

---

## Basic Web Page Construction

Sections 4.1, 4.2, and 4.3  
Pages: 165-179

---

2/20/07 CS120 The Information Era 1

---

---

---

---

---

---

---

---

### Learning Objectives

- Introduce HTML for basic Web page construction
- Use a text editor for Web page design
- Discuss the concept and use of tags in Web pages
- Introduce the four basic Web page tags
- Introduce more specific HTML tags for more complex Web page construction
- Introduce the concept of attributes

---

2/20/07 CS120 The Information Era 2

---

---

---

---

---

---

---

---

### Taking Charge (4.1)

- Anyone with access to the Internet can post a Web page
- You can create a Web page with just a text editor
- There are Web page construction tools available that allow you to create pages without understanding the underlying machinery
  - Why bother learning the underlying machinery then?!

---

2/20/07 CS120 The Information Era 3

---

---

---

---

---

---

---

---

## Web Pages and HTML (4.2)

- Web browsers are designed to display any ASCII text file with the file name extension `.htm` or `.html`
- You can view your Web pages locally on your computer as you develop them
- Hypertext Markup Language or HTML is a markup language that gives Web page authors control over what a Web browser can and can't do when it displays a Web page
- A markup language is not a programming language

2/20/07

CS120 The Information Era

4

---

---

---

---

---

---

---

---

## Elements

- Web page authors communicate formatting commands to web browsers by inserting HTML elements inside a web page
- HTML elements
  - Add content (such as an image)
  - Specify style for text

2/20/07

CS120 The Information Era

5

---

---

---

---

---

---

---

---

## Web Pages and HTML

- All Web pages should contain four basic elements:
  - HTML
  - HEAD
  - TITLE
  - BODY
- You can add HTML elements to a Web page with any text editor. Examples:
  - Notepad (Windows)
  - TextWrangler (Macintosh)

2/20/07

CS120 The Information Era

6

---

---

---

---

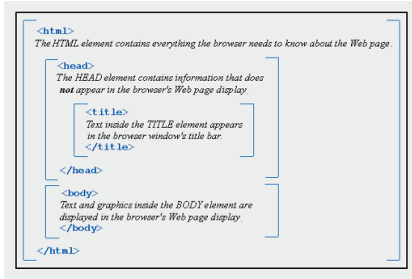
---

---

---

---

## Web Pages and HTML



2/20/07

CS120 The Information Era

7

---

---

---

---

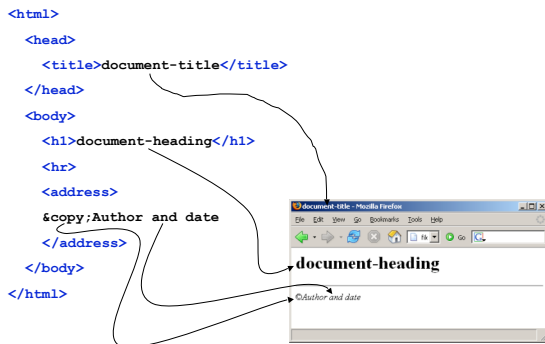
---

---

---

---

## HTML Shell



2/20/07

CS120 The Information Era

8

---

---

---

---

---

---

---

---

## Notes on HTML

- Tags are not case sensitive
  - `<HTML>` is equivalent to `<html>`
- Tags are closed by including the / with the tag name
  - `</html>`
- Most tags come in pairs, though a few, such as `<hr>` and `<br>` do not
- Tag pairs can be nested
  - `<title>` pairs within the `<head>` pairs

2/20/07

CS120 The Information Era

9

---

---

---

---

---

---

---

---

## Your Turn

- Create a web page using the following steps:
  - 1) Using TextWrangler, create the previous HTML shell file and save the file as `shell.html` on your desktop
  - 2) Open up Safari and view `shell.html`
  - 3) Save a copy of `shell.html` in your documents folder on euler

2/20/07

CS120 The Information Era

10

---

---

---

---

---

---

---

---

## HTML Commands (4.3.3)

### Formatting

- Bold `<strong> </strong>` (`<b></b>` is old way)
- Italic `<em> </em>` (`<i></i>` is old way)
- Underline `<u> </u>`
- Center `<center></center>`

### Dividers

- `<p></p>` paragraph break (double carriage return)
- `<br>` forced line break (single carriage return)
- `<hr>` horizontal rule

### Comment

- `<!-- -->`

2/20/07

CS120 The Information Era

11

---

---

---

---

---

---

---

---

## HTML Example

```
<strong>Pacific
University</strong><br>
<em>2043 College
Way</em><br>
<u>Forest Grove,
OR</u><br>
<center>97116</center>
<hr>
```

```
Pacific University
2043 College Way
Forest Grove, OR
97116
```

2/20/07

CS120 The Information Era

12

---

---

---

---

---

---

---

---

## HTML Headings (4.3.1)

Headings can be 1 of 6 sizes:

- Very Large `<h1>` `</h1>`
- Very Small `<h6>` `</h6>`

Some things to note:

- When a Web browser reads an HTML file, the browser treats the text as a continuous stream of characters. When a tag is encountered, a change can occur
- Returns and multiple blanks are ignored
- Headings are different from the `<head>` tag. How?

2/20/07

CS120 The Information Era

13

---

---

---

---

---

---

---

---

## HTML Attributes (4.3.1)

- An HTML attribute is a property of an HTML element, consisting of an attribute name and an attribute value
- The heading tag allows for an align attribute
- `<h1 align="center">`My First Web Page  
`</h1>`

2/20/07

CS120 The Information Era

14

---

---

---

---

---

---

---

---

## Different Fonts (4.3.3)

- Fonts are problematic in HTML because different computers have different fonts
- You can use the `<font>` tag, along with the `face` attribute to list different fonts
- The browser will work through the list from left to right and select the first font that it finds

2/20/07

CS120 The Information Era

15

---

---

---

---

---

---

---

---

## Safe Font Choices

- `<font face="Arial, Geneva, Helvetica">`The text `</font>`
  - Sans serif font
- `<font face="Times New Roman, Times">`The text `</font>`
  - Serif font
- `<font face="Courier New, Courier">`The text `</font>`
  - Monospaced font

2/20/07

CS120 The Information Era

16

---

---

---

---

---

---

---

---

## Another HTML Tag (4.3.3)

- `<pre>` `</pre>` is a tag such that things you type between `<pre>` and `</pre>` show up exactly as you type them.
- Warning: This does not really apply to tabs, so I wouldn't use tabs within this command

2/20/07

CS120 The Information Era

17

---

---

---

---

---

---

---

---

## Your Turn

- Create a Web page showing a simple multiplication table that might be beneficial for a young child to look at using values from 1 to 5
- Use as many HTML features as you can when creating this table including
  - A title in the head
  - A heading with a different alignment
  - A different font
- See next slide!

2/20/07

CS120 The Information Era

18

---

---

---

---

---

---

---

---

## Multiplication Table

### Multiplication Table

	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

2/20/07

CS120 The Information Era

19

---

---

---

---

---

---

---