

Creating a Web Page Using HTML, XHTML, and CSS: The Basics

Mary L. Lanigan, Ph.D.

Preface

In this module, you will create a web page. The web page will look like a mini-resume. After completing all the exercises within this module, your page will look something like the example on the next page.

Please Note: This document is best viewed either on a computer screen or printed out by a color printer.

It is also recommended that you print out the codes for the example web page. The codes are found on Module 6-3. Click the link immediately following the link for this job aid.

Mary L. Lanigan, Ph.D.



Dr. Lanigan is a four-time ISPI Award of Excellence winner for her evaluation research (1999), book (2001) and CD training workshops (evaluation CD in 2005 and performance technology CD in 2007). As an Associate Professor at Governors State University, she teaches various [performance improvement classes](#), and is the recipient of three Faculty Excellence awards. Dr. Lanigan has presented papers at national and regional conferences sponsored by the *International Society of Performance Improvement* and the *American Society of Training and Development*. She has written articles for *Performance Improvement*, *Performance Improvement Quarterly*, *The Journal of Insurance Trainers and Educators*, and the *International Journal of Intercultural Relations*. Her doctorate is from Indiana University, specifically, the [Instructional Systems Technology](#) program and her Masters degrees are in **Educational Psychology**, **Communication**, and **Instructional Systems Technology**.

Address

Department of Communication and Training
 College of Arts and Sciences
 Governors State University
 University Park, Illinois 60466

Professional Experience

Associate Professor, Governors State University
 Training and Instructional Designer, Publishers Circulation Fulfillment
 Training and Instructional Designer, First Midwest Bank

Educational Background

Ph.D., Instructional Systems Technology, Indiana University
 M. S., Instructional Systems Technology, Indiana University
 M. S., Educational Psychology, Indiana University
 M. S., Communications, Illinois State University
 B. A., Speech Communications, University of Illinois- Urbana/Champaign

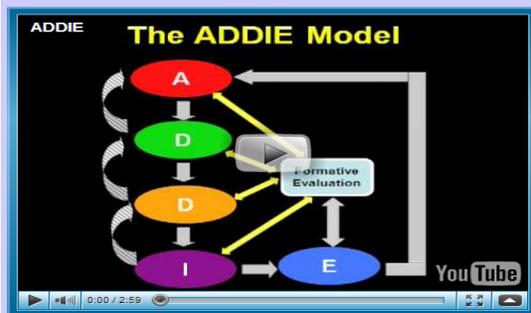
Important Links Regarding Performance Improvement

To learn more information about earning a degree in instructional design and training (also known as performance improvement or performance technology), click on the links below.

To obtain specific information such as class syllabi, plan of study examples and more, then go to: [Human Performance and Training](#)

To obtain specific information about admissions and fees, then go to: [Governors State University](#)

To view a YouTube video on instructional design and training, click on the video presentation below.



The top five things you should know about performance technology:

1. The goal of the field is to raise employees' performances to optimal levels.
2. To determine if the goal has been met, performance technologists must compare the benchmarks of optimal performance to what is actually happening on the job.
3. After comparing the benchmarks to actual performance, performance technologists determine gaps, causes, and solutions.
4. The solutions implemented will be training and/or non-training interventions.
5. All interventions are evaluated and matched back to the benchmarks to see if the solutions enhanced employees' performances back to optimal levels.

If you have questions about the field or the graduate program at Governors State University, contact [Dr. Lanigan](#).

[Back to Top](#)

Exercise 1: Using a Browser

In order to create a web page, you need to be familiar with a browser. There are a number of browsers available-- the two most common are Microsoft Internet Explorer and Mozilla Firefox. **It is recommended that you use Explorer to complete this module in order to reduce confusion.** Some browsers do not contain all the necessary options to complete the exercises within this module. Thus, it is critical you use Explorer.

Step 1: **Open your browser** by clicking the appropriate icon on your computer.

