Introduction

by Louis Romao

The objectives of this tutorial will be:

1) Learn the structure of an HTML element.
2) Apply HTML Elements and Empty Elements in a web page.
3) Manipulate ordered and unordered lists using attributes.
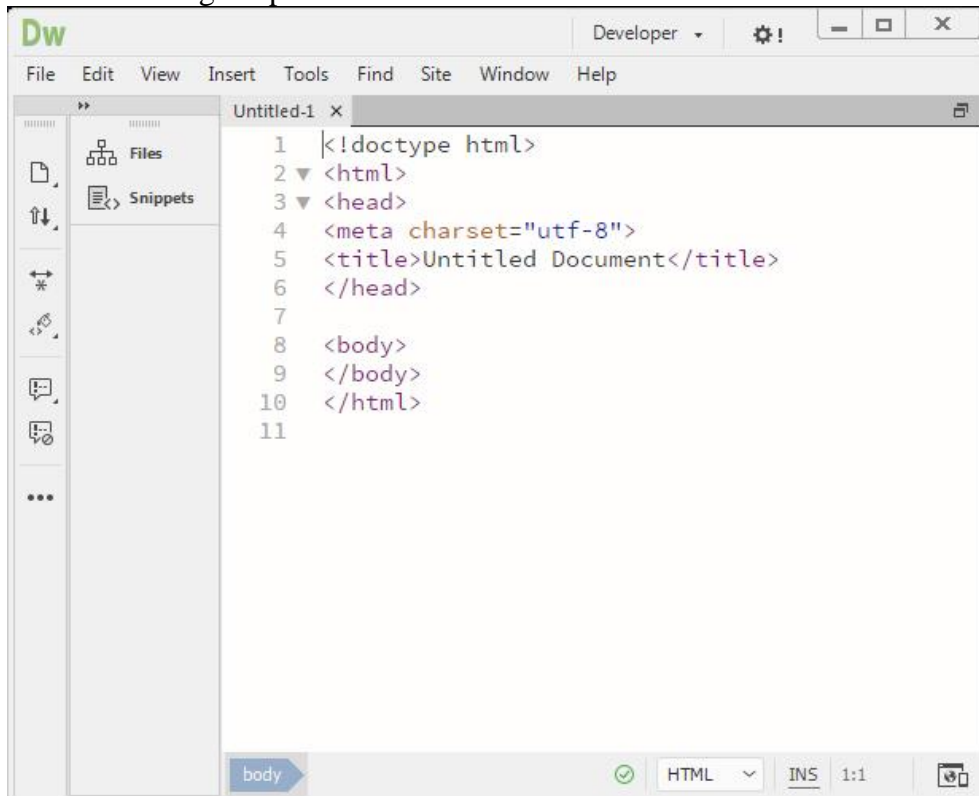4) Learn the structure of CSS and how it affects HTML elements.

Finished files will be:

1a.html
1b.html

1. Create a new HTML document.

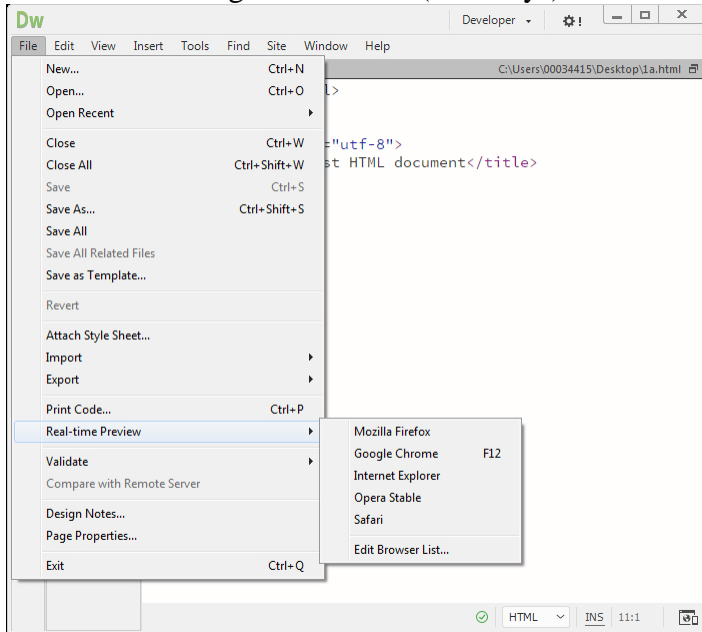The following script should be found in the Code view of Dreamweaver:
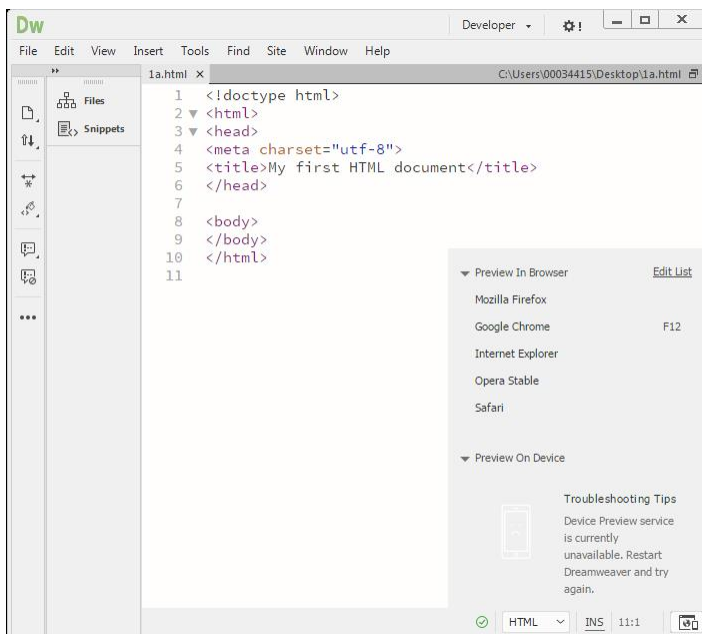

