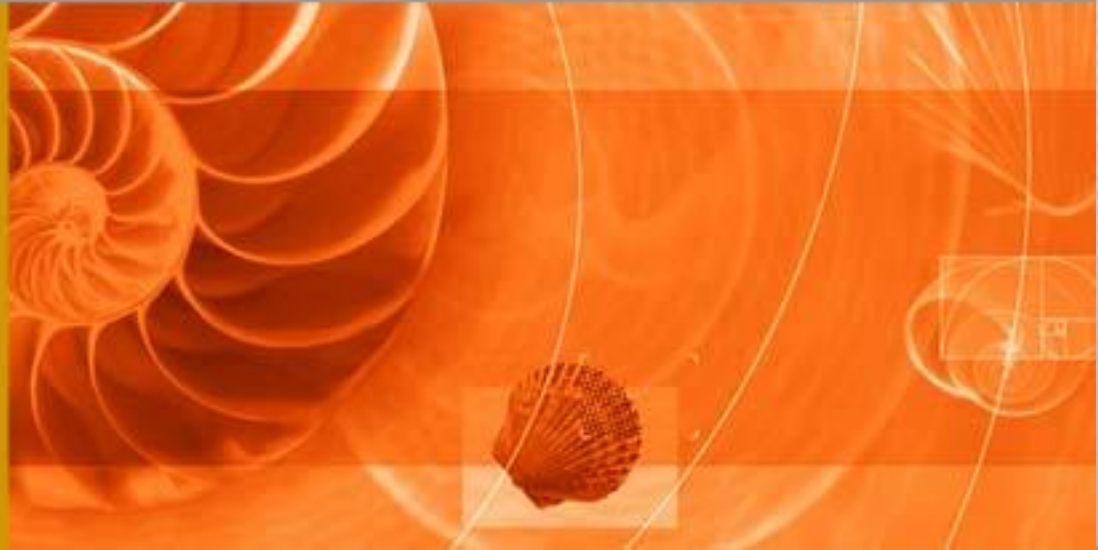


Fundamentals  
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# Basic HTML/XHTML

XHTML

# Things to Know about HTML

- HTML stands for Hypertext Markup Language.
- HTML is executed by the browser and not on the server.
- You do not have to log on to view local HTML pages.
- HTML tags are not case sensitive.
- HTML commands have both opening and closing tags.
- Most HTML tags have attribute settings for extra control.
- Undefined tags are ignored by the browser and not displayed.

# XHTML

- XHTML stands for eXtensible Hypertext Markup Language, and is basically HTML 4.0 with stricter rules. (Concepts that are the same in both HTML and XHTML will be referred to as HTML, whereas concepts that are unique to XHTML will be referred to as XHTML)
- In most cases, HTML and XHTML are the same, and it is our goal to create code that is compatible with both. When differences between the two occur, we will discuss how they are different and how to ensure our code is compatible with both.
- The most important restriction is that all XHTML tags must be in lowercase, whereas HTML tags are not case sensitive.

# Deprecated Tags

- Deprecated tags are older HTML tags and attributes that have been superseded by other more functional or flexible alternatives. Some of the tags we will cover in this course are deprecated tags, but we will not point them out as deprecated in this course.
- Why we still cover them? Just because some tags are deprecated does not mean people stopped using them. In fact most Web sites use deprecated tags and if you do not learn them, you will not have all the skills needed to make updates and changes to those sites.

# <!DOCTYPE> Tag

- The <!DOCTYPE> tag indicates to the Web server what type of document it's parsing (compiling).
- The <!DOCTYPE> tag supports both HTML and XHTML.
- It should be placed at the very top of all of your documents.
- It is interesting to note that the <!DOCTYPE> tag, which is the first tag at the top of an XHTML document, is defined as uppercase "DOCTYPE", yet the rules of XHTML state that all tags and attributes should be lowercase. There is no good explanation for this deviation from the standard.

