**Slide 1**

Welcome to this presentation on HTML Entities.

**Slide 2**

We will be answering the questions; “What ARE Entities?” and “When and How do we use them?”

**Slide 3**

An Entity is basically a code that represents a special character.

For example: {point to characters}

Copyright, Registered, Trade Mark, ampersand, greater-than, and less-than angle brackets, and the non-breaking space which, you can’t see, but much like the wind, you can see its effects on the things around it.

There are hundreds of special characters that you can replace (or escape) with entities but these are some of the most common.

**Slide 4**

You may be asking; why can’t I just type those special characters on my keyboard?

Some characters are ***reserved*** in HTML, meaning that they have a specific purpose and function that may differ from what you would had intended. For example, if you use the less than (<) or greater than (>) signs in your text, the browser might mix them with tags. If you want to represent these characters in your content, you should use character entities. This will help the parser to **distinguish between the content and markup.**

Also, if you want to display certain mathematical equations on your website, Entities can make the job a lot easier.

Let’s take a look. [Brackets] I will use the text editor called Brackets to write my HTML, but any text editor will do.

The very first thing you learn in HTML is that your document must begin and end with HTML tags. Each tag must begin and end with an angle bracket. Your file will likely contain hundreds, if not thousands of these angle brackets, and if one of them is misplaced or forgotten, you may end up with unwanted results, error messages, or invalid code.

Let’s start out with the standard “Hello World!” text and refresh our browser. Now let’s say we want to display a simple mathematical comparison….like 3 is less than 5 which is greater than 4. You can see how HTML can begin to get confused.

Here is another comparison that begins to look a little sloppy.

One half divided by 2 is less than one third.

By using HTML entities, we can display the exact same thing without confusing using these reserved characters.

All HTML entities begin with an ampersand and end with a semi-colon. Many of the entities use a hexadecimal reference while some require a numerical code.

W3schools has a great table which includes most of the available entities and I’ll provide a link at the end of this presentation.

To display the less than angle bracket, we simply type &lt;

For the greater than angle bracket, it’s &gt;

Now for these fractions, we simply type &frac… the numerator followed immediately by the denominator… and then the semi-colon.

To display the division symbol, it’s &div;

Now, what if we wanted to use an ampersand in our text like A & W

To replace the ampersand, we just type &amp;

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In addition to these RESERVED characters, some unique characters don’t exist on most keyboards.

For example;

The Rx symbol

A star

Or even a simple check box.

**Slide 6**

Now let’s discuss this invisible NON-BREAKING SPACE.

When would you need to use this? Well HTML is programmed to ignore anything more than ONE blank space. That means that if you put 10 blank spaces in your content, HTML will ignore the last 9. You can force those blank spaces in with the code &nbsp; However, that is not the primary purpose for this entity. It was designed to keep words together in a sentence that might get separated by text-wrapping.

For example

**Slide 7**

As you can see, Entities are very useful little codes that can also be a lot of fun.

Type the URL on your screen into any browser and include some entities in your next web page.

THANKS FOR WATCHING