DMIT 1530

Week 1
HTML Refresher

Look, I gotta level with you:
computers are not smart.

Computers and software (like browsers) do not look at things like text and images the same way that you and I do.

This is why we need HTML.

HTML, or hypertext markup language, is all about giving meaning and structure to content.

Without it, your browser doesn’t know what your content is, or even what to do with it.

HTML is just a way of labelling things for the sake of all the machines or software that might be trying to figure out (interpret) our websites.

So, what does HTML look like?

Syntax

And other fancy-sounding words.

```
<element> Some content here. </element>
```

Most of the time, HTML is written with an opening tag and a closing tag. Your content belongs between the two tags.

There are some elements (called void elements) that only have one tag (i.e. they are self-closing).

Can you think of some examples?

```html
<!-- Void Element Examples -->

<img src="../img/filename.png" alt="All images must have
alternative text.">

<input id="first-name" name="first-name">

<hr>
```

HTML tags can also have attributes. Attributes provide additional information about an element.

For example, the `src` attribute tells the browser where it can find an image file.

HTML elements can go inside one another.
This is called nesting.

Remember that if an element starts inside another element, it must also close inside of that element.

```html
<!DOCTYPE html>
<html>
    <head>
        <meta charset="utf-8">
        <title>A Totally Semantic Title</title>
    </head>
    <body>
        <h1>Hello, world!</h1>
    </body>
</html>
```

Bits & Bobs

It’s all terribly technical from here on out, I’m afraid.

Let’s go through some HTML elements that you’ve likely seen before.

Required Tags

<!DOCTYPE html>

This technically isn’t a tag, but a declaration. It tells your browser that everything that follows is written in HTML.

<html>

This is the grandfather of all tags. Everything goes inside of here.

Required Tags (cont'd)

<head>

The head contains instructions to the browser. Nothing that the user sees should go here.

<body>

All of your content goes here (including all of your containers and sectioning elements).

<head> Tags

<link>

This tag can point to resources like web fonts or stylesheets.

<title>

This is the title for your web page. It needs to be semantic, or indicative of the page’s contents.

<meta>

This can set all sorts of cool stuff. We’ll be learning a bunch of meta tags later on.

(A Few) Content Tags

<img>

An image. This is a void element.

<p>

A paragraph. Most text content will be marked up with this tag.

<h1>

A heading. While there can only be one first-level heading per page, there can be multiple other levels of headings.

Lists

<ol>

An ordered (numbered) list. In this case, the order or sequence matters. For example, you could be ranking your five favourite games, or giving directions.

<ul>

An unordered (bullet) list. In this case, the order doesn’t matter.

<li>

A list item. This goes inside of <ol> and <ul>.

Container (Sectioning) Elements

<header>, <main>, <footer>
<section>
<nav>
<article>

Non-Semantic Elements

<div>, <span>

These elements don’t actually mean anything. Instead, they’re meant to partition off content so that it can be targeted through CSS or JS later on.

<div> is a block-level element, while <span> is inline.