Advanced HTML Topics

Week Two

Attributes

- Attributes are included inside the opening tag
  - Example is the href attribute from the image tag in the last powerpoint
- An attribute is used to describe the tag
  - Later on, they can be used to give a specific tag style with CSS without having to include it in a separate CSS file, for now href is the only tag to know

Links

- Similar syntax to image tags from earlier, uses href attribute
  - Text To click on
  - Tips - Don't use the url link as text displayed - it looks ugly. Use text between the open/close tags as the text to click on.
  - Href stands for **H**ypertext **Ref**erence

Links to file Locations

- Quick lesson on file paths:
  - If a file is saved in the same file it is linked from, you can just link by the file name, for example Next page
  - If a file is saved in a folder within the folder, separate the folder names with slashes. This can continue for any number of folders. Long name
  - If a file is saved in a folder that contains the linking file, use ".." to go to the containing folder until you can reach the linked file direction. <a href = "../../newfolder/page.html ">Link<a>. That goes "back" two folder, then down a new one to the file

Linking to elements within a page

- Tags can have id's, which are unique and identify that element with a hashtag.
  - <p id="text">Hello</p> can be referenced with "#text"
  - To make the page auto scroll to a specific element, you can link it using that syntax link Will link to the element above, assuming the file name is index.html.
- http://codepen.io/cgodfrey/full/dpxerq/ is an example

Comments

- Comments in any programming language are lines of text that are saved in the code but aren't displayed or used in any way. They are there to explain the code and the algorithms used
  - In this division, comments will be more important in CSS and Javascript, but it can still be useful to use comments with HTML
  - Syntax: `<!-- This text is a comment and is not displayed -->`
    - There has to be no space between < and ! at the start, otherwise the text will be displayed on the webpage
  - Comments can be multiline comments:
```
<!--
None of this text
Will be displayed
-->
```

One more kind of list - Description Lists

- Unlike ordered/unordered lists, these start with the `<dl>` (description list) tag
  - They are used as a sort of word/definition syntax
  - `<dt>` (description term) is bolded and is the word/phrase described
  - `<dd>` (description definition) is the definition of the term above
  - Example:
  - http://codepen.io/cgodfrey/pen/GjVLjB
    - Only formatting by default is indenting the definition, but it makes it easy to add format and style later with CSS

Quotes

- Either a blockquote `<blockquote>` or `<q>` (online)
  - Very simple default styling - either indents the block or puts text in quotes
  - Attribute `cite` is where you put the source of the quote
  - Ex. `<blockquote cite="wikipedia.com">this is indented</blockquote>` or `<q cite="google.com">Search the web </q>`
  - The attribute `cite` can't be seen by default, so to display it use a `<cite>` element next to the quote

Abbreviations

- `<abbr>` - Tells the website that the text inside the tag is an abbreviation.
  - When a title attribute is included, you can hover on the abbreviation to see the full phrase for the abbreviation.
  - Example: http://codepen.io/cgodfrey/pen/ozKOyq

Expressing code in an HTML page

- There are combinations of tags used together that allow you to display code
  - `<code>` simply uses a monospace font
  - `<pre>` tells the website that spaces/empty lines are important
  - These two are usually used together to display code
  - See http://codepen.io/cgodfrey/pen/WGVWab for a more robust example

Time

- The Chantilly Robotics Website is going to have a countdown to when build season starts in early January (depending on how fast we finish the website). Either way we'll have the countdown next year
    - `<time>` is a tag that contains a special attribute - `datetime`.
    - This attribute doesn't affect what is displayed, but it allows the computer to know the date without having to parse what is between the tags.
    - Only a few different ways to use dates within the `datetime` attribute, but you can put anything within the tags
    - http://codepen.io/cgodfrey/pen/amexPV