# <!DOCTYPE> Tag

- This tag is required for an XHTML document to validate.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"  
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">  
<html>  
<head>  
<title>Welcome to HTML</title>  
</head>  
  
<body>  
Welcome to the world of HTML!  
</body>  
</html>
```

# <html> Tag

- After defining the document type, the <html> tag starts the rest of the document and the </html> tag ends it. These tags are used only once in each XHTML document.
- This tag is required for an XHTML document to validate.

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

<body>
Welcome to the world of HTML!
</body>
</html>
```

# Strictly Conforming Documents

- A Strictly Conforming XHTML Document is an XML document that requires only the facilities described as mandatory in the XHTML specification. Two of those are:
  - The root element of the document must be html
  - The root element of the document must contain an xmlns (XML Namespace) declaration

```
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">
```

# <head> Tag

- The <head> tag starts the document header and the </head> tag ends it. These tags are used only once in each HTML document.
- This tag is required for an XHTML document to validate.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>Welcome to HTML</title>
</head>
<body>
Welcome to the world of HTML!
</body>
</html>
```

# <title> Tag

- The <title> tag defines the start of the title bar text, and the </title> tag ends this text. These tags are used only once in each HTML document.
- This tag is required for an XHTML document to validate.

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

<body>
Welcome to the world of HTML!
</body>
</html>
```

# Character Set

- A character set tells the browser what type of encoding and language it is using.
- North American and Western Europe character set  
ISO-8859-1
- This tag is required for an XHTML document to validate.

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

<html>

  <head>
    <title></title>
    <meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1" />
  </head>
```

# Blank Lines

- Blank lines are ignored in HTML.
- They are use to separate text and make it easier to read.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>Welcome to HTML</title>
</head>
<body>
Welcome to the world of HTML!
</body>
</html>
```

# <body> Tag

- The <body> tag defines the start of your HTML document contents, and the </body> tag defines the end of your document. These tags are used only once in each HTML document.
- This tag is required for an XHTML document to validate.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>Welcome to HTML</title>
</head>
<b>body</b>
Welcome to the world of HTML!
</b>body</b>
</html>
```

# Required Format

```
<!DOCTYPE html
  PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
  "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1" />
    <title></title>
  </head>

  <body>

  </body>
</html>
```

# Text

- Text that is not part of an HTML tag is displayed by the browser.

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

<body>
Welcome to the world of HTML!
</body>
</html>
```

# <!-- Comment--> Tag

- A special comment tag exists for you to "document" your code. This tag is used to add comments that won't be displayed by the browser. Although undefined tags are also not displayed, using the comment tag shown below is the correct way to document an HTML file.
- Comment tags may be used throughout an HTML document.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>Welcome to HTML</title>
<!--This text will not be displayed-->
</head>
<!--This text will not be displayed-->

<body>
<!--This text will not be displayed-->
Welcome to the world of HTML!
</body>
</html>
```

# Overview of Tag Attributes

- Tag attributes are used to control color, size, width, height, and other HTML settings. If tag attributes are not specified, default settings are used. Default settings are determined by the browser and may differ by browser make and version. Some browser default settings (text color, text size, link color, and background color) can be altered by the user. To ensure that all users see virtually the same results, you can override user settings by setting tag attributes.
- All XHTML tags and attributes must be in lowercase, whereas HTML tags are not case sensitive. To be both HTML and XHTML compliant, we will use lowercase.

```
width="100"    color="blue"    size="+1"    color="#ffffff"  
height="25"   align="left"    border="0"    alt="Index"
```

# When Are Quotes Required?

- To be XHTML compliant, quotes are required around all attributes, however, with few exceptions, quotes are not needed around attribute values in standard HTML. For HTML, quotes are required only if the attribute value contains special characters or spaces.
- Since we want to build code that is both HTML and XHTML compliant, we will put quotes around all attributes.

# Controlling Your Colors

- The `<body>` tag allows you to set attributes that control the background color and default text color for your document, this will insure that all visitors see your page in the same color theme.
- If your browser's default colors are the same as the colors you select, you may not notice a change when you set these attributes; however, it is very important to set these attributes in all HTML documents. If you don't, the background color and text color for your page will be controlled by the default color settings in the visitor's browser.

# Bgcolor Attribute

- The "bgcolor" attribute is used to set the document background color and can be set only once per HTML page.

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

<body bgcolor="#ffffcc">
Welcome to the world of HTML!
</body>
</html>
```

# Text Attribute

- The "text" attribute is used to set the default text color for the document.

