

COMSC-030

Web Site Development- Part 1



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NOTE: This lecture has audio. At the end of the chapter, you will need to answer the multiple choice questions and submit a screen shot of your review completion on the Canvas discussion board

Lecture 2



2

Creating Your First HTML 5 Page

Are you ready to start creating a Web page? This chapter shows you how to get started with a basic HTML 5 document.

Lecture 2 Topics: Creating Your First HTML Page

- Understanding HTML 5 Document Structure
- Start an HTML 5 Document
- Save an HTML5 Document
- View an HTML 5Page
- Add a Document Declaration
- Add Metadata



Understanding HTML Document Structure

**HTML
Element**

**Document
Type
Declaration**

**Document
Header**

Title

Metadata

Body

Understanding HTML 5 Document Structure

- An HTML documents are built on key **elements** that define a page's structure.
- Although every HTML page differs in content and layout, the underlying structure remains the same.
- Understanding the **basic structure** of a document can help you understand how to build and improve your own HTML page.



Understanding HTML Document Structure

HTML Element

- The **<HTML>** and **</HTML>** tags are the main tags used to identify an HTML document.
- An HTML element is everything from the **start tag** to the **end tag**:
- The start tag is often called the **opening tag**. The end tag is often called the **closing tag**.
- When a browser encounters these tags, it knows that anything within the two tags is part of an HTML document.

Understanding HTML Document Structure

HTML Element Syntax

- An HTML element starts with a **start tag** / opening tag
- An HTML element ends with an **end tag** / closing tag
- The element content is everything between the start and the end tag
- Some HTML elements have empty content
- Empty elements are closed in the start tag
- Most HTML elements can have **attributes**

Understanding HTML Document Structure

HTML Tags

- HTML tags are keywords surrounded by **angle** brackets like `<html>`
- HTML tags normally come in **pairs** like `` and ``
- The first tag in a pair is the **start tag**, the second tag is the **end tag**
- Start and end tags are also called **opening tags** and **closing tags**

Understanding HTML Document Structure

HTML Tags

**<HTML>
</HTML>**

**<HEAD>
</HEAD>**

**<TITLE>
</TITLE>**

<BODY>

<!DOCTYPE>

<META>

Understanding HTML Document Structure

HTML 5.0 Tag Resource

w3schools.com

HTML CSS JAVASCRIPT SQL PHP BOOTSTRAP HOW TO PYTHON W3.CSS JQUERY XML MORE ▾

HTML Reference

- HTML by Alphabet
- HTML by Category
- HTML Attributes
- HTML Global Attributes
- HTML Events
- HTML Colors
- HTML Canvas
- HTML Audio/Video
- HTML Character Sets
- HTML Doctypes
- HTML URL Encode
- HTML Language Codes
- HTML Country Codes
- HTTP Messages
- HTTP Methods
- PX to EM Converter
- Keyboard Shortcuts

HTML Tags

- <!-->
- <!DOCTYPE>
- <a>
- <abbr>
- <acronym>
- <address>
- <applet>
- <area>
- <article>
- <aside>
- <audio>
-
- <base>
- <basefont>
- <bdl>
- <bdo>
- <big>

HTML Element Reference

[← Home](#)

HTML Tags Ordered Alphabetically

🔍 Search..

Tag	Description
<code><!--...--></code>	Defines a comment
<code><!DOCTYPE></code>	Defines the document type
<code><a></code>	Defines a hyperlink
<code><abbr></code>	Defines an abbreviation or an acronym
<code><acronym></code>	Not supported in HTML5. Use <code><abbr></code> instead. Defines an acronym
<code><address></code>	Defines contact information for the author/owner of a document
<code><applet></code>	Not supported in HTML5. Use <code><embed></code> or <code><object></code> instead. Defines an embedded applet
<code><area></code>	Defines an area inside an image-map
<code><article></code>	Defines an article
<code><aside></code>	Defines content aside from the page content
<code><audio></code>	Defines sound content
<code></code>	Defines bold text
<code><base></code>	Specifies the base URL/target for all relative URLs in a document
<code><basefont></code>	Not supported in HTML5. Use CSS instead. Specifies a default color, size, and font for all text in a document

