WWW/HTML Basics CS 4173

What is the WWW?

- ◆A distributed document delivery system
- ◆Uses a client-server model
- ◆Main presentation language is HTML

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Client-Server Model

Two processes (possibly networked):

- The client
 - Sends requests to the server
 - Blocks until reply is received
- The server
 - Processes requests from clients
 - Never blocks
 - Can reply to several clients simultaneously

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HTML

- ◆Hypertext Markup Language
- ◆Intended to be maximally portable
 - Logical markup
 - Graceful degradation of presentation
- An ideal promoted by early WWW
 - Used to be more honoured in the breach
 - Is it getting better now?

Markup Languages

- Markup:
 - Embedded codes in documents
 - Codes are called `tags'
 - Codes
 - Describe the structure documents
 - Include instructions for processing
- Markup language:
 - Computer language for describing syntax of tags
 - May be used with other tools to specify rendering

Logical Markup

- Logical markup:
 - Describes parts of document
 - Does not specify how to render
- Example:
 - This is very important
 - This is *very* important

Logical Markup

- Presentation is client's `decision'
- When client cannot present then there is graceful degradation

 - Object example from Cougar

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Some history

- Gopher & the Internet Superhighway
- ♦ SGML
 - GML + Charles Goldfarb = SGML
 - eXtensible Markup Language
- HTML
- XML and XHTML

Why HTML became XHTML

- ◆HTML was originally a SGML application
 - Tags described the syntax
 - A DTD could check the syntax
 - Informal mapping from syntax to rendering
- ◆Multiple incompatible versions arose
 - IETF moves at 'net speed not web \$peed
 - Tag abuse was rampant in the 'net
 - They were a plague unto the users

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Why HTML became XHTML (2)

- ◆If you think IMG is bad ...
- ◆Big vendors (M\$ and N\$ mostly) agreed
 - To start over
 - To use eXtensible Markup Language
 - A re-write of SGML emphasizing simplicity
 - Carefully planned by CS savvy folks
 - Includes hooks for future development

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XHTML Basics

- ♦Very few real changes from HTML
- ◆But more strict
- ◆All tags are in lowercase
- ◆All tags must be closed
 - Empty tags
 - Paired tags

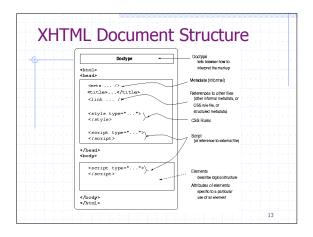
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XHTML Basics

3 Parts to an XHTML or HTML document

- DOCTYPE
 - What DTD are you using
- Head
 - Meta information
 - Only <title> is required
- Body
 - Text to render

. .



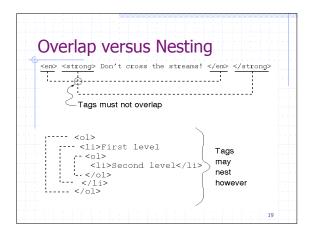


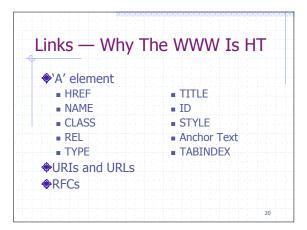
	ays vs	. Elen	nents	
◆Tag is ma	arkup to r	eprese	nt an el	ement
♦Logical vs	s. Present	ation E	lement	S
■ ŤT ≉	≈ CODE, K	BD, PRE		
■ B/11/U ≈ ♦Lists	≈ EM/STRC	JNG		
■ UL/OL				

**XHTML Tags vs. Elements **Block-level and in-line elements **TABLE, P, BLOCKQUOTE, DIV, etc. **CODE, Q, H1, SPAN, etc. **Grouping Elements **DIV **SPAN **One-part elements **BR, etc.

**XHTML Tags vs. Elements **Browser-specific tags MARQUEE, BLINK, etc. **What happens when a browser doesn't recognize a tag?

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XHTML Basics	
	+++++
◆Tags may be nested but	+
◆Tags may not overlap	
Vrags may not overlap	
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얼마나 무슨다 다른다 다 모르다 다 나를 다니다.	
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Where are the tools?	
♦HTML Tidy	
■ /opt/bin/tidy ON borg	
◆The validator	
http://validator.w3.org/	
http://www.cs.dal.ca/validator?	
http://www.cs.dal.ca/validate?	
http://www.cs.dal.ca:81?	
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*XHTML/HTML Examples *XHTML element sampler *XHTML sample template Both in the examples section of the website

For More About HTML

- RFC 1866 (HTML 2.0) (at faqs.org)
 Explains some of the philosophy behind HTML
- HTML 4.01 (at W3C)
 Last version of HTML
- * XHTML 1.1 (at W3C)
 Modularized XHTML

So many choices!...

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Which Standard to Follow?

- Minimal standard for this course is HTML 4.01 Transitional
- ◆Preferred standard is XHTML 1.0 or 1.1
- ◆See Picking a Rendering Mode
 - By Eric Meyer
 - In the Readings part of the Resources

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