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

<body bgcolor="#ffffcc" text="blue">
Welcome to the world of HTML!
</body>
</html>
```

# Bold and Italic Tags

- Used to emphasize text
- Two-sided tags
- Examples

`<b>This is bold</b>`

**This is bold**

`<i>This is italic</i>`

*This is italic*

`<u> This is underlined</u>`

This is underlined

`<b><i><u>All three combined</u></i></b>`

**All three combined**

# Line Breaks

- Without "line break" tags, text that appears on separate lines in an HTML file will be displayed on the same line by the browser.

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

<body bgcolor="#bdbdbd" text="black">
This text will
all end up on
the same line.
</body>
</html>
```

# Break Tag

- A break in the line of text will appear wherever a line break tag "<br />" is placed.
- Starts the next word on the next line
- No space left between lines
- Unlike most tags in HTML, the <br /> tag has no closing tag, thus the " /" (there is a space before the slash) is placed at the end of the tag to make it XHTML compliant.

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

<body bgcolor="#bdbdbd" text="black">
This text<br />
will display on<br />
separate lines.<br />
</body>
</html>
```

# Break Tag

- Text need not be on separate lines for the `<br />` tag to work.

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

<body bgcolor="#bdbdbd" text="black">
This text<br />will display on<br />separate lines.<br />
</body>
</html>
```

# Preformatted Text

- HTML ignores extra spaces, tabs, and carriage returns and displays them as a single space. In the example below, the gaps will close up and the words will be separated by single spaces.

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

<body bgcolor="#bdbdbd" text="black">
This      text      will      all
      end      up      close
together on the same line.
</body>
</html>
```

# Preformatted Tag

- The preformatted text tag "<pre>" displays text in a fixed space font and preserves your original spacing and line breaks (the tag itself does not display). To end preformatted text display, use the closing tag "</pre>".

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

<body bgcolor="#bdbdbd" text="black">
<pre>This      text will      display
on separate   lines      with the
spacing and   line breaks preserved.</pre>
</body>
</html>
```

# Preformatted Tag

- Without the `<pre>` tag, text aligned by spaces can display in disarray.

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

<body bgcolor="#bdbdbd" text="black">
STOCK      SYMBOL      OWN      VALUE<br />
Microsoft  MSFT        100      $6500<br />
Ebay       EBAY        50       $900<br />
Yahoo     YHOO        200      $3700<br />
</body>
</html>
```

# Preformatted Tag

- With the `<pre>` tag, you can easily and correctly display text "tables" aligned by spaces.

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

<body bgcolor="#bdbdbd" text="black">
<pre>
STOCK      SYMBOL  OWN  VALUE
Microsoft MSFT   100  $6500
Ebay       EBAY   50   $900
Yahoo      YHOO   200  $3700
</pre>
</body>
</html>
```

# Paragraph Tag

- In early versions of HTML, the paragraph tag "<p>" had no closing tag and worked like a pair of line break tags <br /><br />, generating an extra space between lines.
- <P> </P> surrounds a paragraph of info
- Skips a line and starts a new paragraph

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

<body bgcolor="#bdbdbd" text="black">
Welcome to the world of HTML!<p>
Your passport to Internet creativity!
</body>
</html>
```

# Paragraph Tag

- XHTML has both an opening and a closing paragraph tag to isolate a paragraph. The "<p>" tag indicates the paragraph's beginning and the "</p>" tag indicates the paragraph's end.

In later versions of HTML the "</p>" closing tag is optional, however, the "</p>" closing tag is NOT optional for XHTML.

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

<body bgcolor="#bdbdbd" text="black">
<p>Welcome to the world of HTML!</p>
Your passport to Internet creativity!
</body>
</html>
```

# Headings

- Heading tags are similar to the paragraph tag since they are used to divide text sections. Heading tags come in six sizes from `<h1>` (biggest) to `<h6>` (smallest).
- A blank line is generated after the closing heading tag.

