

XHTML

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Ready to go... you need....

- you need a text editor (pico, NotePad, WordPad)
- first type in the text
- then add the Tags around to format it
- type in a name for the Web page `xxx.html`
- ****note**** file names can contain letters & numbers, but **NO** spaces
- save as a **Text Document** (NotePad, WordPad)
- The main web page should be named `index.html`

XHTML versions

- XHTML transitional

Closest to HTML and is used when your code is most like HTML

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

XHTML versions

- XHTML frameset

To be used when your documents need to use the frame elements that partition the browser window.

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

XHTML versions

- XHTML strict

Most closely resembles the future of XHTML
Separates content from presentation .

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

Well-formed XHTML Docs

- The syntax rules are:
 - Must contain one root element:
`<html> . . . </html>`
 - All elements must have a start and end tag.
 - Elements must be nested properly.
 - Attributes must be placed in the start tag and no attribute can appear more than once
 - Element names are case sensitive
XHTML tags are in lowercase

Well formed vs. Valid Documents

- A well formed document is one in which the statements adhere to the structural rules of the language.
- Applies to the syntax.
- In order for the document to be valid, the contents must also conform to the DTD (DTD = Document Type Definition) DOCTYPE declaration
- DTD contains the set of all valid element and attribute names that can be used for that document type

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

How XHTML docs are structured

Three parts of an XHTML document!

1. Document prolog
contains information that the browser needs to know about the Web page
2. Header section
contains information that is not displayed in the browser's Web page display
3. Body of document
contains text and graphic inside the body element which are displayed in the browser's Web page display

```
<?xml version="1.0"?>
<!DOCTYPE html
PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html>
  <head>
    .
    .
  </head>
  <body>
    <!-- Body of document goes here -->
  </body>
</html>
```

DOCTYPE tag

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

<html> and </html> the root element

<html> first line of your doc
(after the doctype tag)!

</html> last line of your doc!

- need to identify the particular document as an XHTML document.
- you gotta tell it where it begins and ends!

<head> Title </head>

- The head contains information about the Web page, such as the title.
- Although Browsers will display Web pages without the head Tags, it is considered proper form to include them.

So far, your doc looks like this:

```
<?xml version="1.0"?>
<DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
  http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html>
<head>
this is where your title goes
</head>

</html>
```

```
<title> My beautiful Page </title>
```

```
<head>
<title> letters and numbers only </title>
</head>
```

- Your title will appear in the *title bar* of a Web Browser window.
- If you omit the </title> Tag, your document may disappear (not display in a browser)!

```
<body> the stuff in your page </body>
```

- You must place the <body> Tags around the body of your text. End with </body>
- Remember, </html> is *always* last!
- There should only be *one* <body> tag pair.

so far, your doc looks like...

```
<?xml version="1.0"?>
<DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
  http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html>
<head>
<title> My super fabulous Web Page </title>
</head>

<body>
The text of my Web Page.
How to succeed in Cog Sci 3.
come to class, drink lots a caffeine, go to
section and ask your TAs lots of questions.
</body>
</html>
```

Ready to display it?

- you can test out your Web page, and see how it will appear on the Web!
- get into your favorite browser
- to open your page, **click File-- > Open Page** and navigate to where you saved your file.
Or open it directly on the web once it's published
- When you make changes, check them out and see how they are working -- use RELOAD or REFRESH!!

Working with your XHTML

- Change only 1 thing at a time
- That way, you can be sure your change does what you thought.
- Save your change
- Use Reload or Refresh in your browser to see the change

Your Story

The Lost Pony

Chapter 1 -- at the Barn

The small gray pony lived with her mother in a large red barn at the end of a long winding road. The pony could see the road twisting away into the distance. She had even walked along it on the way to the pasture, but she had never seen the end of it.

Spaces and Spacing

- You want on your page:
The Lost Pony
Chapter 1 -- at the Barn
- So that's what you type into your "source".
- However, the browser will ignore your carriage returns and spacing to make it fit

fake browser

The Lost Pony Chapter 1 -- at the Barn The small gray pony lived with her mother in a large red barn at the end of a long winding road. The pony could see the road twisting away into the distance. She had even walked along it on the way to the pasture, but she had never seen the end of it.

fake browser -- narrow window

The Lost Pony Chapter 1 -- at the Barn The small gray pony lived with her mother in a large red barn at the end of a long winding road. The pony could see the road twisting away into the distance. She had even walked along it on the way to the pasture, but she had never seen the end of it.

Use the `
` tag

- `
` (line Break) means start a new line

The Lost Pony `
`

Chapter 1 -- at the Barn `
`

The small gray pony ...

Or ...

- XHTML is *context free* meaning that the `
` tags can also go:

The Lost Pony

`
` Chapter 1 -- at the Barn

`
` The small gray pony ...

Or perhaps

Or put the `
` tags on a line of their own:

```
The Lost Pony
<br />
Chapter 1 -- at the Barn
<br />
The small gray pony ...
```

Or even

The Lost Pony `
` Chapter 1 -- at the Barn `
` The small gray pony ...

In principle, you could have your XHTML source all be on 1 single line in your editor. But it will be ugly and very hard for you (or the graders :-)) to read.

fake browser

```
The Lost Pony
Chapter 1 -- at the Barn
The small gray pony ...
```

`<p>` start a new paragraph `</p>`

Put a `<p>` in front of every new paragraph.

