



WEBD 162

Class 01
Chapters 1, 2, 3

1

Web **Designer** / Developer

► How the web page looks / acts

- User Interface (UI)
 - Organization / layout of page
- User Experience (UX)
 - Good experience, meets user's needs
- Interaction Design (IxD)
 - Easy to use, efficient
- Content Strategy and Creation

► 2

Web Designer / Developer

► Initial page layout

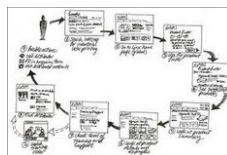
► Wireframe



► Sitemap



► Storyboard



► 3

Web Designer / **Developer**

► Authoring / markup

- HyperText Markup Language - HTML5

► Styling

- Cascading Style Sheets – CSS

► Scripting / Programming

- JavaScript – **front end** – browser interprets
- PHP, My SQL – **back end** – server processes

► 4

Tools Needed

- ▶ Text editor
 - ▶ TextEdit, Notepad
- ▶ HTML editor (code)
 - ▶ Sublime Text, Bluefish
- ▶ Web Authoring Program (visual)
 - ▶ Dreamweaver
- ▶ Browsers (devices, platforms)
- ▶ FTP program (File Transfer Protocol)
- ▶ Image editing software

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How the Web Works

▶ Internet

- ▶ Network of computers
- ▶ Communication protocols
 - ▶ Simple Mail Transfer Protocol (SMTP)
 - ▶ File Transfer Protocol (FTP)
 - ▶ HyperText Transfer Protocol (**HTTP**) – WWW
 - ▶ Transmission Control Protocol / Internet Protocol (**TCP/IP**)

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How the Web Works

▶ IP address

- ▶ For every computer
- ▶ For every domain name
 - ▶ Domain Name Server (DNS) keeps track of them all
 - ▶ IP address maps to domain name

▶ TCP

- ▶ Take care of delivering the request and response

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How the Web Works - Organizations

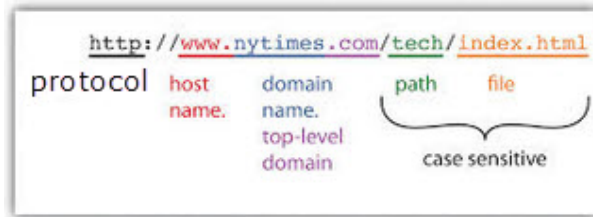
- ▶ European Organization for Nuclear Research (CERN)
 - ▶ Tim Berners-Lee developed HTML and HTTP 1978
- ▶ National Center for Supercomputing Applications (NCSA)
 - ▶ Marc Andreessen develops Mosaic and Netscape browser
- ▶ World Wide Web Consortium (W3C)
 - ▶ Standards organization for HTML, CSS, others
 - ▶ Tim Berners-Lee director, Cambridge MA
- ▶ Web HyperText Application Working Group (WHATWG)
 - ▶ First began work on HTML5



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How the Web Works

- ▶ Web page address – **URL** (Uniform Resource Locator)



- ▶ Default file name

- ▶ index.html, index.htm, index.php, default.aspx

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Anatomy of a web page – pg 27

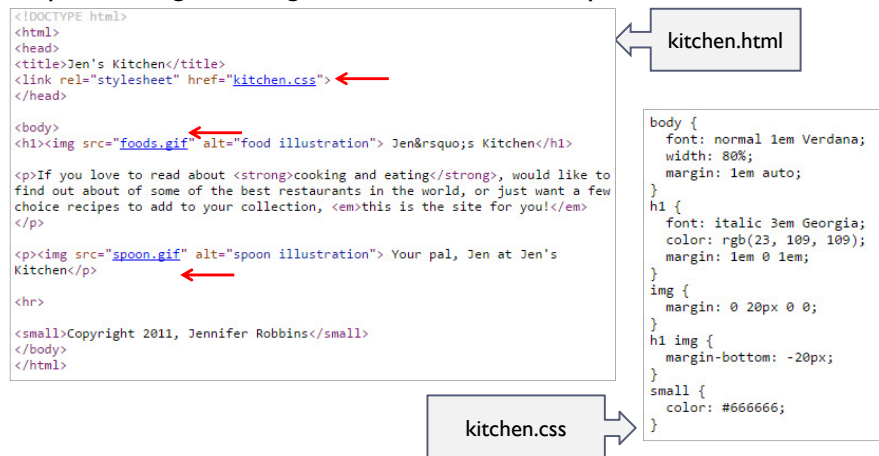
http://learningwebdesign.com/4e/materials/chapter02/kitchen.html



▶ 10

Anatomy of a web page – pg 27

http://learningwebdesign.com/4e/materials/chapter02/kitchen.html



▶ 11

How the browser displays the web page

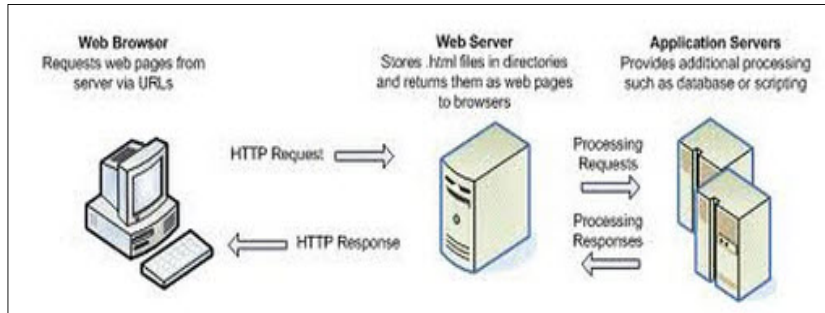
Client – Web Browser
Server – Web Server



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How the browser displays the web page

Client – Web Browser
Server – Web Server



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Web Page Structure

▶ HTML

- ▶ Describes the structure and markup

▶ CSS

- ▶ Presentation / visual display

▶ JavaScript

- ▶ Behavior

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Terminology

▶ Progressive Enhancement (HTML, CSS, JS)

- ▶ Starting with a baseline experience for content and functionality for all devices then adding on enhancements for advanced browsers

▶ Responsive Web Design

- ▶ Providing a layout that responds to the change in screen size



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Terminology

▶ Accessibility

- ▶ The content and functionality can be used by everyone regardless of any limitations:
 - ▶ visual
 - ▶ mobility
 - ▶ auditory
 - ▶ Cognitive
- ▶ www.section508.gov
- ▶ www.webaim.org

▶ Site Performance

- ▶ Optimize load time
 - ▶ images
 - ▶ white space
 - ▶ HTTP requests
- ▶ www.webpagetest.org
- ▶ www.yslow.org

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Example HTML5 Web Page

<!DOCTYPE html>

<html lang="en">

← accessibility

<head>

<meta charset="utf-8">

<title>Page Title Goes Here</title>

← displays in tab

</head>

<body>

... body text and more HTML5 tags go here

← content

</body>

</html>

Paragraph Element

Paragraph element

<p> ...*paragraph goes here*... </p>

- ▶ Groups sentences and sections of text together.
- ▶ Configures a blank line above and below the paragraph
- ▶ **Block element**