`<h1>Biggest</h1>`

`<h2>Very Big</h2>`

`<h3>Bigger than Normal</h3>`

`<h4>About Normal</h4>`

`<h5>Smaller</h5>`

`<h6>Smallest</h6>`

# Headings

- The heading tag should not be used to make text bold since some browsers number the headings. The bold tag "<b>" will be addressed later.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<title>Welcome to HTML</title>
</head>
<body bgcolor="#bdbdbd" text="black">
<h1>Heading Tag 1</h1>
<h2>Heading Tag 2</h2>
<h3>Heading Tag 3</h3>
<h4>Heading Tag 4</h4>
</body>
</html>
```

# Text Alignment

- The "<p>" tag has an "align" attribute you can use to left, center, or right justify text. Left justification is the default (it will occur without special instruction).

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

<body bgcolor="#bdbdbd" text="black">
<p>This text will be aligned to the left (the default)</p>
<p align="left">This text will also be aligned to the left</p>
<p align="center">This text will be aligned to the center</p>
<p align="right">This text will be aligned to the right</p>
</body>
</html>
```

# Text Alignment

- Heading tags can also use the "align" attribute to align text. Left alignment is the default, and will occur without special instruction.

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

<body bgcolor="#bdbdbd" text="black">
<h3>This text is left aligned (the default)</h3>
<h3 align="left">This text will also be aligned to the left</h3>
<h4 align="center">This text will be aligned to the center</h4>
<h5 align="right">This text will be aligned to the right</h5>
</body>
</html>
```

# Center Tag

- You can also use a stand alone <center> tag to center multiple lines at once.

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

<body bgcolor="#bdbdbd" text="black">
<bcenter>
*****
<h2>Welcome to the world of HTML!</h2>
<h3>Your passport to Internet creativity!</h3>
*****
</bcenter>
</body>
</html>
```

# Horizontal Rules

- The horizontal rule tag "<hr />" displays a shaded horizontal line across the screen "page." This can be an excellent way to visually separate sections of a Web page.

Unlike most tags in HTML, the <hr /> tag has no closing tag, thus the " /" (again, with a space before the slash) is placed at the end of the tag to make it XHTML compliant.

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

<body bgcolor="#bdbdbd" text="black">
This text will be displayed above the line.
<hr />
This text will be displayed below the line.
</body>
</html>
```

# Horizontal Rules

- The `<hr />` tag has a "width" attribute you can use to control the width of your horizontal rule.
- The width can be set by percentage or by number of pixels.

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

<body bgcolor="#bdbdbd" text="black">
<center>
This line is 75% of the window width
<hr width="75%" />
This line is 50% of the window width
<hr width="50%" />
This line is 300 pixels wide
<hr width="300" />
This line is 200 pixels wide
<hr width="200" />
</center>
</body>
</html>
```

# Horizontal Rules

- The "align" attribute also works with the <hr /> tag. The default alignment for the <hr /> tag is centered.

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

<body bgcolor="#bdbdbd" text="black">
<p align="left">left justified
<hr align="left" width="200" />
</p>
<p align="center">centered
<hr align="center" width="200" />
</p>
<p align="right">right justified
<hr align="right" width="200" />
</p>

</body>
</html>
```

# Horizontal Rules

- The `<hr />` tag also has a "size" attribute to control the thickness of the line in pixels.

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

<body bgcolor="#bdbdbd" text="black">
This line is 2 pixels thick
<hr size="2" />
This line is 4 pixels thick
<hr size="4" />
This line is 8 pixels thick
<hr size="8" />
This line is 16 pixels thick
<hr size="16" />
</body>
</html>
```

# Horizontal Rules

- The `<hr />` tag can be repeated with different "size" and "width" attributes for special effects.

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

<body bgcolor="#bdbdbd" text="black">
<center>
<hr width="200" size="2" />
<hr width="250" size="4" />
<hr width="300" size="6" />
<h2>Welcome to the world of HTML!</h2>
<hr width="300" size="6" />
<hr width="250" size="4" />
<hr width="200" size="2" />
</center>
</body>
</html>
```

# Tag Etiquette

- **Don't Start Anything You Can't Finish!**
- You must provide a closing tag for every opening tag that requires one.
- Always close the most recently opened tag first. By correctly "nesting" the opening and closing tags, you insure that the browser will execute the HTML tags correctly.
- In XHTML it is a requirement to close all tags in the correct order.

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

<body bgcolor="#bdbdbd" text="#000000">
<p>
<center>
<h2>
Welcome to the world of HTML!
</h2>
</center>
</p>
</body>
</html>
```