`<!doctype html>` declares the type of document being created (in this case HTML5). The HTML **element**, consisting of everything from the **opening tag** (`<html>`) to the **closing tag** (`</html>`), describes the webpage. The closing tag includes a forward slash. The **element content** is everything between the opening and closing tags.

Element

`<html>`Element Content`</html>`
Opening Tag   Closing Tag

An HTML element is usually divided in two sections: the `<head>` element at the top, and the `<body>` element at the bottom. Note that these elements are nested within the HTML element, and that both elements have opening and closing tags.

As you gain experience in HTML you will also notice that most elements usually consist of paired opening and closing tags.

The `<meta>` tag specifies how text is to be displayed on the screen, and is located within the `<head>` element. The `<meta>` tag is called an **empty element** because it has no content and no closing tag.

The `<title>` tag simply indicates the title of the document, and is usually displayed in the tabs of a browser.

2. Type in the `<title>` element as shown below. Be sure it is nested within the `<head>` element:


```
1    <!doctype html>
2 ▼  <html>
3 ▼  <head>
4    <meta charset="utf-8">
5    <title>My first HTML document</title>
6    </head>
7
8    <body>
9    </body>
10   </html>
11
```

3. Save your document as *1a.html*. View your script in a variety of different browsers:

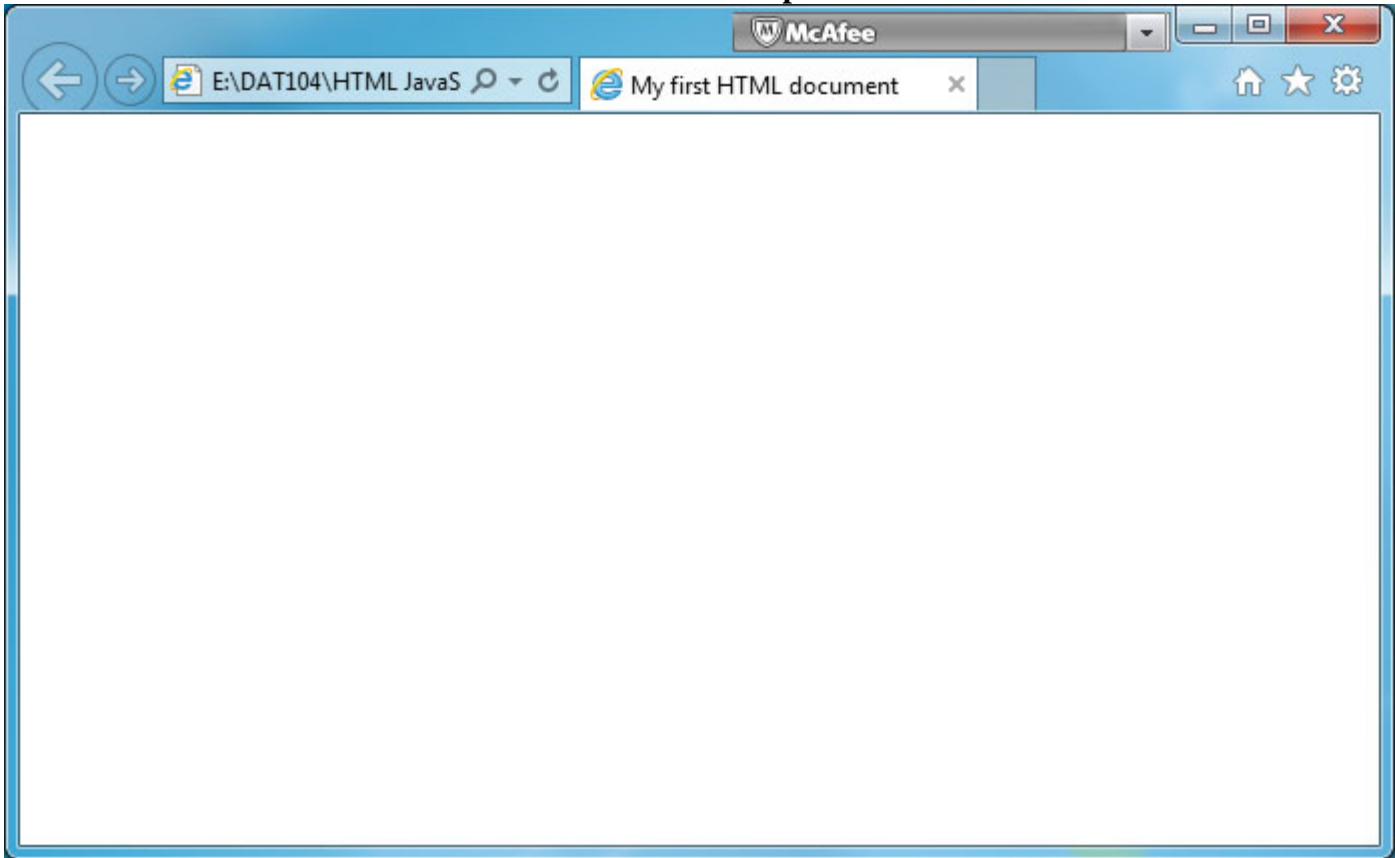Testing in a browser (two ways):

