

## IT350 Web and Internet Programming

### XHTML vs. HTML

2

### History of the World in Just 5 Slides, Part 1

- *ARPANET*
  - Implemented in late 1960's by ARPA (Advanced Research Projects Agency of DOD)
  - Networked computer systems of a dozen universities and institutions with 56KB communications lines
  - Grandparent of today's Internet
  - Intended to allow computers to be shared
  - Real benefit?

## History of the World in Just 5 Slides, Part 2

- ARPA's goals
  - Allow multiple users to send and receive info at same time
  - Use *packet switching* technique
    - Digital data sent in small packages called *packets*
    - Packets contained data, address info, error-control info and sequencing info
    - Greatly reduced transmission costs of dedicated communications lines
  - Operate without centralized control
    - If portion of network fails, remaining portions still able to route packets
- Huge variety of networking hardware and software appeared
  - Development of TCP/IP protocols enabled interoperation

## History of the World in Just 5 Slides, Part 3

- Internet initially just for universities and research labs
  - Military became big user
  - Next, government decided to access Internet for commercial purposes
- Internet traffic grew
  - Businesses spent heavily to improve Internet
    - Better service their clients
  - Fierce competition among communications carriers and hardware and software suppliers
  - Result
    - *Bandwidth* (info carrying capacity) of Internet increased tremendously
    - Costs plummeted

## History of the World in Just 5 Slides, Part 4

- WWW
  - Allows computer users to locate and view multimedia-based documents
  - Introduced in 1990 by *Tim Berners-Lee*
- W3C – [www.w3.org](http://www.w3.org)
  - Founded in 1994 by Tim Berners-Lee
    - Devoted to developing non-proprietary and interoperable technologies for the World Wide Web and making the Web universally accessible
  - Standardization
    - W3C *Recommendations*: technologies standardized by W3C
      - include Extensible HyperText Markup Language (XHTML), Cascading Style Sheets (CSS) and the Extensible Markup Language (XML)
    - Document must pass through *Working Draft*, *Candidate Recommendation* and *Proposed Recommendation* phases before considered for W3C Recommendation

## History of the World in Just 5 Slides, Part 5

- Web 2.0
  - Users create the content
    - Facebook
    - Wikipedia
    - del.icio.us
    - Amazon – how?
  - Tagging
  - Richer user interfaces
    - Google Maps vs. original Mapquest
    - AJAX
  - And more... see IT452!

## **Web Markup Languages**

- HTML 2.0
- ...
- HTML 4.01
- XHTML 1.0
- XHTML 1.1
- XHTML 2.0
- HTML 5

## **HTML vs. XHTML**

## XHTML: Differences from HTML (part 1)

- Documents must be “well-formed”
  1. All start tags must be closed
  
  
  
  
  
  
  
  
  
  
  2. All tags must properly nest

## XHTML: Differences from HTML (part 2)

- Tag and attribute names must be lowercase
  
  
- Attribute values must be double-quoted
  
  
- Use `id` instead of `name`
  - `<a name=bottom> Stuff </a>`
  
  - `<a id=“bottom”> Stuff </a>`
  - `<h1 id=“ships”> ... </h1>`

### **XHTML: Differences from HTML (part 3)**

- Many “style” tags/attributes removed

[http://webdesign.about.com/od/htmlxhtmltutorials/l/bltags\\_deprecat.htm](http://webdesign.about.com/od/htmlxhtmltutorials/l/bltags_deprecat.htm)

- What to do?

### **XHTML: Differences from HTML (part 4)**

- Frames allowed in XHTML 1.0...

But removed in XHTML 1.1

- A few more technical differences...

– See <http://www.w3.org/TR/2000/REC-xhtml1-20000126/#diffs>

## Exercise #1 – Correct any invalid XHTML syntax

```
<?xml version = "1.0" encoding=utf-8 ?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
    "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<!-- An example file
<!-- Our first Web page -->
<html xmlns = "http://www.w3.org/1999/xhtml">

<body>
    <h1> Welcome to <b> IT350! </h1> </b>
    <h2> Today's Agenda </h2>
    <li> XHTML
    <li> JavaScript
</body>
```

## Exercise #2 – Correct any invalid XHTML syntax

```
<?xml version = "1.0"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
    "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns = "http://www.w3.org/1999/xhtml">

    <title>Internet and WWW How to Program - Welcome</title>

    <body>

        <img scr = "xmlhttp.jpg" height = "238" width = "183" >

        <h1 align="center">Under construction</h1>

    </body>
</html>
```

### Exercise #3 – Correct any invalid XHTML syntax

```
<?xml version = "1.0"?>

<html xmlns = "http://www.w3.org/1999/xhtml">
  <head>
    <title>Internet and WWW How to Program - Links</title>
  </head>

  <body>
    <b> <h1>Here are my favorite links</h1> </b>

    <p><A href = "http://www.yahoo.com">Yahoo!</A></p>

    <p><A mailto = "webmaster@ussmichigan.org">Webmaster</A></p>

  </body>
</html>
```

### Exercise #4 – Correct any invalid XHTML syntax

```
<?xml version = "1.0"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
  "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns = "http://www.w3.org/1999/xhtml">
  <head> <title>Best features of the Internet</title> </head>

  <body>
    <ul>
      <li>Meet new people from around the world.</li>
      <li>Access to new media as it becomes public: </li>
        <ul>
          <li>New games</li>
          <li>New applications & software
        </ul>
      <li>Search engines</li>
    </ul> </body>
</html>
```