# Tag Etiquette

- One technique for insuring correct tag nesting is to indent the source code for each new tag. However, don't use this technique with preformatted text, as it can affect your results.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
  <title>Welcome to HTML</title>
</head>
<body bgcolor="#bdbdbd" text="#000000">
  <p>
    <center>
      <h2>
        Welcome to the world of HTML!
      </h2>
    </center>
  </p>
</body>
</html>
```

# Tag Etiquette

- Never close tags in an overlapping fashion. Improper nesting of opening and closing tags could cause the browser to display your page incorrectly.
- Again, in XHTML it is a requirement to close all tags in the correct order.

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

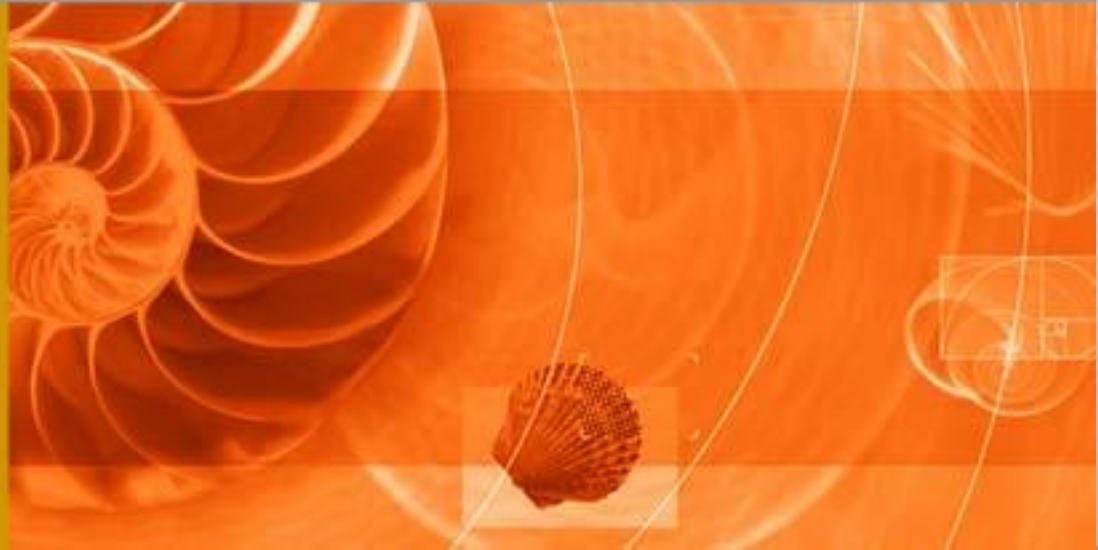
<body bgcolor="#bdbdbd" text="#000000">
<p>
<center>
<h2>
Welcome to the world of HTML!
</body>
</p>
</center>
</h2>
</html>
```

# Notepad

- **Open Notepad.exe**
- Creating HTML files from scratch requires a text editor. Microsoft's Windows notepad.exe (which should be on all Windows 98 and newer machines) is a very simple text editor.
- To run notepad.exe, click the following sequence of buttons in your Windows environment:



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# XHTML Validation

XHTML

# About XHTML Validation

- Writing code that looks like XHTML and writing code that will validate as true XHTML are two very different things. Thus far you have completed exercises that work correctly in your browser and appear to be XHTML, but to be truly correct, your code needs to be validated.
- There are two steps to validating XHTML code.
  - First the coding requirements of XHTML that if not followed will make your code fail validation
  - Then where to test your code for validation errors.

# Common XHTML Errors

- The list below contains the most common XHTML coding errors. Remember that most of these errors will not keep your pages from displaying correctly in your browser, but will keep them from validating.
  1. All pages must start with the DOCTYPE declaration.
  2. All pages must have a character set.
  3. All tags must be lower case.
  4. All attributes must be lower case.
  5. All tags must be closed.
  6. All attribute's values must be in quotes.
  7. Nested tags must not overlap.
  8. All <img> tags must have an "alt" attribute.

# XHTML Validation Tag Ordering Tips

- Valid XHTML is very picky about the ordering of some tags. For example, the following two statements give the same browser results, but only the first one will validate.

