



THE UNIVERSITY OF WINNIPEG

ACS-1809-050
Web Design and Development

Chapter 2

DISCOVER • ACHIEVE • BELONG

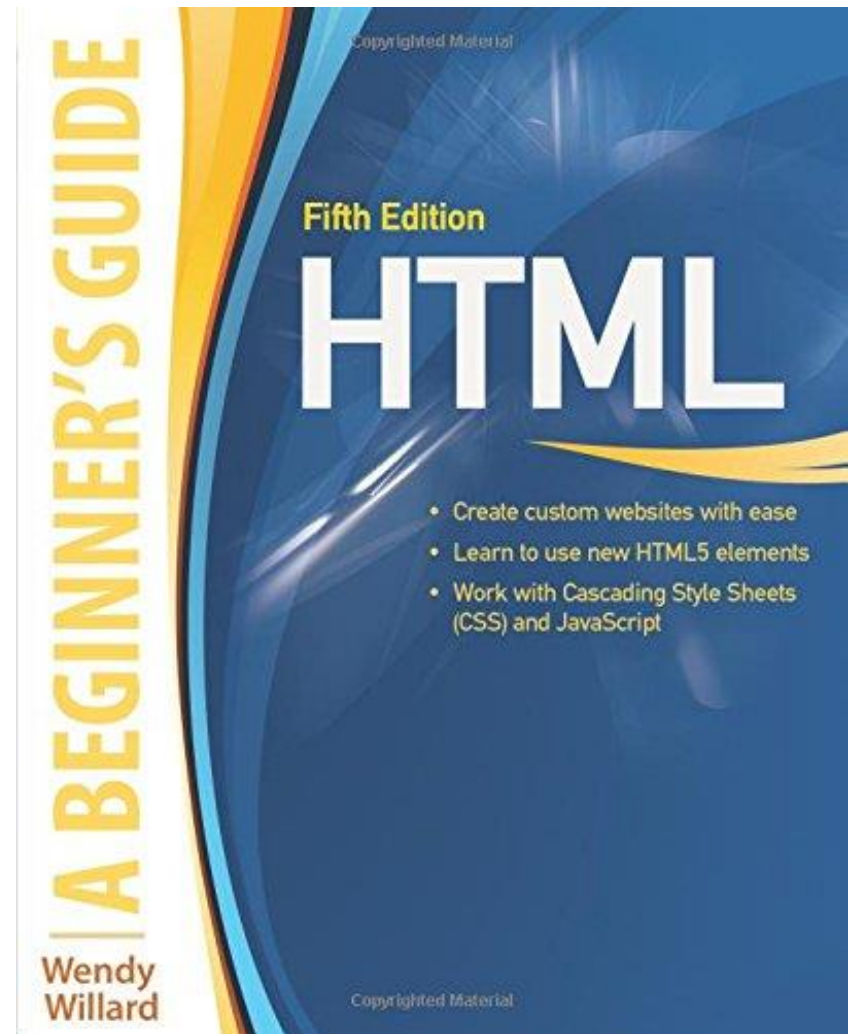
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Create an HTML file

- At their very core, HTML files are simply text files with two simple requirements.
 - *.htm* or *.html* as file extension name
 - They have *tags*.
 - *Tags* are commands or code used to tell the web browser how to display the page content.

