (+) adjacent sibling following parent general sibling selector (-) all elements that are siblings of a specified element East Tennessee State University Department of Computing CSCI 1720 Intermediate Web Design

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Review Conclusion This has been a quick look at topics covered more thoroughly in CSCI 1710 Hopefully, it will serve to both remind you of some of the finer points of HTML/CSS coding and prepare you for what we'll be covering this semester Looking forward, we'll be exploring some of the following topics: East Tennessee State University Department of Computing CSCI 1720 Intermediate Web Design

Review Conclusion			
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Responsive web sites Bootstrap			
Sass/SCSS			
JavaScript			
jQuery			
PHP			
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Text Styles			
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Fonts / Typography

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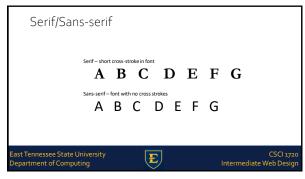
Typography The art and technique of arranging type to make written language legible, readable, and appealing when displayed Typefaces Point sizes Line lengths Line-spacing (leading) Letter-spacing (tracking) Space between pairs of letters (kerning) Also applied to the style, arrangement, and appearance of the letters, numbers, and symbols East Tennessee State University Department of Computing CSCI 1726 Intermediate Web Design

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Typography Type – letters and other symbols that create words and phrases Type family – several typefaces that share the same basic design form Helvetica, Arial, Times New Roman (commontype families) Typeface (face) – all type of a single design and style TR regular, TR italic, TR bold, TR bold-italic are all typefaces within the Times New Roman family Most common type families usually have at least these 4 styles: regular, bold (boldface), italic and bold-italic East Tennessee State University Department of Computing CSCI 1720 Intermediate Web Design

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CSS fonts CSS recognizes 5 generic font families: Sans-serif Serif Monospace Cursive Fantasy East Tennessee State University Department of Computing CSCI 1770 Intermediate Web Design

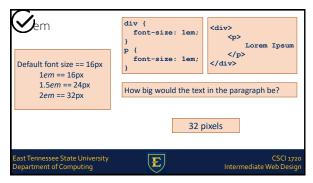




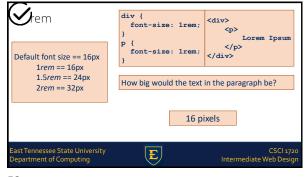


Fantasy	
Difficult to read, so use very sparingly Chiller Jokerman Old English Text Playbill Rosewood STENCIL	
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rem		
em is useful, but can get rem (Root EM) – size is ca Can simplify size calculai May require re-declarati	alculated to be relat	ive to the root (<html>) size</html>
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usability.gov

People read differently online than they do when they read print materials -- web users typically scan for information

When writing for the web, using plain language allows users to find what they need, understand what they have found, and then use it to meet their needs

It should also be actionable, findable, and shareable

It's important to understand how what you are writing fits into the overall content strategy, what the content lifecycle entails, and who is involved in the process

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usability.gov - Identify Users' Top Tasks

People come to your website with a specific task in mind

When developing your site's content, keep your users' tasks in mind and write to ensure you are helping them accomplish those tasks

If your website doesn't help them complete that task, they'll leave

Conduct market research, perform a task analysis and other types of user research, and analyze metrics to better understand what users are looking to accomplish

(We talked about requirements elicitation in CSCI 1210, remember?)

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usability.gov - Identify Users' Top Tasks

Knowing your users' top tasks can help you identify:

Content to feature on your homepage or landing pages Page headers and sub headers

A logical structure to each page's content

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usability.gov It's important to target your audience when writing for the web By knowing who you are writing for, you can write at a level that will be meaningful for them Use the personas you created while designing the site to help you visualize who you are writing for East Tennessee State University Department of Computing

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usability.gov

Use the words your users use. By using keywords that your users use, you will help them understand the copy and will help optimize it for search engines

Chunk your content. Chunking makes your content more scannable by breaking it into manageable sections

Front-load the important information. Use the journalism model of the "inverted pyramid." Start with the content that is most important to your audience, and then provide additional details