## Valid XHTML Code

```
<center><font size="+1">Valid XHTML Code</font></center>
```

## Invalid XHTML Code

```
<font size="+1"><center>Invalid XHTML Code</center></font>
```

# Valid XHTML Tips

## **Paragraph Tags**

`<p></p>` tags cannot contain a `<center>` tag  
`<p></p>` tags cannot contain `<h1>`-`<h6>` tags  
`<p></p>` tags cannot contain a `<hr>` tag  
`<p></p>` tags cannot contain `<ol>`, `<ul>`, `<dd>` tags  
`<p></p>` tags cannot contain a `<pre>` tag  
`<p></p>` tags cannot contain a `<table>` tag

## **Preformatted Text Tags**

`<pre></pre>` tags cannot contain a `<center>` tag  
`<pre></pre>` tags cannot contain `<h1>`-`<h6>` tags  
`<pre></pre>` tags cannot contain a `<hr>` tag  
`<pre></pre>` tags cannot contain a `<img>` tag  
`<pre></pre>` tags cannot contain `<ol>`, `<ul>`, `<dd>` tags  
`<pre></pre>` tags cannot contain a `<pre>` tag  
`<pre></pre>` tags cannot contain a `<table>` tag

## **Bold Tags**

`<b></b>` tags cannot contain a `<center>` tag  
`<b></b>` tags cannot contain `<h1>`-`<h6>` tags  
`<b></b>` tags cannot contain a `<hr>` tag  
`<b></b>` tags cannot contain `<ol>`, `<ul>`, `<dd>` tags  
`<b></b>` tags cannot contain a `<pre>` tag  
`<b></b>` tags cannot contain a `<table>` tag

# Valid XHTML Tips

## **Italic Tags**

`<i></i>` tags cannot contain a `<center>` tag  
`<i></i>` tags cannot contain `<h1>`-`<h6>` tags  
`<i></i>` tags cannot contain a `<hr>` tag  
`<i></i>` tags cannot contain `<ol>`, `<ul>`, `<dd>` tags  
`<i></i>` tags cannot contain a `<pre>` tag  
`<i></i>` tags cannot contain a `<table>` tag

## **Anchor Tags**

`<a></a>` tags cannot contain a `<a>` tag  
`<a></a>` tags cannot contain a `<center>` tag  
`<a></a>` tags cannot contain `<h1>`-`<h6>` tags  
`<a></a>` tags cannot contain a `<hr />` tag  
`<a></a>` tags cannot contain `<ol>`, `<ul>`, `<dd>` tags  
`<a></a>` tags cannot contain a `<pre>` tag  
`<a></a>` tags cannot contain a `<table>` tag

# Valid XHTML Tips

## Header Tags

`<h1>-<h6>` tags cannot contain a `<center>` tag  
`<h1>-<h6>` tags cannot contain `<h1>-<h6>` tag  
`<h1>-<h6>` tags cannot contain a `<hr>` tag  
`<h1>-<h6>` tags cannot contain `<ol>`, `<ul>`, `<dd>` tag  
`<h1>-<h6>` tags cannot contain a `<pre>` tag  
`<h1>-<h6>` tags cannot contain a `<table>` tag

## Font Tags

`<font></font>` tags cannot contain a `<center>` tag  
`<font></font>` tags cannot contain `<h1>-<h6>` tag  
`<font></font>` tags cannot contain a `<hr />` tag  
`<font></font>` tags cannot contain `<ol>`, `<ul>`, `<dd>` tag  
`<font></font>` tags cannot contain a `<pre>` tag  
`<font></font>` tags cannot contain a `<table>` tag

# Valid XHTML Tips

## #1 Validation Rule

You can not have an inline tag outside of a block level tag.

### Inline Tags

- Font
- Bold
- Underline
- Italic
- Anchor
- Image

### Block Level Tags

- Paragraph
- Preformatted
- Center
- Horizontal Rule
- Ordered/Unordered lists
- Headings

# Validating XHTML Code

- The best way to validate your code is to use the validator created by the same people that created the standard, [www.w3.org](http://www.w3.org).
- You can validate your pages by using the following link code:

```
<a href="http://validator.w3.org/check/referer">  
  
</a>
```

# Validating XHTML Code

- Or by visiting [validator.w3.org](http://validator.w3.org) then entering the URL of your page(s). In either case, your page(s) will need to be uploaded to the Internet so the validator can find them.
- Right now, you may not understand everything the validator returns to you, but don't worry, you will understand more as you learn more skills.