HTML Example



```
< > C 88 view-source:https://www.uwinnipeg.ca
+ | X 1903-002-17Winter
1 <!DOCTYPE html>
2 <html xmlns="http://www.w3.org/1999/xhtml" class="no-js" lang="en">
3 <head>
4 <meta content="text/html; charset=utf-8" http-equiv="content-type"/>
5 <title>The University of Winnipeg</title>
6
7 <meta content="index, follow" name="robots"/>
8 <meta content="IE=9; IE=8; IE=7; IE=EDGE" http-equiv="X-UA-Compatible"/>
9
10 <link href="styles-2014.css" media="screen" rel="stylesheet" type="text/css"/>
11 <!-- IE 6-8 support for media queries https://github.com/scottjehl/Respond -->
12 <!--[if lt IE 9]>
13 <link href="/styles-2014-ie.css" media="screen" rel="stylesheet" type="text/css"/>
14 <script type="text/javascript" src="/_files/scripts/respond.min.js" ></script>
15 <![endif]-->
16 <!--[if IE]>
17 <script type="text/javascript">
18 (function(){
19 var html5elements = "address|article|aside|audio|canvas|command|datalist|details|dialog|figure|figcaption|footer|header|hgroup|keygen|mark|meter|menu|nav|progress|ruby|section|time|video".split('|');
20 for(var i = 0; i < html5elements.length; i++){
21 document.createElement(html5elements[i]);
22 }
23 })();
24 </script>
25 <![endif]-->
26 <link href="print.css" media="print" rel="stylesheet" type="text/css"/>
27
28 <!-- Arvo font http://www.google.com/fonts#UsePlace:use/Collection:Arvo -->
29 <link href="https://fonts.googleapis.com/css?family=Arvo:400,700" rel="stylesheet" type="text/css"/>
30
31 <meta content="width=device-width, initial-scale=1" name="viewport"/>
32 <meta content="yes" name="apple-touch-fullscreen"/>
33 <meta content="UWinnipeg" name="apple-mobile-web-app-title"/>
34 <link href="/files/images/responsive-2014/favicon.png" rel="icon" type="image/png"/>
35 <link href="/files/images/responsive-2014/apple-touch-icon.png" rel="apple-touch-icon-precomposed"/>
36 <link href="//ajax.googleapis.com/ajax/libs/jqueryui/1/themes/redmond/jquery-ui.css" rel="stylesheet" type="text/css"/>
37
38 <script src="https://code.jquery.com/jquery-latest.min.js" type="text/javascript"></script>
39
40 <script src="/files/scripts/jquery.cycle2.js" type="text/javascript"></script>
41 <script src="/files/scripts/custom.js" type="text/javascript"></script>
42 <script src="/files/scripts/accordion-nav.js" type="text/javascript"></script>
43 <script>
44 $(function() {
45 $("#accordion").accordion();
46 });
47 </script>
48 <script src="https://www.google.com/jsapi" type="text/javascript"></script>
49
50 <script src="https://uwinnipeg.ca/_files/scripts/facebook-conversion-code.js" type="text/javascript"></script>
51 <noscript>
52 
53 </noscript>
54
55
56 </head>
57 <body class="home">
58 <header id="topBar"><div class="layoutBlock"><a href="index.html" id="siteLogo">University of Winnipeg</a> <a href="#search" id="siteSearchLink">Search</a>
59 <div id="mobileNavLink">
60 </div></div>
```

Naming Conventions

- About the file name
 - Be consistent about *.htm* or *.html*
 - Case sensitivity
 - Simple file names with only letters and numbers.
 - Don't use spaces, punctuation, or special characters.
 - (No “-,_...”)
- Remember to save your file as a text file (on both PCs and Macs)

Preview of You HTML Work

- No need to upload the file to be able to preview in the browser
 - Use “open” from “File” menu in your browser.
 - Example
 - If the file is already opened in the web browse then just a “refresh/reload” is enough

HTML Document Format

- AN *HTML element* or *tag* is a command used to tell the browser how to display content on a page.
 - ` Reminder: `
- Tags are placed within *brackets* (`<` `>`).
 - *Example:* `<p>` creates paragraphs, `` creates list items, and `
` adds a line break.

Types of Tags

- “Opening” and “Closing” tags.
 - opening tag: to signify where to start a paragraph
 - Closing tag: to signify where the paragraph ends
 - `<p>`The same tag with a forward slash placed before it `</p>`
 - Not all tags in HTML5 are required to have both opening and closing tags.
 - They are called “empty” if just one tag
- ``

Attribute

- Many tags have additional aspects that you can customize. These options are called **attributes**
- *Attributes* are placed after the element name but before the final bracket

```
<img src= "mypicture.jpg" width="100" height="100" alt="A photo of me">
```

- Base element/tag is **img** : insert an image at this spot
- The attributes are: **src, width, height, alt**
- Each attribute has a **value**, which comes after = sign and is placed within quotation marks

Attributes

- Multiple attributes can be included in a single tag
- Only add the attributes to the opening tag, and then close this opening tag (NO attributes in closing tag)
- **img** tag doesn't have a separate closing tag
 - This is referred to as being “empty”
 - In early version of HTML, to close tags without separate closing versions, simply place a forward slash(/) before the final bracket
 - This is **not required in HTML5**, but good for stricter validation (like XML parser)

Types of Tags

- Document Setup
 - Elements in this category include those necessary to set up a basic HTML page – html, head, title, ...
- Text-Level Semantics
 - These elements help the browser understand the meaning behind bits of text content – fonts, ...
- Sectioning
 - Elements used to section large chunks of content and divide up the page belong in this category – div, header, ...
- Grouping
 - Elements used to section smaller chunks of content, like lists and paragraphs, fall into this category