HTML 5.0 Tag Reference: <http://www.w3schools.com/tags/default.asp>

Understanding HTML Document Structure

Document Type Declaration

- You can add a **DOCTYPE** declaration to specify the version of HTML upon which the page is based.
- **<!DOCTYPE HTML>**



Understanding HTML Document Structure

Document Header

- You can use the document header to add basic information about your page.
- The document header tags, **<HEAD>** and **</HEAD>**, follow the **<HTML>** opening tag.
- You can use the document header to include title information, metadata and base and script elements.

Understanding HTML Document Structure

Title

- You can add a title to your document header to help others identify your page.
- For example, if you are building a Web page for a business, your company name is a good page title.
- Web browsers, display the title in the browser window's title bar.
- You can use the `<TITLE>` and `</TITLE>` tags to define a page title
- For best results, keep the title brief and to the point.

Understanding HTML Document Structure

Metadata

- Metadata is data that describes the material on your page, such as author information, any programs you used to create the page, a description of the page and keywords for search engines.
- You can use the metadata tags to add author and copyright information, too.
- You can place metadata between your document header tags.

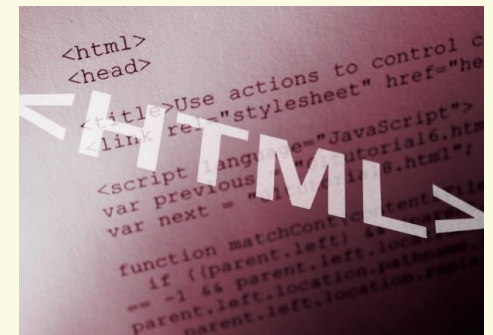
Understanding HTML Document Structure

Body

- The content of your page, including paragraphs, lists, and images, appears within the body of your HTML document.
- The body of the document is identified by the **<BODY>** and **</BODY>** tags.
- Anything you place between these tags appears on the document and in the browser window.
- The body of the document includes blocks of texts, headings, lists, tables, images and forms.

Start and HTML Document

- You can start an HTML document using a text editor or word processing program.
- You can use sets of HTML tags to define the **basic structure** of your page.
- The **<HTML>** **<HEAD>** and **<TITLE>** tags are basic to Web pages



Start an HTML Document

- The **<HEAD>** and **<TITLE>** information does **NOT** appear on the Web page itself.
- However, the text you include between these tags declares the **type of document** and briefly describes the page
- The text you place between these tags appear in the browser **window's title bar**.

Start an HTML Document



Start an HTML Document

1. Open the text editor.

2. Type **<HTML>**

This tag declares the document is an HTML document.

3. Press 

4. Type **<HEAD>**

This tag starts the information describing the page, including any title text.

5. Press 

Start an HTML Document

Start an HTML Document

6. Type **<TITLE>**.

7. Type **title text** for your page.

Title text describes the contents of the page and appears in the Title bar of the Web browser.

8. Type **</TITLE>**

9. Press 

10. Type **</HEAD>**.

This tag completes the document heading information for the page.

11. Press 

Start an HTML Document



Start an HTML Document

```
MyFirstPage.html - WordPad
File Edit View Insert Format Help
[Icons]
<HTML>
<HEAD>
<TITLE>My Web Page</TITLE>
</HEAD>
<BODY>
This is my first web page
</BODY>
</HTML>
```

Start an HTML Document



Does it matter if I type upper- and lowercase letters or all caps for my tags?

No, However, it helps to be consist with your tags, particularly if you run across an error later.

For example, typing tags in all uppercasse letters can make it easier to identify the tags on the page.

Start an HTML Document

(continued)

- You can use the body tags, **<BODY>** and **</BODY>** to add content to your page.
- Page content can include lines of text, paragraphs, bulleted and numbered lists and more.