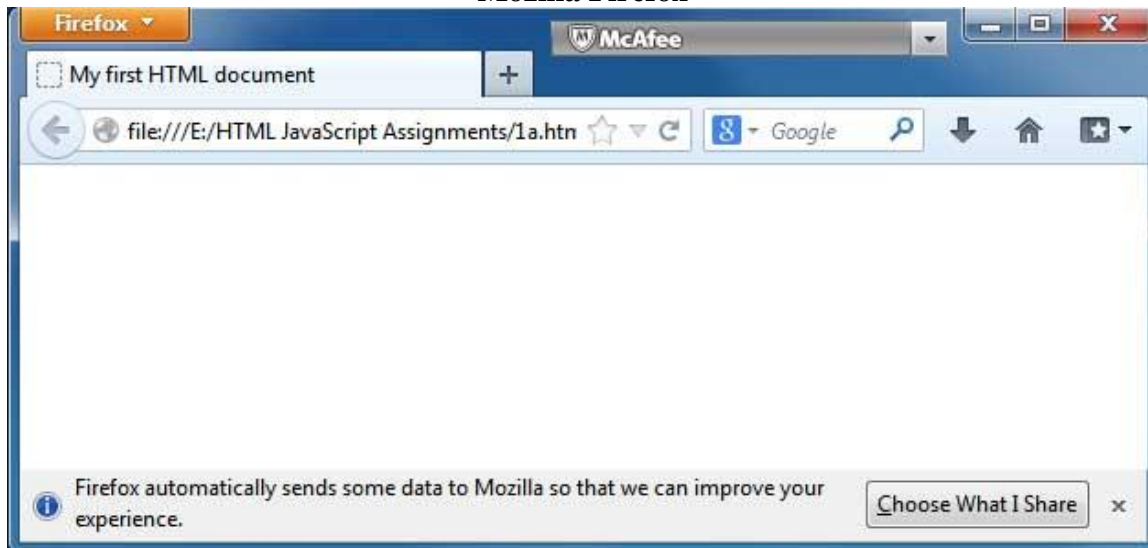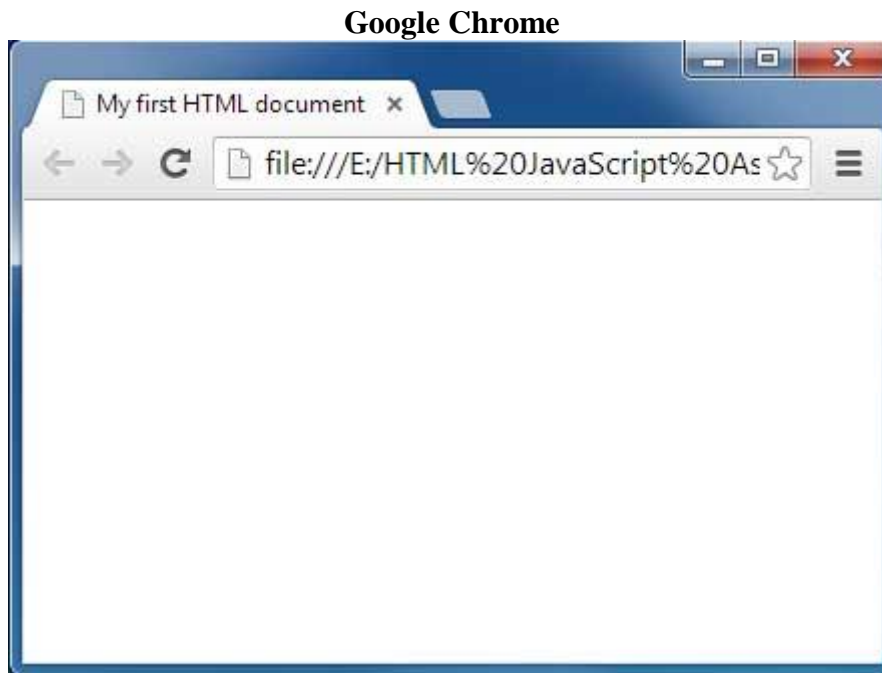a) Go under the File menu under Real-time Preview and choose a browser.

