Web Development

Higher Diploma in Science in Computer Science



Eamonn de Leastar (edeleastar@wit.ie)

Department of Computing, Maths & Physics Waterford Institute of Technology

http://www.wit.ie

http://elearning.wit.ie





HTML Elements

Web Development

HTML Elements - Categories

- Structural Elements
- Head Elements
- Text Formatting Elements
- List Elements
- Image and Media Elements
- Table Elements
- Form Elements
- Frame and Window Elements
- Deprecated Elements
- Proprietary & Nonstandard Elements

HTML Elements - Categories

- Structural Elements
- Head Elements
- Text Formatting Elements
- List Elements
- Image and Media Elements
- Table Elements
- Form Elements
- Frame and Window Elements
- Deprecated Elements
- Proprietary & Nonstandard Elements

Structural Elements - <html>

- The html element is the outer container for everything that appears in an HTML document.
- It can only contain two elements as direct descendants, namely the head element and either a body or frameset element.
- As it is the outermost element in the document, it's also known as the root element.
- This element will have a place on every single web page you ever create. There's no case in which you would not use this element when crafting a web page.

```
<html>
    <html>
    <head>
        <title>Page title goes here</title>
    </head>
    <body>
        <!-- content goes here -->
        </body>
</html>
```

Structural Elements - <head>

- The head element is the wrapper for all the head elements that:
 - instruct the browser where to find style sheets,
 - define relationships that the document has to others in the web site;
 - provide essential meta information;
 - point to or include scripts that the document will need to apply later on.

```
<html>
    <html>
    <head>
        <title>Page title goes here</title>
    </head>
    <body>
        <!-- content goes here -->
        </body>
    </html>
```

Structural Elements - <body>

- The body element wraps around all of the content that will be displayed on screen.
- You should not place character data (text) or inline elements such as em, or q directly into the body.
- Instead, these should be contained inside block-level elements such as p elements, headings h1 - h6 and so on.

```
<body>
  <h1>101 Ways to make a paper aeroplane</h1>
  Let's start with the basics ...
  :
  </body>
```

Structural Elements - <h1-h6>

- The h1 element is used to indicate the most important (or highest-level) heading on the page.
- There are six heading levels to h1 to h6—to add structure to the web page.
- A document's first heading should be an h1, followed by one or more h2 headings; each of these h2 headings can then have a further series of h3 headings below them, and so on
- May contain any text content, but it can't include any block-level elements: only inline elements can be included

```
<h1>News and Views</h1>

    Bits of news, words of advice

<h2>September 3, 2010</h2>

    <img src="images/robinhood.jpg" alt="Robin Hood">
```

News and Views

Bits of news, words of advice

September 3, 2010



Structural Elements - <blockquote>

- The blockquote element is a mechanism for marking up a block of text quoted from a person or another document or source.
- It may be just a few lines, or it may contain several paragraphs which must be marked up using nested p elements).

Not so good one from film.com:

The film is pretty, and there are a few solid moments every hour. But considered as a work of cinema, with paid professionals involved, it's an extremely lackluster story.

Might be worth watching.

Structural Elements -

 Creates a line break within a block of text, leaving no padding or margins between the two blocks of text created by the line break

```
There was an old man from Swindon, <br>
A place that rhymed only with 'pinned on,' <br>
Okay, well that's fine, <br>
Until the fifth line, <br>
At which point ... well, I'm totally out of luck.
```

There was an old man from Swindon,
A place that rhymed only with 'pinned on,'
Okay, well that's fine,
Until the fifth line,
At which point ... well, I'm totally out of luck.

Structural Elements -

- One of the most commonly used building blocks of HTML.
- When you use the p element to begin a new paragraph in HTML, it automatically creates some space above and below the content.
- Can only contain inline elements

We endeavour to give you your most wanted DVD and/or Game from your rental queue depending on our stock situation. All DVDs and Games are posted out at noon FIRST CLASS, and should be at your doorstep by the next morning.

