How2 use HTML tags

What do HTML tags do?

Computers are very impressive machines, but without code they can't do much! Code is the language that tells a computer what to do – and HTML is the language that tells computers how a website should be built and laid out.

The online challenge **Starting to Code** introduced you to HTML and mentioned other programming languages that are important for website development.

HTML is the code that lays out a website, and CSS (standing for Cascading Style Sheets) is the code that makes a website look good – it is a styling language which can tell the computer which colours to use, what font to use, and lots of other design features that make the website look like the web designer wants it to. JavaScript is another language that can make websites interact with the user. So buttons, entry fields and other dynamic features of a website happen often because of JavaScript code.

HTML, CSS and JavaScript are very similar. If you learn HTML first, you will find it easier to then learn CSS and JavaScript afterwards. All three rely on tags – these are pieces of code that tell the computer what to do to make the website work as the developer and designer want it to. The important thing about the tags is that you need to know them to use them – just like you need to know the words, and the way they fit together, to use French, German or Spanish.

Tags you need to know

- There are lots of tags that you can learn over time but for the purposes of the offline challenge, you just need a few.

- The first tag you need is the one that tells the computer that HTML is about to begin. This is the HTML start tag - **<html>**. Note that all tags are in lower case letters between the arrowheads.

- Computers also have to know that something has ended, otherwise they can get confused. So there are close tags, too, which are usually the same as the start tag with a forward slash immediately after the first arrowhead. So the close tag for HTML is **</html>**.

- The body tag tells the computer that the main body of your web page is about to start. It is **<body>** and the close tag is **</body>**. This means that often the first two tags are **<html>** and **<body>** and the last two tags are **</body>** and **</html>**.

- If you want a heading, there are lots to choose from! You can have different levels of heading starting with h1, with the tag is **<h1>**. The closing tag is (you've guessed it!) **</h1>**. Another heading is **<h2>** and there are **<h3>**, **<h4>** and **<h5>** each with its own close tag. Check what these look like by creating some code that has six levels of heading. Save and run to see what these different headings look like.

- When you type text into your Notepad++ it will publish without paragraphs. The computer just reads the text as one block even when you put different code on different lines in the editor. So to add paragraphs use the **<p>** tag at the beginning of your new paragraph, and the **</p>** tag at the end.

- To change the format of your text, just like you do in a word processed document, you can use bold and italic. To make a section of text bold, use the **** tag at the beginning of the piece of text and the **** tag at the end. The text between the two tags will publish as bold. You can do the same to make text italics using the **<i>** tag at the beginning of the section of text and the **</i>** tag at the end.

- The image tag (**<img>**), which tells the computer to display an image you have selected, is a bit different from the rest. It doesn't have a close tag. And within it you have to tell the computer the name of the image and then make sure that image is in the same folder as the saved code, because that is where it will look for it. So to add an image:

    o Find the image you want to use in your web page

    o Make sure it is sized at around 400x300 pixels, or 300X400 if it is a portrait shape

    o Save it in the folder where you are saving your code and remember what you have called it

    o Then use the syntax **<img src="My picture.jpg">**

    o What this means is that the image source (its name) is equal to what you have called it, and that is put inside speech marks. This is so the computer understands that it's an image it is looking for and not another tag

    o As it doesn't need a close tag, the end of the image tag (the arrowhead) is put at the end after the image name

- The best way to remember these tags is to have a go! Use your Notepad++ to play around with the tags, formatting text, adding headings and images. We have supplied some sized copyright-free images you can use.

- And if you really get into using HTML, you can go to the TechFuture Classroom and try the Coding in HTML with Intel and CoderDojo which introduces lots more HTML tags including some that can add an audio player to your website, as well as tables and bullet points.