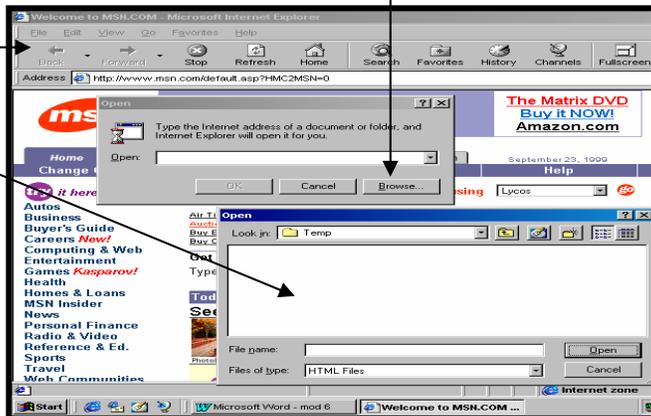
Step 2: After the browser opens, notice a few things.

- A. The **Address** box.
 This box is where you type in the URL of any web page you are searching for. The box also lists the address of the page you are presently on.



- B. Under **File**, click **Open**; click **Browse**.

Browse brings up this box so you can find the file you wish to open.



When you create web pages, sometimes you may elect to open the file by clicking the browse button. By doing so, you don't have to be connected to the Internet to view these files. For now, close your browser and proceed to the next exercise.

Exercise 2: Creating a Data Sheet

Prior to building a web page, you are asked to create a data sheet. The data sheet information will be used to create your Internet homepage. This step is not required to create web pages; however, it is needed to complete this module's exercises.

Step 1: **Open Word.**

Step 2: **Create** a data sheet that includes your:

⇒ name;

⇒ an overview of work accomplishments;

⇒ work address;

⇒ professional experiences;

⇒ educational background; and,

⇒ additional information you wish people to know about you.

Please Note: This information will be posted on the Internet for all to see. Only use information you are willing to make public and that is professional.

Data Sheet Example

Mary L. Lanigan

Dr. Lanigan is a four-time ISPI Award of Excellence winner for her evaluation research (1999), book (2001) and CD training workshops (evaluation CD in 2005 and performance technology CD in 2007). As an Associate Professor at Governors State University, she teaches various performance improvement classes and is the recipient of three Faculty Excellence awards. Dr. Lanigan has presented papers at national and regional conferences sponsored by the International Society of Performance Improvement and the American Society of Training and Development. She has written articles for Performance Improvement, Performance Improvement Quarterly, The Journal of Insurance Trainers and Educators, and the International Journal of Intercultural Relations. Her doctorate is from Indiana University, specifically, the Instructional Systems Technology program and her Masters degrees are in Educational Psychology, Communication, and Instructional Systems Technology.

Address:

Department of Communication & Training
College of Arts and Sciences
Governors State University
University Park, Illinois 60466

Professional Experiences:

Professor/Governors State University
Trainer/Publishers Circulation Fulfillment
Trainer/First Midwest Bank

Educational Background:

Ph.D., Instructional Systems Technology, Indiana University
M.S., Instructional Systems Technology, Indiana University
M.S., Educational Psychology, Indiana University
M.S., Communication, Illinois State University
B.A., Speech Communication, University of Illinois, Champaign-Urbana

Important Links Regarding Performance Improvement

To learn more information about earning a degree in instructional design and training (also known as performance improvement or performance technology), click on the links below.

To obtain specific information such as class syllabi, plan of study examples and more, then go to: [Human Performance and Training](#)

To obtain specific information about admissions and fees, then go to: [Governors State University](#)

Perhaps a video on instructional design can be inserted.

