Lab 01: Alma Mater HTML Page

In this lab, you will create a simple HTML document containing the lyrics to Saint Leo University's Alma Mater, with an embedded image of the current Saint Leo University logo, a hypertext link to an article about the Alma Mater, and which will also use the official Saint Leo University green (Pantone 554C, RGB(#00543D) and gold (Pantone 130CP, RGB(#FDB813) colors.

Web page are text files which contain markup tags, and which as saved with the extension **HTML** (**H**yper**T**ext **M**arkup **L**anguage.) We will assume that you are using the Notepad++ text editor, but you can also use notepad or any other editor designed to save simple text files.

HTML was developed by British physicist, Professor Sir Timothy John Berners-Lee, while he was working at CERN in Switzerland. It added in-line text tags to insert hyperlinks, pictures, and formatting commands into text documents which could be shared over computer networks. The network of these interlinked pages grew into the World Wide Web.

HTML tags consists of abbreviations or key words surrounded by less than and greater than signs, which in this context are called angle braces. For example, the tag to insert a horizontal line across the text is **<hr>**. Most tags occur in pairs and contain text or other tags. Such pairs of tags consist of an opening tag, and a corresponding closing tag, which includes a slash character. For example, a paragraph of text begins with an opening tag **<p>**, and closes with a **</p>** tag.

```
1   <!DOCTYPE html>
2   <html lang="en">
3       <head>
4           <meta charset = "utf-8">
5           <title>      </title>
6           <style>
7           </style>
8       </head>
9
10      <body>
11          <h1></h1>
12          <p> </p>
13          <hr>
14      </body>
15  </html>
```

Taking the files included with these instructions, copy or rename the file **AlmaMaterXY.txt** as **AlmaMaterXY.html**, substituting your initials for the XY. Then open the file with a text editor of your choice, Notepad++ or Atom being particularly good choices. Also please open the file ina web browser so that you can observe the changes in how it renders.

Please enter the code in the figure into the top of your file. Please note that the line number are not part of the code. If you are using the Atom text editor, it can auto complete this code for you.

This structure seems complex but its form follows its function. Line 1, **<!DOCTYPE html>** is a command to tell a server that this is an html document. The tags **<html>** and **</html>** on lines 2 and 15 enclose all of the html code. The attribute **lang="en"** inside the **<html>** tag marks the document as being in the English language. Nested inside the html section are two subsections, the head section, which contains information about the web page, and the body section, which contains the context of the web page which will appear within the browser window.

The head section from lines 3 to 8 is enclosed by the **<head>** and **</head>** tags. It contains data about the web page, or the pages **metadata**. The **<meta charset="utf-8">** tag on line 4 marks the file as using the UTF-8 character set, which is essentially 8-bit ASCII with the ability to use escape characters to embed Unicode characters. The **<title>** and **</title>** tags on line 5 may contain text which will appear on the title bar or tab on the web browser, and also which would appear in a search engine list,

but which will not appear on the web page itself. The **`<style>`** and **`</style>`** tags on lines 6 and 7 mark off a section that will contain style rules, used to format how content will be drawn on the web browser window.

The body section from lines 10 to 14 is enclosed by the **`<body>`** and **`</body>`** tags and contains the content which will appear in the browser window. The heading 1 tags, **`<h1>`** and **`</h1>`** are in fact optional, and can contain the largest heading text on the page. They are often used to contain the title of the web page as it is written in the browser window. As previously mentioned, the **`<p>`** and **`</p>`** tag enclose text with is treated as a paragraph. The **`<hr>`** tag at the bottom draws a horizontal rule (line) across the bottom of the page, and is a very old fashioned way of denoting the end of the page.

Part 1: Insert Content

Insert your content as follows. After each step, open your file in a web browser to see how the page is progressing or how it has broken so you can fix it as you proceed.