Start an HTML Document



Start an HTML Document (continued)

12. Type **<BODY>**

This tag starts the actual content of your web page.

13. Press



14. Type the body text you want to appear on your page.

Body text is the content of your page, including lines of text, paragraphs, lists and more..

Start an HTML Document



Start an HTML Document

(continued)

15. Press



16. Type **</BODY>**

This tag closes the body portion of the page

17. Press



18. Type **</HTML>**

This tag closes the HTML declaration.

Start an HTML Document



Start an HTML Document

```
MyFirstPage.html - WordPad
File Edit View Insert Format Help
[Icons]
<HTML>
<HEAD>
<TITLE>My Web Page</TITLE>
</HEAD>
<BODY> ← 12
This is my first web page
</BODY> ← 16
</HTML> ← 18
```

Start an HTML Document



demo

How do I turn off WordPad's text wrapping?

If the text you type in WordPad scrolls off the screen, the text wrapping feature is turned off. You can turn on the next wrapping feature to keep the text in view all times.

The screenshot shows the WordPad interface with the 'Options' dialog box open. The 'Text' tab is selected. The 'Word wrap' section has three radio buttons: 'No wrap', 'Wrap to window', and 'Wrap to ruler'. The 'Wrap to window' option is currently selected. Red arrows and numbers indicate the steps to turn off text wrapping:

1. Click on the 'File' menu.
2. Click on 'Options...' in the 'View' menu.
3. Click on the 'No wrap' radio button.
4. Click on the 'OK' button.

Save an HTML Document

- When naming a Web page, do not use spaces and keep your filenames to letters and numbers.
- If you are creating a main page for a Website, it is common to name the page **index.html** or **default.htm**.



Save an HTML Document



Save an HTML Document

1. Click **File**.
2. Click **Save**
This tag declares the document is an HTML document.
3. Navigate to the folder or drive where you want to store the file.
4. Click here and select Text Document.
5. Type a name for the file followed by .html or .htm
6. Click **Save**
7. Click on **Yes**