Top five things you should know about performance technology:

- The goal of the field is to raise employees' performances to optimal levels.
- To determine if the goal has been met, performance technologist must compare the benchmarks of optimal performance to what is actually happening on the job.
- After comparing the benchmarks to actual performance, performance technologists determine gaps, causes, and solutions.
- The solutions implemented will be training and/or non-training interventions.
- All interventions are evaluated and matched back to the benchmarks to see if the solutions enhanced employees' performances back to optimal levels.
-

If you have questions about the field or the graduate program at Governors State University, contact [Dr. Lanigan](#).

Step 3: Save the **data sheet** you created.

Step 4: **Minimize the window.**

Exercise 3: Constructing a Web Page

What are HTML, XHTML, and CSS Coding?

Hypertext Markup Language (HTML) is the coding that aids browsers in reading online documents. Extensible Hypertext Markup Language (XHTML) is a stricter variation of HTML, which mandates certain rules for all web designers. For example, in the past when web designers only used HTML, they were able to write code both in upper and lower case letters. Now with XHTML that is no longer the case. **Web designers must write code all in lower case.** CSS are style sheets that describe the web page colors, fonts, and more. For this module, we will be predominantly using XHTML and CSS coding.

To see what web source code looks like, go to any web page on the Internet. In the Internet Explorer browser: **click View; click Source.** For the debrief below, use the codes from my web page example that I asked you to print out on page 2 of this document.

The top code on a source page typically indicates the XHTML version. Notice that the top code also indicates that this web page is in compliant with www.w3.org, which is a consortium whose goal is to create consistency for all web designers.

Next, the head section includes the title and styles.

The CSS styles listed include the margin size, body fonts, background color, and more.

Scroll down the source code page until you see these codes:

```
</style>
```

```
</head>
```

```
<body>
```

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">

<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1" />

<title>Mary's Homepage</title>

<style type="text/css">

/* Global Styles Defined */
*{
padding:0;
margin: 2;
}

body {
font-family: Arial, Helvetica, sans-serif; /*Note: this line tells bro
search for fonts*/
font-size: 1em;
line-height: 1.25em;
color: black;
background-color: #CCCCFF;
height: 100%;
}
```

The closed style and head tags `</style>` and `</head>` are telling the browser that the style section and heading section are now closed.

The open body tag `<body>` tells the browser that the body, which contains the written content of the web site, is now starting.

The words written in black text are the actual words that appear on the web page. The words written in blue and red are the XHTML and HTML codes.

```

</style>
</head>

<body>

<p><br /><br /><br /></p>

<h1>Mary L. Lanigan, Ph.D.</h1>

<p><br /><br /><br /></p>

<p></p>
<p class="style3">Dr. Lanigan is a four-time ISPI Award of Excellence winner for her evaluation
research (1999), book (2001) and CD training workshops (evaluation CD in 2005 and performance
technology CD in 2007). As an Associate Professor at Governors State University, she teaches
various <a href="#anchor1">performance improvement classes </a>and is the recipient of three
Faculty Excellence awards. Dr. Lanigan has presented papers at national and regional
conferences sponsored by the <em>International Society of Performance Improvement </em>and the
<em>American Society of Training and Development</em>. She has written articles for Performance
Improvement, Performance Improvement Quarterly, The Journal of Insurance Trainers and
Educators, and the International Journal of Intercultural Relations. Her doctorate is from
Indiana University, specifically, the <a href=
"http://site.educ.indiana.edu/Default.aspx?alias=site.educ.indiana.edu/ist">Instructional
Systems Technology </a>program and her Masters degrees are in <strong>Educational Psychology

```

Things You Need Prior to Creating Your Web Page

You are going to create a web page using HTML, XHTML, and CSS codes. Before beginning this exercise you need to complete the following steps.

1. You are going to create your web page using Notepad ++, which is NOT the Notepad that is under the Accessory folder on your computer. Instead it is advanced software that indicates the code in the red and blue colors. In regular Notepad, all contents and coding are in black; this makes coding more difficult.

To download Notepad++, go to: <http://sourceforge.net/projects/notepad-plus/files/>

For more information about the company that produces Notepad++, go to:

<http://notepad-plus.sourceforge.net/uk/site.htm>

2. You will also need a picture of yourself that has been saved as a .jpg image.
3. Create a folder on your hard drive and call it *htmlexercise* and put your picture in this folder. You will also be saving your code and anything else you put on your web site in this folder.

Once you have completed the above three steps you are ready to begin coding.

Writing Code

Remember, the end result of this exercise is to create a web page that looks similar to the example on the Preface pages of this module. The only difference is you will be substituting your information and images for mine.

Step 1: **Open Notepad++.**
You should see a blank screen.

Step 2: **Type** the following **information** into your Notepad document.
Type it exactly as it appears below. You can also follow along from the coding source page you printed out earlier.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
```