b) Click the Real-time Preview icon in the lower right corner of the interface.

Microsoft Internet Explorer

Mozilla Firefox

Google Chrome

Notice that a blank browser window opens with *My first HTML document* (the content within the **<title>** element) situated in the upper left part of the browser.

4. Close all browser windows and return to your Dreamweaver document.

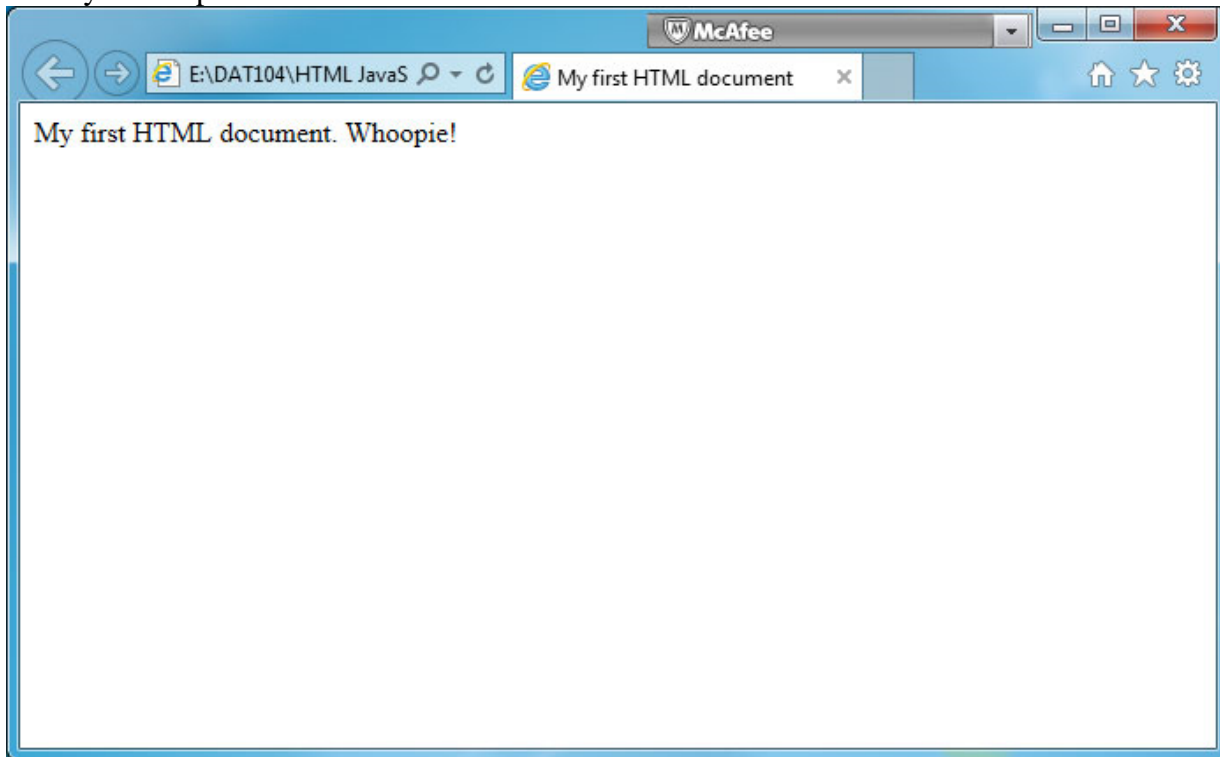**NOTE: Remember to save your work through this assignment and other assignments this semester.**