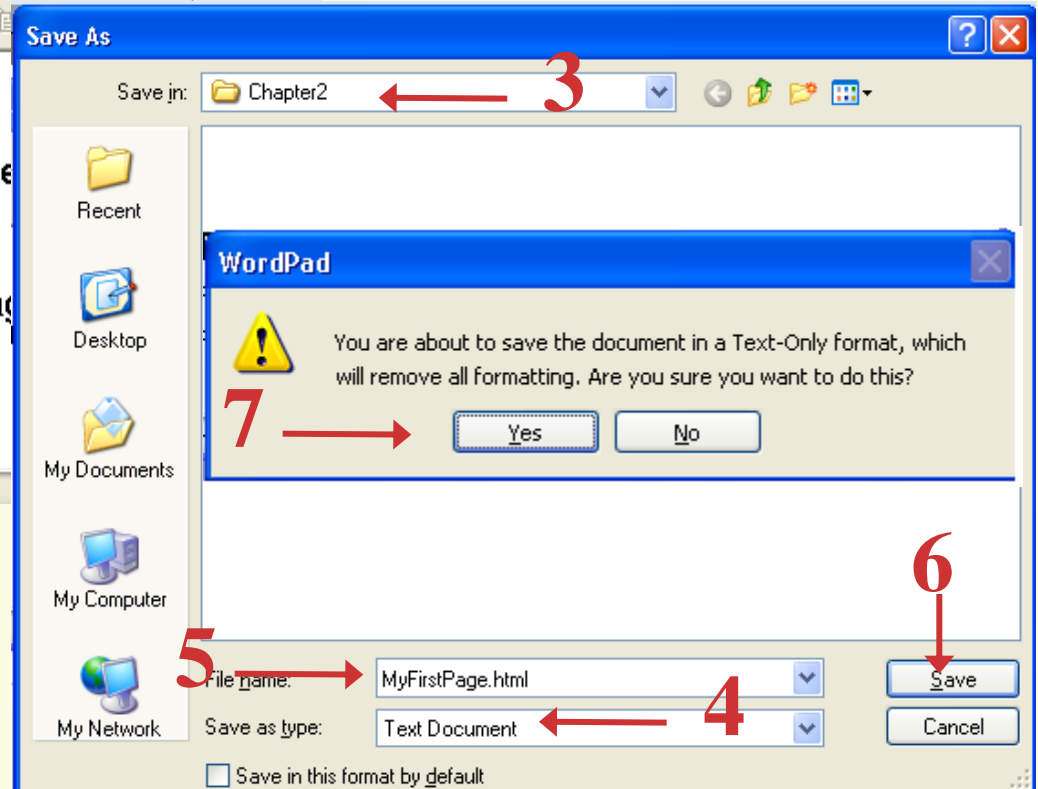
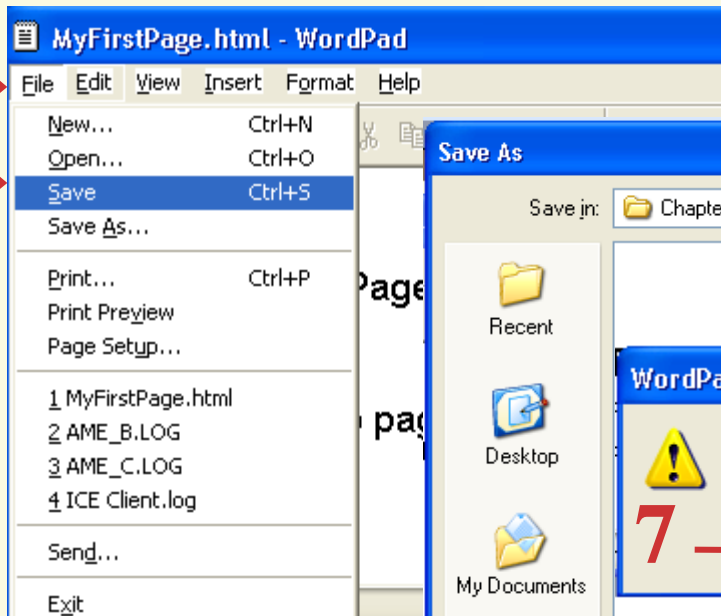
Save an HTML Document



Save an HTML Document

1 →

2 →



5 →

3 ←

7 →

4 ←

6 ↓

Save an HTML Document



What is the different between the .html and .htm suffix?

- The shorter suffix, also called a file extension **.htm** is left over the days of DOS when filenames could utilize only a three-character file extension.
- Web browsers and servers can read either extension; however, for consistency you might want to stick with **.html**.
- The .html extension is more universally used with various hosting systems.

Save an HTML Document



What makes a good filename for a Web page?

- Any time you name a file, you need to keep the name simple enough so you can remember it and locate it again later.
- Because filenames are important when used as hyperlinks and page titles, it is best to utilize a name that makes sense to type of page you are designing.



Save an HTML Document

(pg 25)



What makes a good filename for a Web page? *(continuation)*

- It is also a good idea to keep your Web page files in one folder.
- Give the folder a name that clearly identifies the content, such as My Web Pages.

View an HTML 5 Page

- After you create and save an HTML document, you can view it in your Web browser
- For example, you might view your pages to check how the content or image look in a browser or you might view pages to look for typing errors.



View an HTML Page



View an HTML Document

1. Open your Web browser.
2. Click **File**
3. Click **Open**
The Open dialog box appears.
4. Click **Browse**
5. Navigate to the folder or drive in which your HTML document is stored.
6. Click the filename