When we dispatch your DVD/Game we'll send you an e-mail to advise you on which DVD/Game was dispatched to you. There are no late fees so you can watch or play at your leisure

We endeavour to give you your most wanted DVD and/or Game from your rental queue depending on our stock situation. All DVDs and Games are posted out at noon FIRST CLASS, and should be at your doorstep by the next morning. When we dispatch your DVD/Game we'll send you an e-mail to advise you on which DVD/Game was dispatched to you. There are no late fees so you can watch or play at your leisure

Head Elements - <title>

- Displaying a title in the browser toolbar or in the task bar (on Windows)
- Providing for the document a name that's used by the browser when you add the page as a favorite or bookmark
- Displaying a title of the page when it appears in search engine results

```
<html>
<head>
<title>
FAQ
</title>
</head>
```



Head Elements - <style>

- Define style aspects of the page
- Encapsulate syntax from a language different from HTML CSS.

```
<style type="text/css">
  body
{
  background-color: #d2b48c;
  margin-left: 20%;
  margin-right: 20%;
  border: 1px dotted gray;
  padding: 10px 10px 10px 10px;
  font-family: sans-serif;
  }
</style>
```

Text Formatting Elements - <a>

- Usually referred to as a link or hyperlink
- Has a 7 possible attributes in total, of which we have seen just one: href, which defines the document to which the link leads. This may be
 - a web page in the same directory,
 - a page somewhere else on the same server,
 - a location within the current page,
 - a web page—or any another kind of document—stored on another server.

```
<a href="catalogue/newreleases.html">new releases</a>
```

 In a link to another section within the same page, the destination is identified in the href attribute by a hash symbol combined with the id attribute of the

destination

```
<a href="#q1">Q.Does it matter where I live?</a>
```

```
<a id="q1">Q.Does it matter where I live?</a>

A.Our service is only available in the republic of Ireland,
  we use "An Post" and deliver to all 26 counties.
```

Text Formatting Elements -

 The em element is used to emphasize text content, and displays in italics in all current browsers. It provides semantic meaning about the text it contains,

This week we recommend the Crazies.

reccomend the Crazies.

Text Formatting Elements - <q>

- Used for inline quotations (instead of blockquote, which sets the quotation in its own block.
- It is intended that the browser should insert the necessary quotation marks, the style of which should depend on the language of the document or that section of the document, rather than the author adding quotation marks
- This can sometimes cause double sets of quotation marks to appear.

Not so good one from film.com: <q>The film is pretty, and there are a few solid moments every hour. But considered as a work of cinema, with paid professionals involved, it's an extremely lackluster story.</q>

Not so good one from film.com: "The film is pretty, and there are a few solid moments every hour. But considered as a work of cinema, with paid professionals involved, it's an extremely lackluster story."

List Elements - Unordered List -

 Used to group a collection of items together in a list, but in a way that doesn't suggest an order of precedence or importance.

```
    Individual items in the list
marked with - li
```

```
    Avatar
    Titanic
    Lord of the Rings: Return of the King
```

- Avatar
- Titanic
- Lord of the Rings: Return of the King

List Elements - Ordered List -

- Like ul, used to group a collection of items together in a list
- However, the bullets in an unordered list are replaced with a series of incrementing numbers

```
    Robin Hood
    Prince of Persia, Sands of Time
    Date Night
    Last Chance, CO
    Bad Leutennant: Port of Call - New Orleans
    Cop Out
```

- 1. Robin Hood
- 2. Prince of Persia, Sands of Time
- 3. Date Night
- 4. Last Chance, CO
- 5. Bad Leutennant: Port of Call New Orleans
- 6. Cop Out

Image & Media Elements -

- Provides a means for embedding an image in the document.
- Has a total of 12 attributes

- src provide a link to the image to be displayed
- alt provides text to be displayed if the image cannot be retreived.
- Height & Width provide (optional)
 dimensions. Used to help the browser
 lay out images properly, and should
 co-inside with the actual image
 dimensions





Except where otherwise noted, this content is licensed under a Creative Commons Attribution-NonCommercial 3.0 License.

For more information, please see http://creativecommons.org/licenses/by-nc/3.0/