1. Titles and Headings:
   a. Insert the text "**`SLU Alma Mater`**", which will appear in the title bar between the **`<title>…</title>`** tags in the head section.
   b. Inside the **`<head>…</head>`** section, before the **`<meta…>`** tag, insert a comment containing your name and the date, by placing these between an "**`<!--`**" and "**`-->`**"

   ```
   <head>
       <!-- Bryan Reagan - 4 January 2018  -->
       <meta charset="utf-8">
       <title>SLU Alma Mater</title>
   ```

   c. Move the text "**`Saint Leo University Alma Mater`**" between the **`<h1>…</h1>`** tags in the body section, which will appear on the top of the display area in the browser.
   d. After the **`<h1>…</h1>`** tags, insert a new line with a **`<hr>`** tag to insert a line under the heading.
2. Logo Image:
   a. Under the <hr> under the **`<title>…</title>`** tags, insert an <img…> tag to put the logo on the page.

   ```
   <body>

   <h1>Saint Leo University Alma Mater</h1>
   <hr>

   <img src="logo.png" alt="Picture of SLU Lion Head Logo">
   ```

3. Lyrics Text:
   a. Move all of the lyrics text into the **`<body>…</body>`** section.
   b. Enclose each stanza inside a pair of tags **`<p>…</p>`** which marks them off as a paragraph, which will have a bit of space between them.
   c. Between each line inside the paragraphs, inert a break tag **`<br>`** to force a line break.
   d. After the last stanza, but another **`<hr>`** tag to indicate the end of the section.

```
<img src="logo.png" alt="Picture of SLU Lion Head Logo">

<p>
Saint Leo we salute traditions new and old,<br>
Which guide us as we grow,<br>
In body, heart and soul.<br>
Everywhere we flourish sustained by our ideal,<br>
Of challenging our minds to make our vision real.
</p>

<p>
Joyfully we gather, our destinies to seek,<br>
Partners in harmony united yet unique.<br>
Excellence in work and deed,<br>
We've made our final quest,<br>
We care for all creation, with compassion and respect.
</p>

<p>
Saint Leo we salute traditions new and old,<br>
Which guide us as we grow,<br>
In body, heart and soul.<br>
Everywhere we flourish sustained by our ideal,<br>
Of challenging our minds to make our vision real.
</p>

<hr>
```

4. Footer Section:
   a. After the **<hr>** copy and paste the citation information, and enclose it in a paragraph using the **<p>…</p>** pair of tags.
   b. Turn the URL into a link by enclosing the text with an anchor tag ** … .** The UL|RL goes into the quotation marks following the equal sign, and the word "Note" should be pasted between the **<a>** and **** tags.
   c. Enclose the authors names between a single pair of cite tags **<cite>…</cite>.**

```
<p><a href="https://blog.online.saintleo.edu/online-learning/Highlights-In-History-Saint-Leo-s-Alma-Mater">Note:</a>
<cite>Music by Jeffrey R. Smith; Lyrics by Kurt Van Wilt.</cite></p>

</body>
</html>
```

Part 2: Style Sheets

We will now insert CSS rules in the <style> section of the header to format the items.

1. Between the **<style>** tags, insert a rule to make the body of the document have a **background-color** of **white** and a **margin-right** and a **margin-left** of **2 eM.**
2. Insert a rule to make **<h1>** text Saint Leo green, **color: #00543D;**
3. Insert a rule to make **<hr>** line Saint Leo gold, **color : #FDB813;**
4. Insert a rule to make images **float** to the **right**.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <!-- Bryan Reagan - 4 January 2018  -->
    <meta charset="utf-8">
    <title>SLU Alma Mater</title>
    <style>
        body {background-color: white; margin-left: 2eM; margin-right: 2eM;}
        h1 {color: #00543D;}
        hr {color: #FDB813; }
        img {float: right;}
    </style>
</head>
```

Part 3: Submit your files

Please check your work, and if satisfied, compress the PNG and HTML files into a ZIP file and submit to the instructor by the correct dropbox.