View an HTML Page



View an HTML Document

7. Click **OPEN**.

8. Click **OK**

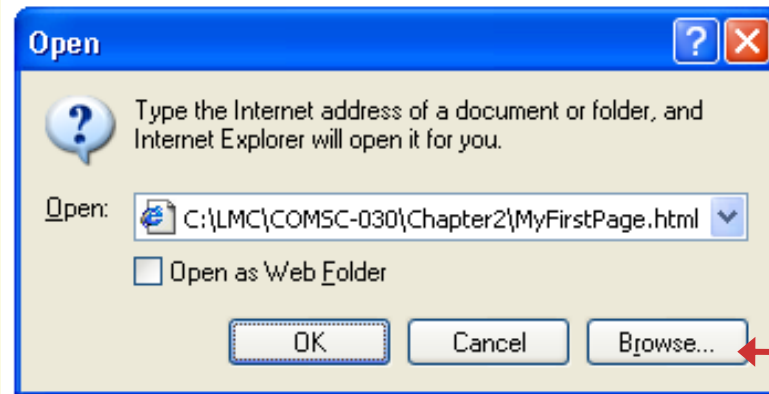
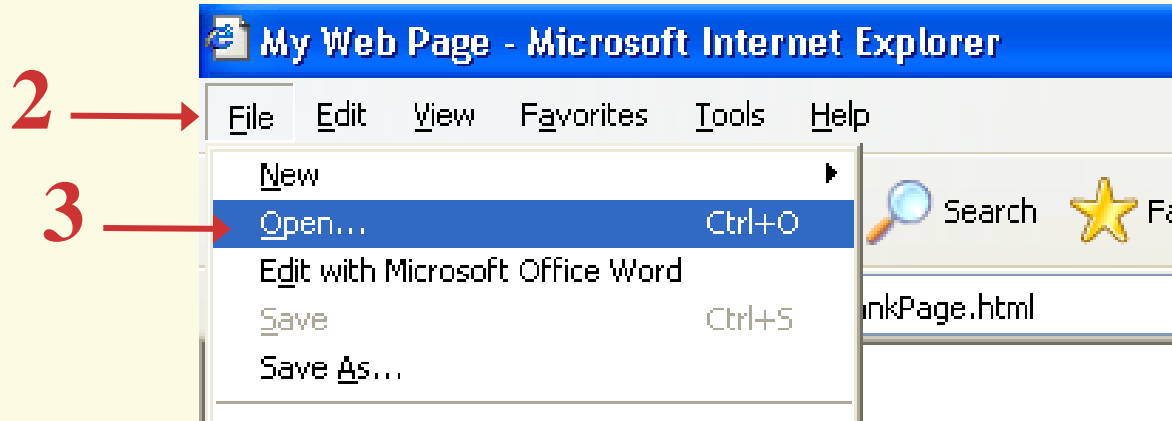
- The Web browser displays the page.
- The Title information appear
- The body information appears

Note: You can not see metadata information on the browser page.