5. Within the <body> element, type the following (shown in **red**):

```
<!doctype html>
<html>
<head>
<meta charset="utf-8">
<title>My first HTML document</title>
</head>

<body>
My first HTML document.
Whoopie!
</body>
</html>
```

Note: The HTML in **black** *is what you typed in already.*

6. View your script in a browser.

The text that you typed in shows up in your browser window but on only one line. In order for the text to be displayed on two lines, the line break tag <br> must be used.

7. Add the <br> tag as shown in red:

```
<!doctype html>
<html>
<head>
<meta charset="utf-8">
<title>My first HTML document</title>
</head>

<body>
My first HTML document.<br>
Whoopie!
</body>
</html>
```

Now your text shows on two lines.

Note: <br> is another **empty element**.

In the next step, you will center the text in your browser window by adding a <center> element.

8. Add the `<center>` element as follows. Be sure to save your work frequently, and test your code in a browser:

```
<!doctype html>
<html>
<head>
<meta charset="utf-8">
<title>My first HTML document</title>
</head>

<body>
<center>
My first HTML document.<br>
Whoopie!
</center>
</body>
</html>
```

9. Add a horizontal rule (a horizontal line across the width of the Web page) as follows:

```
<!doctype html>
<html>
<head>
<meta charset="utf-8">
<title>My first HTML document</title>
</head>

<body>
<center>
My first HTML document.<br>
Whoopie!
</center>
<hr>
</body>
</html>
```

Now you will add a headline to the next part of your webpage.

10. Type in the following HTML (in red) after the `<hr>` tag.

```
</center>
<hr>
<h3>Why should I learn HTML?</h3>
</body>
</html>
```

Notice that the size of the text is larger and bolder than the text previously entered. Experiment using other headline tags like `<h1>`, `<h2>` and `<h7>`, and use the proper closing tags. What do you notice?

Now add an ordered list.

11. Add the following HTML in red.

```
<h3>Why should I learn HTML?</h3>
<ol>
<li>I like it!</li>
<li>To understand how HTML works.</li>
<li>I like it!</li>
<li>To correct errors in Web pages.</li>
<li>I like it!</li>
<li>To learn how other pages work.</li>
<li>I like it!</li>
</ol>
</body>
</html>
```

The `<ol>` tag creates the ordered list and the `<li>` tag is used for each of the individual list items (note that these tags also have closing tags). Notice that the list is ordered with numbers (1,2,3, etc.).

12. Change the `<ol>` tag as follows:

```
<h3>Why should I learn HTML?</h3>
<ol type="a">
<li>I like it!</li>
```

In the above step, an HTML *attribute* was added to the `<ol>` element. Quite simply, an *attribute* is a modifier of an HTML element. By adding the above attribute to the `<ol>` tag, the list is now ordered with small letters.

(Note: The `<meta>` tag in your document also has an attribute `charset` attribute which specifies the character encoding for the HTML document.)

13. Change the **\<ol\>** tag as follows:

```
<h3>Why should I learn HTML?</h3>
<ol type="1" start="0">
<li>I like it!</li>
```

What do you notice?

14. Change the ordered list tag \<ol\> to an unordered list tag \<ul\> as follows:

```
<h3>Why should I learn HTML?</h3>
<ul>
<li>I like it!</li>
<li>To understand how HTML works.</li>
<li>I like it!</li>
<li>To correct errors in Web pages.</li>
<li>I like it!</li>
<li>To learn how other pages work.</li>
<li>I like it!</li>
</ul>
</body>
```

Notice that your list items are now preceded with bullets.

Finally, apply a copyright with your name on it.

15. Just before the closing body tag, add a center element:

```
</ul>
<center>
</center>
</body>
</html>
```

16. Within the center element, add the following:

```
</ul>
<center>
    Copyright &copy; This Year by Your Name
</center>
</body>
</html>
```

The HTML **©** puts a copyright symbol © onto the webpage.

17. Save your work and test the page.

NOTE: Copyright indications are to be put in ALL assignments for the remainder of the semester.

