

# The Internet

The Internet is simply a system, like a courier service, for communicating digital information from one place to another

- World Wide Web (WWW) is only one part of the Internet (Tim Berners-Lee)
- Others
  - Email
  - File Transfer Protocol (FTP)
  - Internet Relay Chat (IRC)
  - USENET

# The Internet – concept 1 of 6

- The HyperText Transfer Protocol
  - (HTTP)
  - HTTP servers, also known simply as Web servers, are designed specifically to distribute hypertext documents to browsers, and to let the browser send back information for processing on the server

# The Internet – concept 2 of 6

- Uniform Resource Locators, or URLs.
  - These are the means by which Internet resources are addressed in the World Wide Web.
  - Common URL schemes:
    - HTTP URLs <http://www.nytimes.com>
    - Mailto URLs <mailto:rob@robertspahr.com>
    - News URLs <news:comp.infosystems.www>
    - FTP URLs <ftp://ftp.mysite.org/path/file.txt>

# The Internet – concept 3 of 6

- HyperText Markup Language
  - (HTML)
  - This is the markup language with which World Wide Web hypertext documents are written, and it allows you to create hypertext links, fill-in forms, and so forth.

# The Internet – concept 4 of 6

- Cascading Style Sheets
  - (CSS) Controls page layout and formatting
  - A language that works with HTML documents to define how such documents should be formatted and displayed by the web browser.

# The Internet – concept 5 of 6

- Browser-side scripting
  - This lets an author include script programs within Web pages.
  - Allows significant interactivity on the browser without any connection to a server.
  - Example: JavaScript

# The Internet – concept 6 of 6

- Server-side processing
  - This lets a user with a Web browser interact with resources lying on an HTTP server, providing a tunnel through the server to these resources.
  - This can either be through common gateway interface (CGI), or a server side scripting language such as PHP or ASP.
  - Example: PHP

# Tools

- Web Browser
- Text Editor
- Image Editor



# Markup Examples

HTML Elements, also known as HTML tags.

`<p> ... </p>` Paragraph

`<b> ... </b>` Bold

`<i> ... </i>` Italic

`<p>HTML is a markup language designed for use on the World Wide Web.</p>`

`<h1>Heading Text</h1>`

`<h2>Heading Text</h2>`

`<h3>Heading Text</h3>`

`<h4>Heading Text</h4>`

`<h5>Heading Text</h5>`

`<h6>Heading Text</h6>`

# Format by Context

`<strong> ... </strong>`    bold text

`<em> ... </em>`    italic text

`<code> ... </code>`    monospaced font

# HTML Files

## Requirements:

- File save as plain text
- A file extension of .html or .htm (we will use .html)

## Suggestions:

- No spaces in the file name
- All lowercase letters

# Page Structure

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <title>Example Page</title>
```

```
  </head>
```

```
<body>
```

```
<p>HTML a markup language for use on  
the web.</p>
```

```
</body>
```

```
</html>
```

# Markup: Elements, Attributes and Values

Example of an **Image Element** (also referred to as an "image tag").

With an attribute of source and a value of "mypic.jpg".

The element contains a second attribute of width with a value of "100".

```

```

# Anchor

`<a> ... </a>`

href

event

name

tabindex

target

# Anchor – fully resolved URL

```
<a href="http://www.cnn.com">CNN</a>
```

# Anchor - relative URL

```
<a href="page2.html">Page 2</a>
```



# Paragraph

`<p> ... </p>`

# Line Break

`<br />`

# Comment

```
<!-- This is a comment. -->
```

# Special Entities

&lt; <

&gt; >

&quot; “

&copy; ©

&nbsp; non-breaking space

These are just a few of many special entities.