View an HTML Page



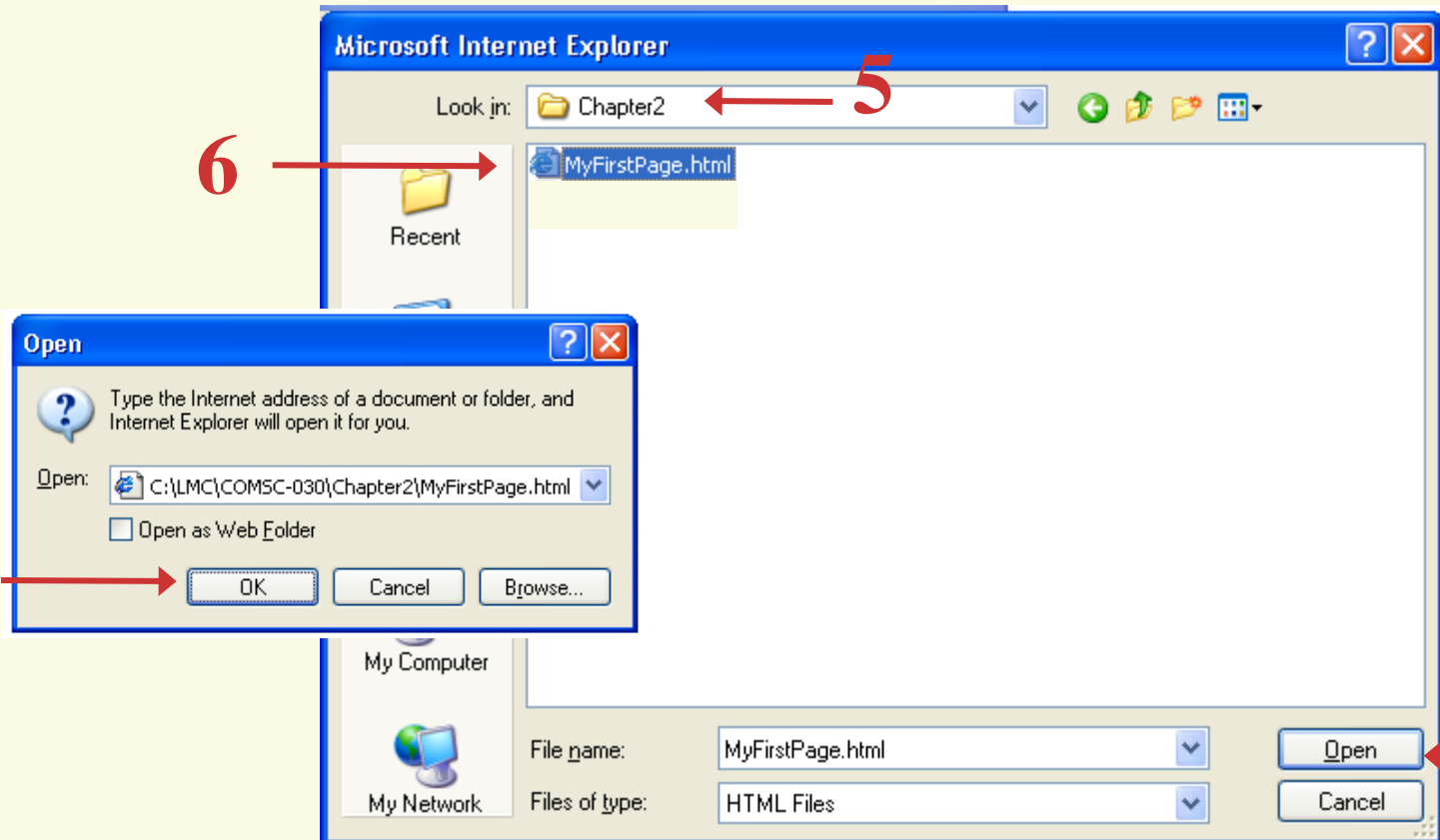
View an HTML Document



View an HTML Page



View an HTML Document

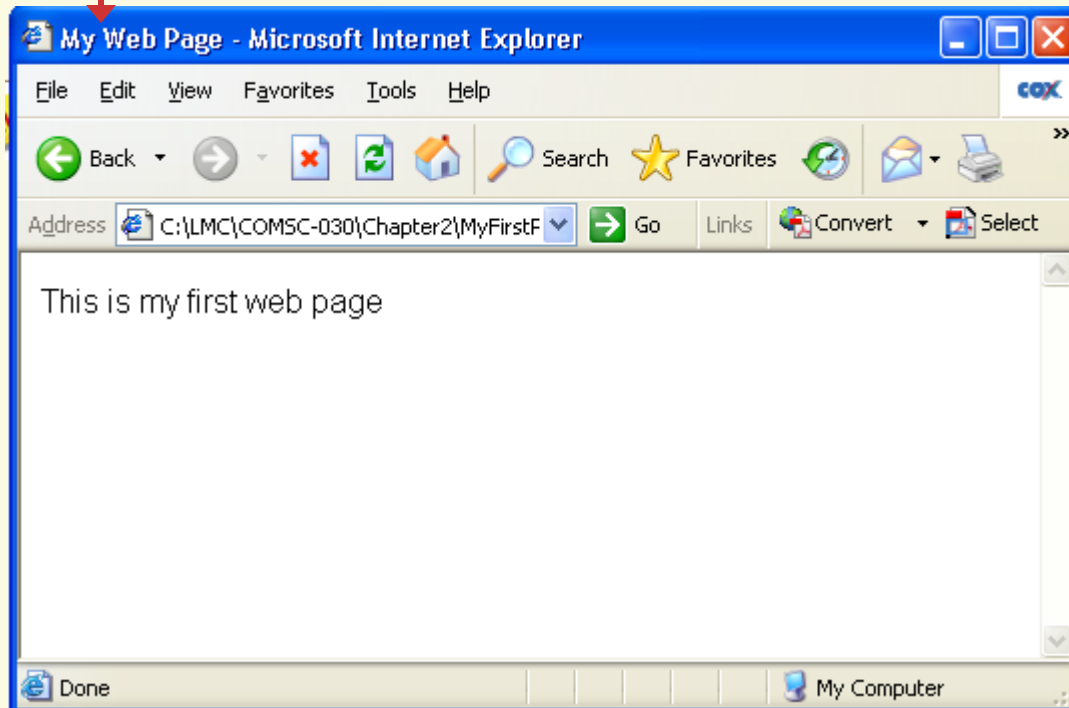


View an HTML Page



View an HTML Document

The title information appears here



View an HTML Page



Does it matter whether I view a page with Microsoft Internet Explorer or Netscape Navigator?

- No. Both browsers are set up to view pages offline as well as online.

View an HTML Page



What happens if I can not view my page?

- If you do not see any content for your page, you need to double-check your HTML coding for errors.
- Make sure your document uses **correctly paired start and end tags**.
- Proof read your HTML codes to make sure everything is correct.

Add a Document Declaration

- The **transitional version** of HTML is the most inclusive you can use.
- It includes all the standard structural elements as well as presentation elements.
- The **strict version** is a streamline version of the transitional version.
- The **frameset version** is the transitional version along with the necessary frame elements to display frames on Web page.

Add a Document Declaration

- You can use a document declaration at the top of your Web page to declare which version of HTML, you are using to create the page.
- You can utilize three types of HTML:
 1. HTML 4.01 Transitional
 2. HTML 4.01 Strict
 3. HTML 4.01 Frameset
- The document declaration tags contain a statement declaring the version.

Add a Document Declaration

- The DTD specifies the **rules** for the markup language, so that the browsers can render the content correctly.

http://www.w3schools.com/tags/tag_doctype.asp

Add a Document Declaration



Add a Document Declaration

1. Open the HTML document you want to edit.
2. Insert a new line before the `<HTML>` tag .
3. Type the **DOCTYPE** declaration

To specify **HTML 4.01 Transitional** type:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML  
4.01 Transitional//EN"  
"http://www.w3.org/TR/html4/loose.dtd">
```

Add a Document Declaration

Add a Document Declaration

To specify **HTML 4.01 Strict** type:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML  
4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">
```

To specify **HTML 4.01 Frameset** type:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML  
1.0 Strict//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-  
strict.dtd">
```

Add a Document Declaration



Add a Document Declaration

2 →

```
MyFirstPage.html - WordPad
File Edit View Insert Format Help
[Icons]
|
<HTML>
<HEAD>
<TITLE>My Web Page</TITLE>
</HEAD>
<BODY>
This is my first web page
</BODY>
</HTML>
```

3 →