. Use pronouns. The user is "you." The organization or government agency is "we." This creates cleaner sentence structure and more approachable content Use active voice. "The board proposed the legislation" not "The legislation was proposed by the board"

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usability.gov

Use short sentences and paragraphs. The ideal standard is no more than $\,$ 20 words per sentence, five sentences per paragraph

Use dashes instead of semi-colons or, better yet, break the sentence into

It is ok to start a sentence with "and," "but," or "or" if it makes things clear and brief

Use bullets and numbered lists. Don't limit yourself to using this for long lists—one sentence and two bullets is easier to read than three sentences

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Use clear headlines and subheads. Questions, especially those with pronouns, are particularly effective Use images, diagrams, or multimedia to visually represent ideas in the content. Videos and images should reinforce the text on your page Use white space. Using white space allows you to reduce noise by visually separate information East Tennessee State University Department of Computing CSCI 1726 Intermediate Web Design

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usability.gov

Use Microsoft Word's Readability Statistics feature—part of the Spelling & Grammar check—to measure your progress as you write and edit copy

Try to make your reading ease number go up and your grade level go down $\,$

You can improve your readability by using active voice and short words, sentences, and paragraphs

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9 Tips

1. Treat your web visitors like wild animals

Your website visitors behave like wild animals

They're hunting for information or a product to buy – just like a hungry panther hunts for his next meal

When a panther sniffs a scent trail he quickly decides: will the scent trail lead to a good meal? And will it be an easy catch?

Your web visitors consider the same two things: Does your website offer what they're looking for? And can they find it easily?

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9 Tips 2. Put your most important information first Writing for the web is completely different from writing an essay or a paper An essay might go like this: First, explain what you're going to discuss. Then, present an overview of the literature. Next, discuss, and finally draw your conclusion. The most important point you make is in the conclusion – at the end of your essay! On web pages you have to do the opposite: your most important points always come first $% \left(1\right) =\left(1\right) \left(1\right) \left$ East Tennessee State University Department of Computing

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9 Tips

3. Don't try to be clever or creative

On the web it's rare that a reader hangs on to every word you write. No time. He or she's in a hurry because he or she could check out several other scent trails – websites – instead of wasting time trying to figure out what you do

Simple statements often work best

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9 Tips

4. Write for scanners

Research suggests that only 16% of people read web pages word-for-word Most people scan

How can you write for scanners? A check list:

Does your headline communicate what you're about? Does your image caption communicate a sales message? Do your sub headlines summarize your key points? Do easy-to-scan bullet points reduce wordiness?

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9 Tips 5. Use Familiar Words Carewords are the words people are looking for We often like to make ourselves sound better than we are; embellish what we do; or try to sound scientific, fancy, or special But your web visitor is looking for familiar words – carewords – because they're the scent trail that tells users that they're in the right place East Tennessee State University Department of Computing CSCI 1720 Intermediate Web Design

9 Tips

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6. Write for lazy people

Make your copy easy to read:

Use short paragraphs – four sentences max
Use short sentences – twelve words on average
Skip unnecessary words
Avoid jargon
Avoid the passive tense
Avoid needless repetition
Address your web visitors directly
Shorten your text

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9 Tips

7. Expect people to arrive anywhere on your website

Most web visitors will not start reading at your home page

They may arrive on any of your web pages

If each web page can be an entry page what does that mean?

Each page should be easy to scan

Each page should clarify to people where they are; and what your site is about $\parbox{\ensuremath{\mbox{\mbox{\sc h}}}}$

Each page should have a call to action telling people where to go next

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9 Tips 8. Make it easy for hunters to find you Potential customers are hunting for information or products How can you help them find you? Lure potential customers to your website by providing useful information. That's how writing for SEO (Search Engine Optimization) basically works: Answer the questions potential customers are asking Discuss one key topic for each page Include links to relevant pages on your own website or to other websites Use phrases and words your potential customers are looking for East Tennessee State University Department of Computing CSCI 1720 Intermediate Web Design





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