Adding CSS Formatting

To get a basic start on CSS, this lesson will:

    a) Create a container and format it.
    b) Edit background color
    c) Edit text color

18. Add an opening **div** tag just after the opening body tag.

```
<title>My first HTML document</title>
</head>
<body>
     <div>
          <center>
          My first HTML document.<br>
```

19. Put the closing div tag just before the closing body tag.

```
          <center>
               Copyright &copy; 2019 by Lou Romao
          </center>
     </div>
</body>
</html>
```

20. In the opening div tag create an attribute **id** with a value of **container**:

```
<body>
     <div id="container">
          <center>
          My first HTML document.<br>
```

The CSS that will be written in this assignment will manipulate the **body** element and the **div** element with the **container** id. CSS will target one of these objects with the **selector**. You will add **properties** to the selector and assign **values** to each property. The formatting will change as a result.

21. Add a **<style>** element within the **<head>** element as follows:

```
<head>
<title>My first HTML document</title>
<style>

</style>
</head>
```
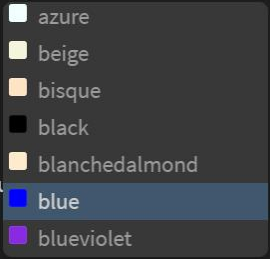
22. Within the style element, add a body selector with opening and closing curly braces:
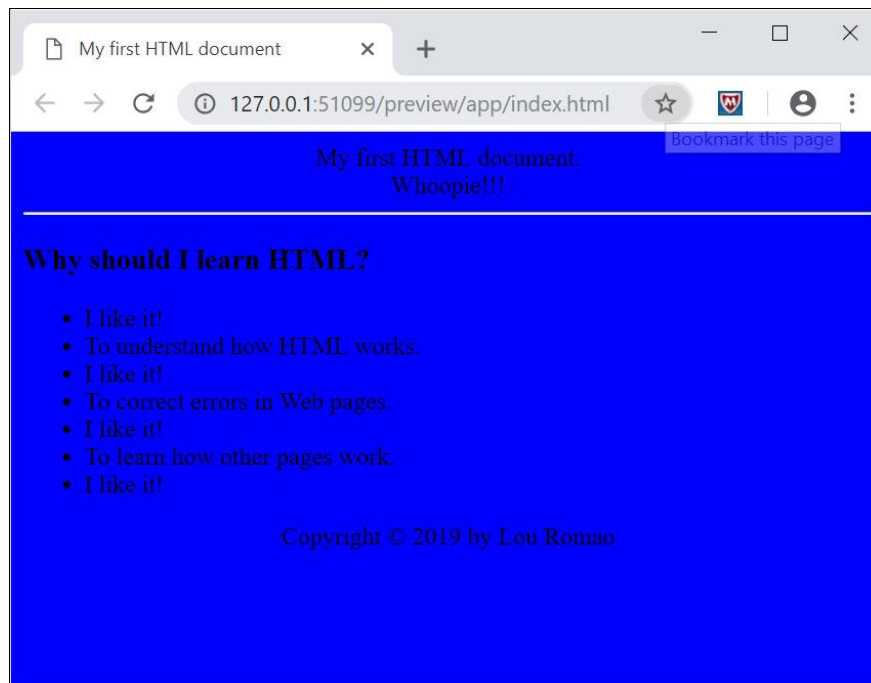
```
<style>
    body{

    }
</style>
```

23. Within the **body** selector (*not* the HTML tag), add a background-color property and choose a dark color from the color picker (blue is being chosen in the illustration).

24. Save and test the page.

The contrast on this page is not good at all. No need to worry since more CSS will be added.