The above information is the **Document Type Definition**, which indicates to the browser the type of document it is; the XHTML version; and, the language the designer is using. In this case, the language = English (en).

Step 3: Next, you are going to **type** the **head** information. The heading contains coding that does NOT appear on the web page. Similar to the Document Type Definition section, it communicates information to the browser. In the example below, it is communicating:

- the content type; and,
- the title of the web page.

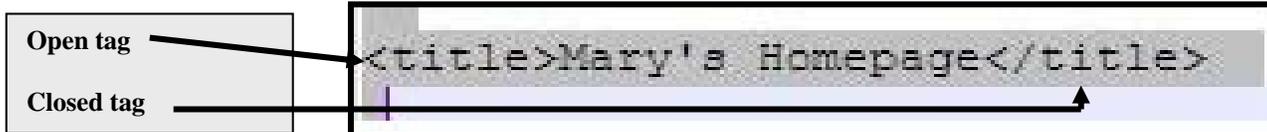
Go ahead and type the code exactly as you see it, including the meta and content tags and information.

```
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1" />

<title>Mary's Homepage</title>
```

The **title** is very important because the browser uses this information when users search for web sites. For example, if someone did a Google search on *Mary's Homepage*, then this page would be on the top of the search results. As such, you may want to title your page with your first and last name.

Note: Notice how the title has an **open** title tag and a **closed** title tag.



Almost all XHTML coding has open and closed tags such as this. If you forget to open or close a tag, then errors will occur in your web page.

Notice: We have an open head tag but we have not closed it yet because we are still working in the heading section.

Here are some examples of open and closed tags.

Tags		Purpose
<code><head></code>	<code></head></code>	To create and end a heading.
<code><title></code>	<code></title></code>	To indicate a page title beginning and ending.
<code><body></code>	<code></body ></code>	To indicate the body of the document has begun and then to indicate it is ending.
<code><h1></code>	<code></h1></code>	This indicates that you want a group of text to be written in the first heading level. This is the largest heading possible.
<code><h2></code>	<code></h2></code>	This indicates that you want a group of text to be written in the second heading level.
<code><p></code>	<code></p></code>	To begin and end a paragraph.
<code></code>	<code></code>	This code indicates a link to another file.
<code></code>	<code></code> <code></code> <code></code>	Creates an ordered list.
<code></code>	<code></code> <code></code> <code></code>	Creates an unordered list.