`<p>` will insert a blank line for you :)

- can you predict what it will look like?

fake browser

```
The Lost Pony
    ← you put a <p> here
Chapter 1 -- at the Barn
```

Browsers ignore your SPACES!

non breaking space!

- you need to use a special code to keep blank spaces that you *really* want.

` ` for each blank space! ←

S A L E

- you need to:

```
<br />S &nbsp; A &nbsp; L &nbsp; E
```


- You would really write it as:
S A L E
- You *very rarely need*

Ready to add a Heading?

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

The Heading Tags

`<h1>Heading 1</h1>` **Heading 1**

`<h2>Heading 2</h2>` **Heading 2**

`<h3>Heading 3</h3>` **Heading 3**

`<h4>Heading 4</h4>` **Heading 4**

`<h5>Heading 5</h5>` **Heading 5**

`<h6>Heading 6</h6>` **Heading 6**

More Heading Tags ...

`<h1>Heading 1</h1>`

- Note, headings change the **size**,
- and they make the text **bold**,
- but they do **NOT** center!

Center the Heading

Use `<center> ...</center>`

`<center>`

`<h1>`

The Lost Pony

`</h1>`

`</center>`

More on Heading Tags ...

`<h1>The Lost Pony</h1>`

`<h3>Chapter 1 -- at the Barn</h3>`

The small gray pony lived with her mother in a large red barn at the end of a long winding road. The pony could see the road twisting away into the distance. She had even walked along it on the way to the pasture, but she had never seen the end of it.

Looks like:

The Lost Pony

Chapter 1 -- at the Barn

The small gray pony lived with her mother in a large red barn at the end of a long winding road. The pony could see the road twisting away into the distance. She had even walked along it on the way to the pasture, but she had never seen the end of it.

No `
` needed?

- In the previous example, with the `<h1>` and `<h3>` tags, no `
` was needed to get the `<h3>` heading on a new line, nor the text following the `<h3>` heading on a new line
- Some tags change the “text style” (like Heading tags, or even `<center>`), and they will give you an implicit `
`

Closing Tags

- In HTML, one was allowed to leave off the closing tag, if it is unambiguous for empty element tags.
- For example, `
` for a line brake and `<p />` for a new paragraph.

Close your Heading Tags ...

`<h1>The Lost Pony<h1>`

`<h3>Chapter 1 -- at the Barn</h3>`

The small gray pony lived with her mother in a large red barn at the end of a long winding road. The pony could see the road twisting away into the distance. She had even walked along it on the way to the pasture, but she had never seen the end of it.

Looks like:

The Lost Pony

Chapter 1 -- at the Barn

The small gray pony lived with her mother in a large red barn at the end of a long winding road.

...

Don't use `<h4>` to fix ...

`<h1>The Lost Pony<h1>`

`<h3>Chapter 1 -- at the Barn</h3>`

`<h4>` The small gray pony lived with her mother in a large red barn at the end of a long winding road. The pony could see the road twisting away into the distance. She had even walked along it on the way to the pasture, but she had never seen the end of it. `</h4>`

With the <h4> tags

The Lost Pony

Chapter 1 -- at the Barn

The small gray pony lived with her mother in a large red barn at the end of a long winding road. The pony could see the road twisting away into the distance. She had even walked along it on the way to the pasture, but she had never seen the end of it.

When it should look like:

The Lost Pony

Chapter 1 -- at the Barn

The small gray pony lived with her mother in a large red barn at the end of a long winding road. The pony could see the road twisting away into the distance. She had even walked along it on the way to the pasture, but she had never seen the end of it.

“Embedding” or “Nesting” Tags

- Sometimes you want to combine the effects of 2 or more tags.
- Like making a word both **bold** and *italic*
- Think of each set of <xxx> </xxx> pairs as creating a container. Then you can put that container inside another
- <i>Word</i> or <i>Word</i>

More Embedded Tags

```
<center>  
<h1>The Lost Pony</h1>  
</center>  
Or  
<h1>  
<center>The Lost Pony</center>  
</h1>
```

But NOT ...

```
<center>  
<h1>The Lost Pony</center>  
</h1>  
Or  
<h1>  
<center>The Lost Pony</h1>  
</center>
```

How to get this?

The Lost Pony

Chapter 1 At the Barn

The small gray pony lived with her mother in a large red barn at the end of a long winding road. The pony could see the road twisting away into the distance. She had even walked along it on the way to the pasture, but she had never seen the end of it.

More on Heading Tags ...

<h1>The Lost Pony</h1>

**<h3>Chapter 1
At the Barn</h3>**

The small gray pony lived with her mother in a large red barn at the end of a long winding road. The pony could see the road twisting away into the distance. She had even walked along it on the way to the pasture, but she had never seen the end of it.

But don't "stack" your tags ...

<h1>The Lost Pony</h1>

<h3>Chapter 1 </h3>

<h3>At the Barn</h3>

The small gray pony lived with her mother in a large red barn at the end of a long winding road. The pony could see the road twisting away into the distance. She had even walked along it on the way to the pasture, but she had never seen the end of it.

Gives you ...

The Lost Pony

Chapter 1



(extra vertical space!)

At the Barn

The small gray pony lived with her mother in a large red barn at the end of a long winding road. The pony could see the road twisting away into the distance. She had even walked along it on the way to the pasture, but she had never seen the end of it.

