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HTML5 and CSS3

ICT 580

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Lesson 2

More HTML Coding

Lesson Outcomes

By the end of this lesson, you will be able to:

- Choose specific HTML tags to add elements to your simple web page
- Use the correct tags to embed elements in your web page
- Debug your web page if errors occur



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Review Discussion

Does a tag always need to be opened and closed?



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Review Discussion

What does code that is written in the `<head>` element do?



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Review Discussion

What does code that is written in the `<body>` element do?

Review Discussion

Give an example of when you would need to nest a tag within another tag?

<a> Links

- The href attribute is required for all links. The href value is the link's web address/URL
- The href value can be relative or absolute



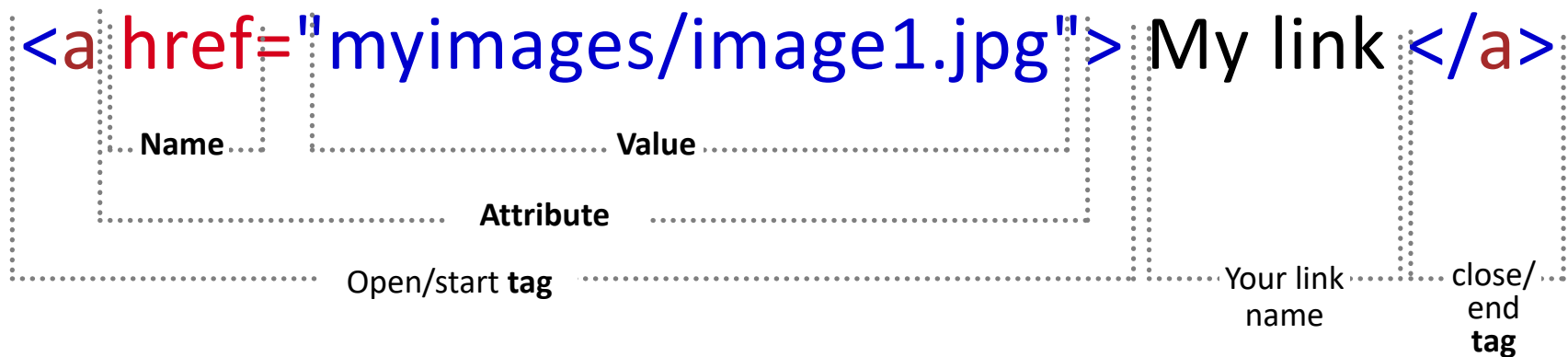
<a> Links

- **Absolute link:** A complete hyperlink to a website.
<http://www.asite.com>



<a> Links

- **Relative link:** A path to a folder or file within the website *myimages/image1.jpg*



<a> Links

- An optional attribute is the target which sets where the link will open:
 - `_blank` is in a new browser window/tab
 - `_self` is in the same window (default value)

` My link `

Name	Value	Name	Value
href	"http://www.asite.com"	target	"_blank"

Attribute 1 Attribute 2

Open/start tag Your link name close/end tag

 Adding Images

- Must include the src attribute which tells the browser where the image is. The src can be absolute or relative
- Should also include an alt attribute to tell users what the image is if it cannot load, or for being described by a screen reader
- Does not need a closing/end tag

``

Name	Value	Name	Value
src	"myimage.jpg"	alt	"description of image"
Attribute 1		Attribute 2	

Open/start tag

 Unordered list tag

- Each item in the unordered list requires a list tag
- The list item tag must be nested in the tag

code

```
<ul>My unordered list:  
    <li>List item 1 </li>  
    <li>List item 2</li>  
    <li>List item 3</li>  
    <li>List item 4</li>  
  
</ul>
```

browser

My unordered list:

- List item 1
- List item 2
- List item 3
- List item 4

 Unordered list tag

- Each item in the unordered list requires a list tag
- The list item tag must be nested in the tag

code

```
<ul>My unordered list:
```

```
  <li>List item 1 </li>
```

```
  <li>List item 2</li>
```

```
  <li>List item 3</li>
```

```
  <li>List item 4</li>
```

```
</ul>
```

*Remember to use
tabs to easily see the
nested structure of
your code*

browser

My unordered list:

- List item 1
- List item 2
- List item 3
- List item 4

 Ordered list tag

- Each item in an ordered list requires a list tag
- The list item tag must be nested in the tag

code

```
<ol>My ordered list:  
    <li>List item 1 </li>  
    <li>List item 2</li>  
    <li>List item 3</li>  
    <li>List item 4</li>  
  
</ol>
```

browser

My ordered list:

1. List item 1
2. List item 2
3. List item 3
4. List item 4

<!-- HTML Comments -->

- Text between these tags is not displayed in the browser
- Comments explain what is happening in your code

code

```
<!--Comments don't show in the browser. -->  
<ol>My ordered list:  
    <li>List item 1 </li>  
    <li>List item 2</li>  
    <li>List item 3</li>  
    <li>List item 4</li>  
</ol>
```

browser

My ordered list:

1. List item 1
2. List item 2
3. List item 3
4. List item 4

Table structure

- A table has nested tags to specify rows and columns

<code><table></code>	<i>Declares a table</i>
<code><tr></code>	<i>Declares a table row</i>
<code><th>My Table Heading</code>	<i>Defines a table heading</i>
<code></th></code>	
<code></tr></code>	
<code><tr></code>	
<code><td>My Table cell</code>	<i>Defines a table cell</i>
<code></td></code>	
<code></tr></code>	
<code></table></code>	

<table>

- Content nested inside will display as a table
- Requires rows and cells to be defined using <tr>,<td>

code

```
<table>  
</table>
```

browser

<tr> Table Row

- Info nested inside will display in one row
- Requires cells to be defined using <th>or<td>

code

```
<table>
  <tr>
    <th>Name</th>
    <th>Address</th>
  </tr>
  <tr>
    <td>Jason</td>
    <td>34 Coachwood Road WEST</td>
  </tr>
</table>
```

browser

Name	Address
Jason	34 Coachwood Road WEST

<td> Table Cell

- Table Content
- Content nested inside displays in one cell

code

```
<table>
  <tr>
    <th>Name</th>
    <th>Address</th>
  </tr>
  <tr>
    <td>Jason</td>
    <td>34 Coachwood Road WEST </td>
  </tr>
</table>
```

browser

Name	Address
Jason	34 Coachwood Road WEST

<th> Table Heading

- Will display in bold or distinct format
- Can be used for both row or column headings

code

```
<table>
  <tr>
    <th>Name</th>
    <th>Address</th>
  </tr>
  <tr>
    <th>Jason</th>
    <td>34 Coachwood Road WEST </td>
  </tr>
</table>
```

browser

Name	Address
Jason	34 Coachwood Road WEST

<caption>

- Gives the table a title

code

```
<table>
  <caption>What the table is called</caption>
  <tr>
    <th>Name</th>
    <th>Address</th>
  </tr>
  <tr>
    <td>Jason</td>
    <td>34 Coachwood Road WEST</td>
  </tr>
</table>
```

browser

What the table is called

Name	Address
Jason	34 Coachwood Road WEST

Table Attributes

- Colspan defines how many columns one cell spans
- Rowspan defines how many rows one cell spans

code

```
<table>
  <caption>What the table is called</caption>
  <tr>
    <th>Name</th>
    <th colspan="2">Address</th>
  </tr>
  <tr>
    <td>Jason</td>
    <td>34 Coachwood Road WEST</td>
    <td>T1K 6B5</td>
  </tr>
</table>
```

browser

What the table is called

Name	Address	
Jason	34 Coachwood Road WEST	T24 3W7

Table Attributes

- Colspan defines how many columns one cell spans
- Rowspan defines how many rows one cell spans

code

```
<table>
  <caption>What the table is called</caption>
  <tr>
    <th>Name</th>
    <th>Address</th>
  </tr>
  <tr>
    <td rowspan="2">Jason</td>
    <td>34 Coachwood Road WEST</td>
  </tr>
  <tr>
    <td>T1K 6B5</td>
  </tr>
</table>
```

browser

What the table is called

Name	Address
Jason	34 Coachwood Road WEST
	T1K 6B5

Semantic Markup

Semantic markup describes your content to search engines and screen readers

- For example, you can use the ``my important text`` to tell the browser that the content is important
- Browsers have a default style for these tags

Semantic Markup

- `` meaning emphasize (usually displayed as *italics*)
- `` meaning important text (usually displayed as **bold**)
- `<q>` Text will display in quotation marks
- `<blockquote>` Quote indented on both left and right margins

Debugging HTML

- Use an HTML validator to find errors in your code
- [https://validator.w3.org/#validate by uri](https://validator.w3.org/#validate_by_uri)

Review Question

What is missing?

`<p>`HTML is a mark-up language that:`</p>`

- ``displays content on a web page``

- ``is useful for adding images and links to your web page``

``



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Review Question

Why is the “alt” tag helpful?

```

```



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Review Question

What's the difference between an absolute and a relative link?



Review

In this class we discussed:

- The structure of HTML Attributes
- The following tags:
 - `<a>`
 - ``
 - `<table>`
 - `<tr>`, `<th>`, `<td>`
 - ``, ``
 - ``
 - `
`
- Semantic markup
- Debugging HTML



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Assignment 1

Create a Simple Webpage (10%)



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Questions?