# W1 **Understanding HTML**

**HTML: Hypertext Markup Language**

**HTML** stands for hypertext markup language. Hypertext refers to the way we can place hypertext links in our document that allows our users to move from one page to another. Markup is a set of symbols or codes for displaying content on the Internet. HTML tells web browsers the structure of a web page's words and images. This markup language allows you to code around the content, the browser will use this code to display or render our page correctly. The code or tags we use are the markup.

**Example**

Let's copy the following code into an html file. I named the html file byui.html. It doesn't have to be in our wdd130 folder but you are welcome to place it there. We will be practicing new concepts on this html page for the next 5 weeks. But it doesn't have to be submitted or published live on the Internet.

<!DOCTYPE html>  
<html>  
 <head>  
 <title>BYUI</title>  
 </head>  
 <body>  
 <header></header>  
 <main></main>  
 <footer></footer>  
 </body>  
</html>

This is the framework of a beginning HTML page. Notice inside the body tag we have 3 general areas. The body tag has 3 children tags of header, main and footer. Let's start with the header. Let's type in a common element you'd find in the header a nav element.

<header>  
 <nav></nav>  
</header>

The nav element will contain menu links. These links are created with an a tag.

<nav>  
 <a>Church of Jesus Christ</a>  
 <a>Temples</a>  
 <a>Scriptures</a>  
</nav>

If we look at our rendered page now in a browser window, the content of the a tag shows but they are not links. When we click on the content text, nothing happens. We have to add an attribute to the opening a tag that shows where to take the user when they click on the content. Let's also add a Home page link and then add attributes to each opening tag as follows.

<a href="byui.html">Home</a>  
<a href="https://www.churchofjesuschrist.org">Church of Jesus Christ</a>  
<a href="https://www.churchofjesuschrist.org/temples">Temples</a>  
<a href="https://www.churchofjesuschrist.org/study/scriptures">Scriptures</a>

Now when you look at the rendered page in the browser you can click the text content and it will take you to the right place because we added the href or hypertext reference value for each a link.

**Note**

Note that the links here are not going to internal website pages but to external website pages. Your navigation link would usually be going to other pages in your website not to outside web pages like this.

**Example Continued**

Let's move on to the main part of our web page with a header level one title for our page using an h1 tag. Then let's add an img tag. There are two attributes needed for an image. First where is the image located or what is the source (src) and, second what is some alternative text (alt) that can be used if the image can't be seen. Then add a paragraph beneath the title using a p tag.

<main>  
 <h1>Brigham Young University Idaho</h1>  
 <img  
 src="https://web.byui.edu/policylibrary/assets/images/home.jpg"  
 alt="BYUI Campus"  
 />  
 <p>BYU-Idaho is a comfortable place to learn and grow as a disciple of Jesus Christ because students, faculty, and employees share a commitment to live the gospel.</p>  
 </main>

**Note**

Again, we are using an attribute value for the src property that is taking us to an image that is located externally to our site. Normally you would want to use an internal path to your own images folder where your website images are located. Something like src="images/map-banner.jpg" This would assume that you have a folder called images with a jpg image called 'map-banner.jpg' located in that images folder of your site. But for ease of this prepare practice we will use the external image.

**Example Continued**

Lastly, let's add a p tag to our footer with a bit of information for the bottom of our page.

<footer>  
 <p>My Web Page 20XX ©</p>  
</footer>

The &copy; will create an HTML symbol copyright entity for us. See [HTML Symbols](https://www.w3schools.com/html/html_symbols.asp)for more examples.

There we have our first simple HTML page. If we had multiple page that we created for the same website, the header and footer section would remain the same for every page of our website and the main section would change from page to page of our website.

We've practiced with some of the elements that make up the structure of a simple web page. And we see that some elements need attributes within their opening tags to display and function properly.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content=IE=edge">

<meta name="viewport" content=width=device-width, initial-scale=1.0">

<title>All About Me</title>

</head>

<body>

<h1>About Me</h1>

<img src="images/me.png" alt="photo of me" width="250" height="250">

<h2>Pat Blau</h2>

<h2>No nick name</h2>

<p>Hi everyone, I am Pat. The photo is of me and my husband. We were high school sweet hearts and dated for 5 years. We ended up going in separate directions and after 30 years got a second chance. We have been married for 5 years and sealed for 2. We live in Waynesville, MO and plan to have a camping facility here in the future. It's our retirement plan.</p>

<p>I enjoy taking photos, crafts, and family history.</p>

</body>

</html>