Step 4: Following the title you want to complete the heading section by putting in all these CSS codes. Type the codes in as illustrated and then I'll explain each.

```
/* Global Styles Defined */
*{
  padding:0;
  margin: 2;
}

body {
  font-family: Arial, Helvetica, sans-serif; /*Note: this line tells browser the order to search for fonts*/
  font-size: 1em;
  line-height: 1.25em;
  color: black;
  background-color: #ccccff;
  height: 100%;
}

/* Set the appropriate color patterns for the general links within the website */

a:link {
  color: maroon;
  font-weight: bold;
}

a:visited {
  color: purple;
}

a:hover {
  color: #ffff33;          /* A type of yellow color */
  background-color: #ead5d4;
}
```

```
/* Set the generic styles through the use of independent classes */  
  
.style1 {  
    font-size: 48px;  
    font-weight: bold;  
    font-family: Arial, Helvetica, sans-serif;  
}  
  
.style2 {  
    font-size: 16px;  
    font-family: Arial, Helvetica, sans-serif;  
}  
  
.style3 {  
    font-size: 14px;  
    font-family: Arial, Helvetica, sans-serif;  
}  
  
.style4 {  
    font-size: 14px;  
    font-family: Arial, Helvetica, sans-serif;  
    text-align: center;  
}
```

```
/* Set the generic styles for display of images through the use of dependent classes */  
  
img.leftAlign {  
  background-color: white;  
  border: solid 15px #006699;  
  float: left;          /* Textual content will float to the right of the image. */  
  padding: 10px;  
  margin: 10px 25px 10px 5px;  
}  
  
img.centerAlign {  
  background-color: white;  
  border: solid 1px #b09c9d;  
  text-align: center;   /* Image will be centered. Text above and below image. */  
  padding: 10px;  
  margin: 10px 5px 10px 25px;  
}  
  
img.rightAlign {  
  background-color: white;  
  border: solid 1px #b09c9d;  
  float: right;        /* Textual content will float to the left of the image. */  
  padding: 10px;  
  margin: 10px 5px 10px 25px;  
}  
  
h1 {  
  color:navy;  
  text-align: center;  
}  
  
h2 {  
  color:navy;  
  text-align: center;  
}  
  
</style>  
</head>
```

NOTE: You have just embedded your styles into your web document. Style sheets can be internal such as the one you just created or external. External style sheets reside in their own files (that end with .css). If you were using an external style sheet, you would not put in all those style codes into your web page. Instead you would create a link to the external style sheet.

For example:

```
<link rel="stylesheet" href="../generalLayout.css" type="text/css" />
```

Let's review the internal style codes that you entered into your web page.

Notice that we started the section with: `<style type="text/css">`. This code tells the browser that from the open style tag to the closed style tag, we are communicating style codes.

Whenever you see `/* and */` between text that is a statement or note to the web designer. In other words, if you want to write a reminder to yourself, but you don't want the browser to read it, then you can type in words as long as you bookend the wording with `/* and */`.

For example: `/* Global Styles Defined */`

This is just a note to the web editor that the styles are being defined below.

```
/* Global Styles Defined */
*{
  padding:0;
  margin: 2;
}

body {
  font-family: Arial, Helvetica, sans-serif; /*Note: this line tells browser the order to
search for fonts*/
  font-size: 1em;
  line-height: 1.25em;
  color: black;
  background-color: #ccccff;
  height: 100%;
}
```

Whenever you indicate a style, you begin the code with a `{` and end it with a `}`.

For example: `*{`
padding:0;
margin: 2;
`}`

This style is communicating to the browser that there is no padding property around the four sides of the web page; hence, `padding:0`. But we are giving margin space or white space around the border at a 2.

Note: A web page consists of a larger box called a margin. Inside that box is an inner box called a border. Inside the border is a smaller box called the padding.

Our next style code is defining the body of the web page.

For example:

```
body {  
    font-family: Arial, Helvetica, sans-serif; /*Note: this line tells the browser the order to  
                                                search for fonts*/  
    font-size: 1em;  
    line-height: 1.25em;  
    color: black;  
    background-color: #ccccff;  
    height: 100%;  
}
```

Here we are telling the browser to look for the Arial font first to display the body text. If the browser can't find Arial, then it will look for Helvetica next and any sans-serif font after that. Next we are indicating the default font-size; line-height, and text color. Subsequently, we are indicating the background color using a *hex code* such as #ccccff, which is a type of bluish-gray color.