Types of Tags

- Embedding
 - Often times, we need to embed content from other sources into a web page – image, video, audio, ...
- Tables
 - The elements that are used for managing tabular data
- Forms
 - Any element used in the development of a web form falls into this category

Basic HTML Page Tags

Opening Tag	Closing Tag	Description
!DOCTYPE	n/a	-Tells the browser about the standards used in your page.
<html>	</html>	-Frames the entire HTML page.
<head>	</head>	-Frames the identification information for the page, such as title, that is transferred to the browser and search engines.
<body>	</body>	-Frames the content of the page.
<title>	</title>	-Gives the name of the page that will appear at the top of browser window. - Is contained within <head> and </head>.

HTML Document

- HTML document is one big element
 - `<html>your html document</html>`
- There is a head and a body
 - Head: `<head>the header</head>`
 - contains information about the document like title, keywords for search engine, etc
 - Body: `<body>the body</body>`
 - contains the content of the web page
 - tells the browser how to display it
 - Body is always placed after the head element

Required tags - Example

```
<!DOCTYPE html PUBLIC "-//w3c//DTD XHTML 1.0 Transitional//EN"  
  "http://www.w3.org/TR/xhtml1/DTD/transitional.dtd">
```

```
<html>
```

```
<head>
```

```
<title> My First HTML page</title>
```

```
</head>
```

```
<body>
```

This is a very basic HTML page.

```
</body>
```

```
</html>
```

!DOCTYPE

The **!DOCTYPE** tag: tells which version of HTML is used in the document

- In HTML 4.01
 - **XHTML Transitional** : for documents that combine old and new HTML code
 - **XHTML Strict** : for documents that only use new code
 - **XHTML Frameset**: for documents containing frames
- Now it's much simpler for HTML5 – just use “html” for `<!DOCTYPE>`
`<!DOCTYPE html>`

Required tags - Example

So now the previous HTML code becomes:

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title> My First HTML page</title>
```

```
</head>
```

```
<body>
```

This is a very basic HTML page.

```
</body>
```

```
</html>
```

About the Tag

- In earlier days HTML was case insensitive
- HTML4 became case sensitive and requires all tags to be lowercase
 - All values for attributes must be placed within quotation marks

```
<p style="font-family: verdana;">
```



The value of the attribute

- Now in HTML5, it's case insensitive again
 - To keep backward compatible it's still recommended to use lower case for all the tags
 - as well as the quotation marks

Nesting

- Containing one HTML tag inside another

` This text is bold and italic`



The *em* tag is nested within strong tag

- Proper way and improper way to nest tags:

` These tags are nested properly.`

` These tags are not nested properly.`

Spacing and Break

- Two places within an HTML file to add breaks:
 - In between tags (as well as their components) -- to help you differentiate between sections of the page.
 - In between lines of text within the body of the page.

Spacing and Breaks

```
<html>  
  <head>  
    <title>My first web page</title>  
  </head>
```

The title tag here is indented to show it is contained or nested within the head tag.

Spacing Between Lines of Text

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <title> My first web page</title>
```

```
  </head>
```

```
  <body>
```

```
    Welcome.
```

```
    Thank you for visiting my first web page. I have several other  
    pages that you might be interested in.
```

```
  </body>
```

```
</html>
```

Spacing Between Lines of Text

To make those line breaks appear, you have to use a tag to tell the browser to insert a line break.

- `
` : simple line break.
- `<p></p>`: paragraph break.

Spacing Between Lines of Text

- So to display the blank line it should be in this way:

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

```
<p>Thank you for visiting my first web page. I have several  
other pages that you might be interested in.</p>
```

- HTML can not recognize extra space either
 - To put more than one space between words, you must use style sheets or special characters

Special Characters

Character	Numbered Entity	Named Entity
“	"	"
&	&	&
(nonbreaking space)	 	
©	©	©
®	®	®
é	é	é
<	<	<
>	>	>

Appendix D : full list

Comments

- To leave comments or notes that you don't want the visitors of your web site see (e.g. Reminders to yourself):

Space

<!-- Remember to update this page after the new product becomes available. -->

Space

- Any text this is enclosed between <!-- and --!> are comments
- Comments are good as reminder for yourself, and for other people.

Questions?



QUESTIONS



now