CS 134
Intro to Computer Science

Mar 14, 2016

Lecture 16:
Web Protocols & Standards

Announcements

- Lab 6 today and tomorrow. Read lab handout before lab.
- Midterm review sessions:
  - Wed 1:00-2:00 TPL 203
  - Wed 8:00 TPL 203
- Midterm
  - Evening of March 17th
  - At 6 p.m. or 7:30 p.m. in TPL 203
  - 75 minute closed book exam

Today’s Plan

Web Standards and Protocols
- HTML
- HTTP
  - 1.0 vs. 1.1
HTML Document Structure

<HTML>
  <HEAD>
    <TITLE> something short but sweet </TITLE>
  </HEAD>
  <BODY>
    something not so short but sweet
  </BODY>
</HTML>

A Brief Example

<html>
  <head>
    <TITLE>CS 134 Sample Page</TITLE>
  </head>
  <body>
    <H1>Hello, CS134!</H1>
    <P>Let's make a webpage!</P>
  </body>
</html>

HTML HEAD TAGS

- <TITLE> My Wonderful Webpage </TITLE>

HTML BODY TAGS

- Paragraph: <P> ...  </P>
- Line break:  <BR>
- Headers (n is a number):  <Hn> ...  </Hn>
- Bold:   <B>   ...  </B>
- Underline:  <U>   ...  </U>
- Italics:  <I>   ...  </I>
- Centering: <CENTER>   ...  </CENTER>
TAGS WITH ATTRIBUTES

- Center paragraph: `<P ALIGN=CENTER>`
- Colored font: `<FONT COLOR=RED> ... </FONT>`

ACCESSING OTHER FILES

- Images
  - `<IMG SRC="someGreatPicture.gif">`
  - `<IMG SRC="http://www.picture.com/image.gif">`

LINKS TO OTHER PAGES

- `<A HREF="http://www.cs.williams.edu"> ... </A>`

POP

USER jeannie

SERVER
POP

CLIENT

POP

USER jeannie
+OK
PASS mysecretword
+OK
RETR 4
+OK ...

HTTP

WWW

HTTP

HTTP

GET /~jeannie/index.html
HTTP

WEB

GET /~jeannie/index.html

HTTP/1.0 200 Document ...

HTTP

SERVER

HTTP/1.0

• Connect to server on port 80
• Send: GET /name-of-document HTTP/1.0
• Send any optional header lines
• Send: a blank line
• Process server’s response
• Server closes connection

HTTP/1.1

• Connect to server on port 80
• Send: GET /name-of-document HTTP/1.1
• Send: host: name of server
• Send any optional header lines
• Send: a blank line
• Process server’s response
• Server maintains connection (briefly)