CompSci 4

HTML

Sep 1, 2005

Prof. Susan Rodger
CompSci 4

- Last time
  - How to start a web page, copy files to Duke account
- Assignment 1 due Friday, Assignment 2 out
- Today – Learn HTML
  - Use laptop cart
  - Bring laptop if can
- Start Alice next week
  - Read Chapter 1
  - Do reading quiz on blackboard
    - Multiple attempts
    - Must do before next class period starts
Browsers on the Web

• First browser called “WorldWideWeb”
  – Hypertext browser/editor
  – Created in 1990 by Tim Berners-Lee at CERN
  – 1991 available on internet

• Lynx
  – Textual browser, 1992, [history](#)
  – Lou Montulli, Charles Rezac, Michael Grobe
CompSci 4 Web page in Lynx

CPS 004, SPRING 2005

Introduction to Programming via Animation and 3D Virtual Worlds

Course Announcements

* Is this the right course for me? *
* Note from Prof. Rodger - Jan 14, 2005 *
* No programming experience for this course! Learn programming concepts by programming 3-D Virtual Worlds.
* See sample virtual worlds that represent what you will create in this course.

Course Description:

CompSci 4 is an introductory programming course that teaches fundamental computer science concepts. This version of CompSci 4 uses

---press space for next page---

Arrow keys: Up and Down to move. Right to follow a link; Left to go back.  
H)elp O)ptions P)rint G)o M)ain screen Q)uit /=search [delete]=history list
Other Browsers

• Mosaic
  – 1993, Univ of Illinois Urbana-Champaign
  – Last version in 1997

• Netscape
  – 1994 by Jim Clark and Marc Andreessen
  – Hired most of Mosaic Engineers and Montulli (lynx)
    – history

• Internet Explorer
  – 1995, first version attached to Windows 95, not very popular
    – history
How do These Browsers view the same info?

• Standards
  – Html
  – Figure formats (gif, jpeg, tiff)
  – Scripts (javascript, cgi)

• Plug-ins
  – Program provided by companies that are run when specific file is downloaded
URLS

• Uniform Resource Locator
• Address of location of a web site or other Internet service
• Organized first by protocol
  – http, mailto, ftp, file
• Organized next by domains
  – .com, .edu, .org, country (.it, .fr, .de)
• Organized finally by directory on specific machine
An HTML file

- Write HTML commands in a file
  - use Notepad
- File should have .html extension
- View file with browser
  - Save file and check often
HTML tags

• First tag “<“ says, “Begin Mode”
• Second tag “>” (has “/”), says “End Mode”
• <title>Flavor of the Week </title> means
  – Begin title mode
  – “Flavor of the Week” is in title mode
  – End title
• Can nest several modes
HTML

• Some General HTML rules
  – For tags, case doesn’t matter
    • `<html>` = `<HTML>`
  – In the text, spaces don’t matter (free format)
  – `<br>` starts a new line

• Headings
  – Use `<hn>` for heading size, the smaller `n`, the larger the heading
  – `<h1>` … `</h1>` is largest heading
  – `<h4>` … `</h4>` is minor heading
<html>
<head>
<title> Susan’s Web Page </title>
</head>
<body bgcolor="white">
<center>
<h1> Susan’s Web Page </h1>
</center>
<p> I love to bake cookies and cakes! </p>
</body>
</html>
HTML

• Add links

   <a HREF=http://www.duke.edu>
      The Duke web page </a>

• Italics or emphasis

   – <i> or <em>

• Darker or bold use

   – <strong> or <b>

• Text space exactly as typed

   – <pre>
HTML – specifying colors

• Can be specified in different ways
• Standard colors, “white” or “red”
• Arbitrary colors, specify amount of red, blue and green involved (RGB)
• Uses base 16 arithmetic: 0, 1, …,9, a, b, ..f
  Red: ff0000   Green 00ff00   Blue 0000ff
  Yellow: ffff00   Gray 7f7f7f   White ffffff
  Black 000000   Orange ff7f00   Purple c000e0
Can experiment!
HTML - Lists

• Bulleted list
  
  <ul>
    <li> item in list
  </ul>

• Ordered list
  
  <ol>
    <li> first item in list
    <li> second item in list
  </ol>

• Can nest arbitrarily deep – lists within lists
HTML – Tables and Images

• Tables – produces simple table
  
  ```html
  <table border=1>
    <tr> <td> cell 1 </td> 
    <td> cell2 </td> </tr>
    <tr> <td> cell 3 </td> 
    <td> cell 4> </td> </tr>
  </table>
  ```

• Images – displays an image
  
  ```html
  <img src=http://www.cs.duke.edu/~rodger/shrfun.gif>
  ```
Classwork - Create a Web page

• Create a web page – complete by Sept. 8
• Work in pairs
• Use notepad to create file with HTML
• Look at file with browser
• Copy file to your Duke OIT account
• View your file on the web