25. In the style element, add a #container selector with opening and closing curly braces.
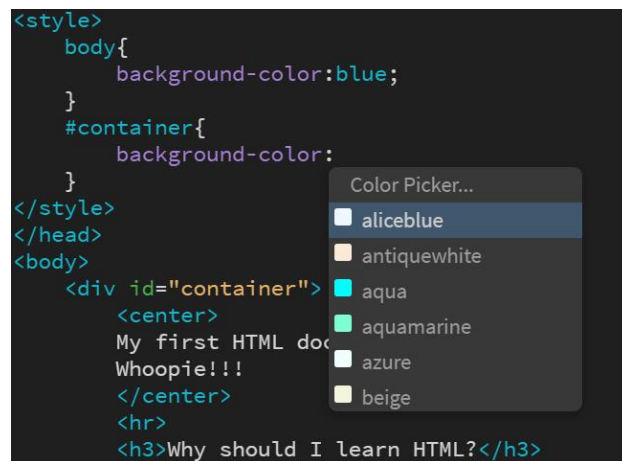
```
<style>
    body{
        background-color:blue;
    }
    #container{

    }
</style>
```
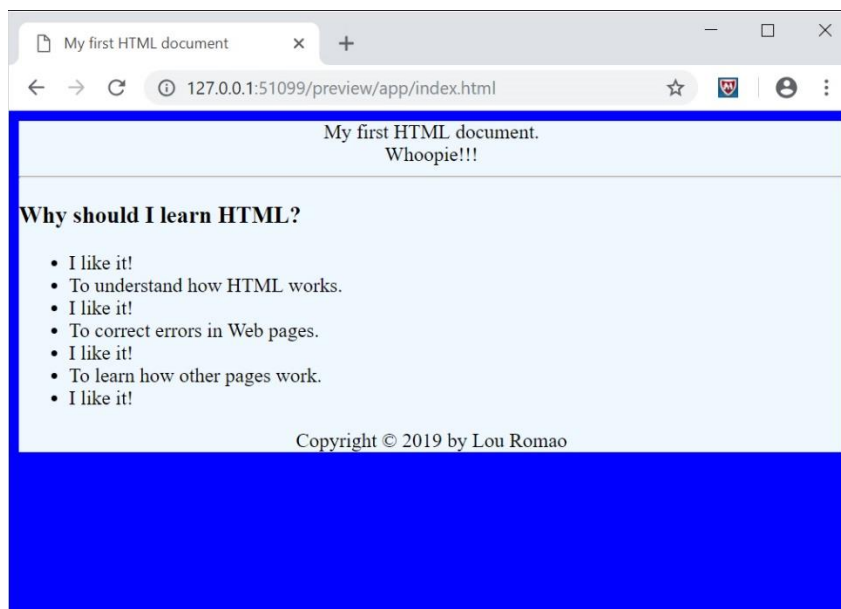
id attributes are usually targeted with a hash mark (**#**). If there were more **div** elements on the page, this procedure assures that only the **div** element with the attribute will be affected, and not any other **div** elements.

26. Within the container selector, add a **background-color** property, and apply a light color as a value (just like in step 23). Aliceblue is chosen here.

27. Save and test the page.

Note that the **div** element with the **container** attribute is located inside the **body** element in the HTML. As a result, the **container** with the lighter aliceblue color will be seen inside the **body** element with the darker blue color.

28. Add color to the text by adding the following CSS:
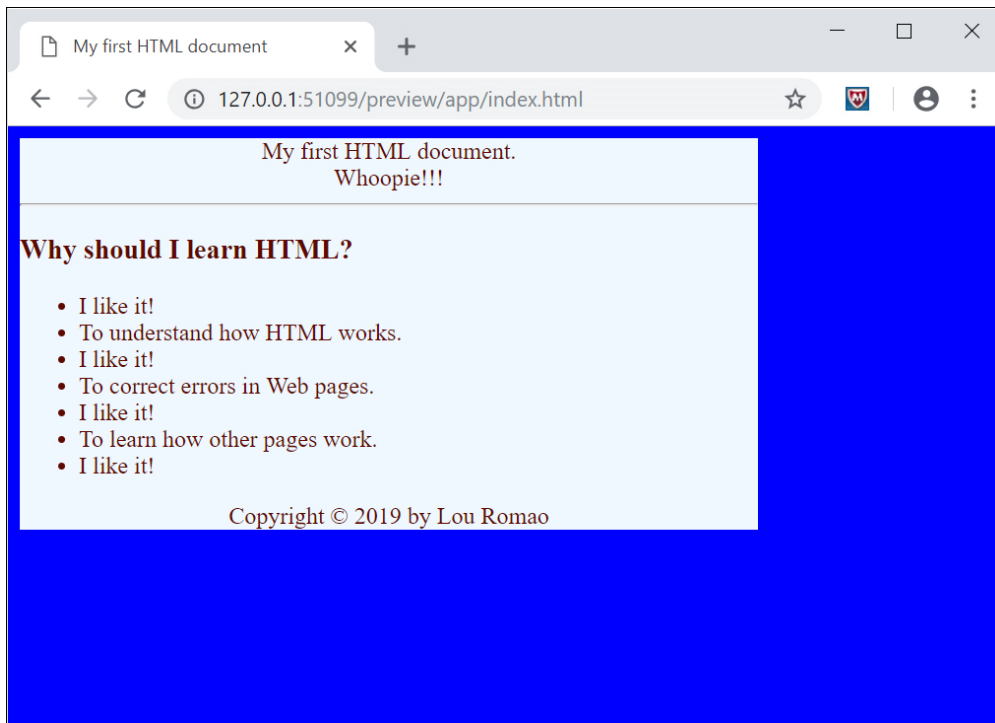
```
<style>
    body{
        background-color:blue;
    }
    #container{
        background-color:aliceblue;
        color:#5E0A01;
    }
</style>
```

In this step, a text color is added to the text within the container. Furthermore, this reddish color is not being added by a color name, rather by a *hexadecimal* number preceded by a hash mark. Hexadecimal numerals in color theory will be explained in the next chapter.