```
MyFirstPage.html - WordPad
File Edit View Insert Format Help
[Icons]
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN"
"http://www.w3.org/TR/REC-html40loose.dtd">
<HTML>
<HEAD>
<TITLE>My Web Page</TITLE>
</HEAD>
<BODY>
This is my first web page
</BODY>
</HTML>
```

Add a Document Declaration



Do I have to declare an HTML version?

- No. Most browsers can display your page without a DOCTYPE declaration, but some browsers do not.
- To make sure your page is viewable by all Web browsers, it is a good idea to include a DOCTYPE declaration.
- You may want to add such a declaration as you become more familiar with designing Web pages.

Add a Document Declaration



Which version of HTML should I use?

- All Web browsers support HTML Transitional.
- However, developers are moving more toward HTML Strict and using with **CSS (cascading style sheets)** to control formatting.
- CSS offers greater flexibility with formatting yet does not necessary work well with all browsers.
- If your page users frames, then you use HTML Frameset because it allows you to add frames to a page.

Add Metadata

- **Keywords** and **page description** are the most common data Web developers enter into the metadata tags.
- However, metadata is also a great source for other Web page developers, enabling them to see who you are and what sort of notes or techniques you applied to create your page.

Add Metadata

- You can use metadata to give more details about your page:
 - page description
 - authoring information
 - copyrights
 - keywords
- Metadata does **not** appear on the Web page itself.
- The information you insert in the metadata tags is useful with **search engines** that glean information about your page.

Add Metadata Example

The image shows a web browser window displaying a website. The browser's address bar shows "Not secure | jmistal.com". The website has a dark blue header with the text "COMSC-030 Web Site Development - Part 1" in white. Below the header is a navigation menu with items: "Agenda & Reminders", "Course Syllabus", "Lecture Presentation", "Course Assignments", "Web Site Links", and "Final Course Project".

Below the website screenshot is a "view-source:jmistal.com" window showing the HTML source code. The code is as follows:


```
1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-
2 <html xmlns="http://www.w3.org/1999/xhtml">
3 <head>
4 <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
5 <link rel="icon" type="image/x-icon" href="images/favicon.ico" />
6 <link rel="shortcut icon" type="image/x-icon" href="images/favicon.ico" />
7
8 <meta name="author" content="Joenil Mistal" />
9 <meta name="description" content="LMC student web site for COMSC-30 Web Site Development Part 1 " />
10 <meta name="keywords" content="COMSC-031, LMC, Computer Science, Web Design, Los Medanos College" />
11
12 <title>COMSC-030 Web Site Dev Part 1</title>
```

The metadata tags on lines 8, 9, and 10 are highlighted with a red box in the original image.

Add Metadata




Add an Author Name

1. Click between the `<HEAD>` `</HEAD>` tag to start a new line.. Insert a new line after the `<TITLE>` tag .
2. Type `<META NAME="author">` and a blank space.
3. Type `CONTENT= "My Name">` replacing My Name with your name.
4. Press 

Add Metadata



Add a Page Description

5. Type **<META NAME= “description”** and a blank space.
6. Type **CONTENT=“Page Description”>** replacing Page Description with your own page description
7. Press 

Add Metadata

Specify Keywords

8. Type **<META NAME="keywords">** and a blank space
9. Type **CONTENT="My Keywords">** replacing My Keywords with a keyword.

Note: For multiple keywords, use a space and commas to separate each keyword

10. Press



Add Metadata

Add a Copyright

11. Type **<META NAME="copyright"** and a blank space
12. Type **CONTENT="2012">** replacing 2004 with your own numbers or copyright information.
13. Press 

Add Metadata



Add Metadata

```
index.html - WordPad
File Edit View Insert Format Help
[Icons] Arial 10 Western B
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
<HTML>
<HEAD>
<TITLE>My First Web Page</TITLE>
2 → <META NAME="author" CONTENT="Joenil Mistal">
3 → <META NAME="description" CONTENT="My First Web page"> ← 5
<META NAME="keywords" CONTENT="pet, dog, cat, horse">
<META NMAE= "copyright" CONTENT=" 2012" ← 12
</HEAD>
<BODY>
This is my first web page
</BODY>
</HTML>
```

Add Metadata



How do I add the name of the program I used to design my page to the metadata information?

- To specify an authoring program type `<META NAME= "generator" CONTENT= "Program Name">`

Add Metadata



Who can view my metadata?

- The only time anyone can see your metadata information is if they **view the HTML code** for the page.
- To view the HTML coding of any page in your browser window, click View and then click Source.
- This opens your text editor window and you can see the HTML page to create the page.
- Any metadata assigned to the document appears at the top within the **<HEAD>** and **</HEAD>** tags.