29. Add the following CSS:

```
<style>
    body{
        background-color:blue;
    }
    #container{
        background-color:aliceblue;
        color:#5E0A01;
        width: 500px;
    }
</style>
```
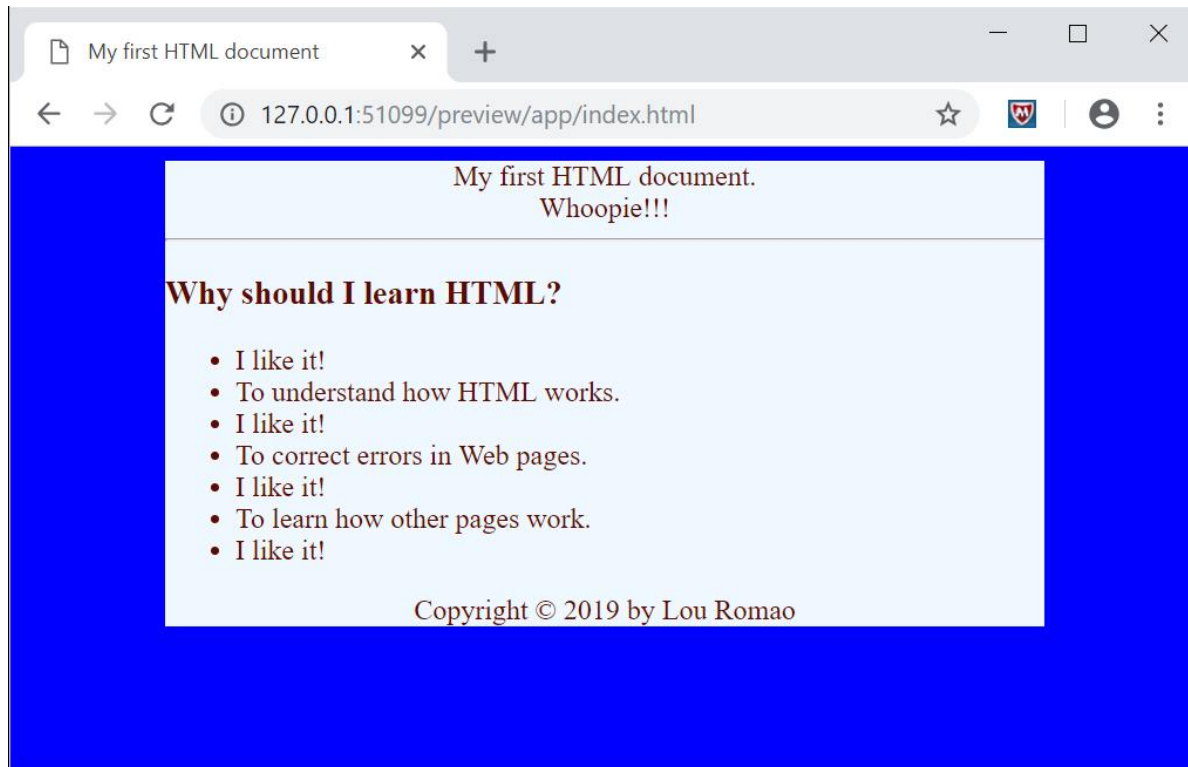
30. Save and test the page.

A **width** property has been applied to the container with a value of 500 pixels. At this point, you are free to adjust the number on the width to your own specifications.

As you can see the **container** is aligned to the left. In the next step, the **container** will be centered.

31. Add the following CSS:

```
#container{
    background-color:aliceblue;
    color:#5E0A01;
    width: 500px;
    margin:auto auto auto auto;
}
```

32. Save and test the page.

My first HTML document.
Whoopie!!!

Why should I learn HTML?

- I like it!
- To understand how HTML works.
- I like it!
- To correct errors in Web pages.
- I like it!
- To learn how other pages work.
- I like it!

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Try readjusting the width of the browser window. No matter what width the window is, the container remains horizontally in the center of the page.

My Favorite _____

Think of a category of your own favorites, and create a list of ten items containing your favorites.

Put the title of the list you have chosen into a headline element. Also put this same text in the title element.

Create a list (order or unordered) and input each item as a list item.

Apply your own CSS colors to the background and text.

Be sure to save your work as *1b.html*.

Do not forget to put your name in a copyright indication.

Note: Below is an example given by the instructor. DO NOT DUPLICATE!
(ie. **COME UP WITH YOUR OWN LIST!**)