NOTE about COLOR: Most colors use a number sequence in order to communicate to the browser what the colors are. There are only 16 predefined colors were you can write out the color name. Those colors are:

- Aqua
- Black
- Blue
- Fuchsia
- Gray
- Green
- Lime
- Maroon
- Navy
- Olive
- Purple
- Red
- Silver
- Teal
- White
- Yellow

If you are not using these colors, then you can go to the web site below to locate the hex color codes for all other possible colors.

<http://html-color-codes.com/>

In the next group of style codes, we are defining our links.

```
/* Set the appropriate color patterns for the general links within the website */  
  
a:link {  
    color: maroon;  
    font-weight: bold;  
}  
  
a:visited {  
    color: purple;  
}  
  
a:hover {  
    color: #ffff33;                /* A type of yellow color */  
    background-color: #ead5d4;  
}
```

The **a:link** indicates an **active link**. As you can see, we are telling the browser we want all active links in maroon color and we want them bolded.

The **a:visited** indicates a **visited link**. After a user clicks on the link, the color will change from maroon to purple.

The **a:hover** indicates the color when a user hovers over a link but doesn't click the link. In this case the link turns yellow and the background color around the link turns a tan color.

Here is what the links look like on the web page.

The first link shows what a hover link looks like.	<p style="text-align: center;">Important Links Regarding Performance Improvement</p> <p>To learn more information about earning a degree in instructional design and training (also known as performance improvement or performance technology), click on the links below.</p> <p>To obtain specific information such as class syllabi, plan of study examples and more, then go to: Human Performance and Training</p> <p>To obtain specific information about admissions and fees, then go to: Governors State University</p> <p>To view a YouTube video on instructional design and training, click here.</p>
The second link shows a visited link.	
The third link shows a link that has not been clicked.	

Notice on all the styles we discussed so far that none of them begin with periods. In other words, *body* and *a:link* are not preceded by periods. These styles are elements common to all browsers. There are times when you may wish to create your own made-up elements. To do so, you want to place a period in front of your made-up element.

For example: *.style1*; *.style2*; *.style3*; and, *.style4* are all made-up elements. What this means is when I place a **style1** in my body code (which you will see when we get to the body), it tells the browser to override the default and make my font 48 and make it bold. Technically, since the font-family indicated in style1 is the same as the default, you don't really have to list that in the code. However, if you wanted style1 to use Times New Roman, then you could have written the font-family as Times New Roman.

```
.style1 {
    font-size: 48px;
    font-weight: bold;
    font-family: Arial, Helvetica, sans-serif;
}

.style2 {
    font-size: 16px;
    font-family: Arial, Helvetica, sans-serif;
}

.style3 {
    font-size: 14px;
    font-family: Arial, Helvetica, sans-serif;
}

.style4{
    font-size: 14px;
    font-family: Arial, Helvetica, sans-serif;
    text-align: center;
}
```

As you can see, style 2 has a reduced font size and style 3's font is further reduced. Notice in style4, not only do we want the font-size 14, but we are also commanding the browser to center the text.

To see how these styles work, let's review the top portion of my web page.



Notice in line 135, I use a style3 code. Thus, I want the text copy to appear at a font size of 14 pixels.

But in line 142, I tell the browser to display that information as a style4. Here I not only want the text at 14 pixels but I want the text centered.

```

124 <body>
125
126
127 <p><br /><br /></p>
128
129 <h1>Mary L. Lanigan, Ph.D.</h1>
130
131
132 <p><br /><br /></p>
133
134 <p></p>
135 <p class="style3">Dr. Lanigan is a four-time ISPI Award of Excellence winner for her
performance technology CD in 2007). As an Associate Professor at Governors State Univ
recipient of three Faculty Excellence awards. Dr. Lanigan has presented papers at na
</em>and the <em>American Society of Training and Development</em>. She has written
Trainers and Educators, and the International Journal of Intercultural Relations. Her
"http://site.educ.indiana.edu/Default.aspx?alias=site.educ.indiana.edu/ist">Instruct:
</strong>, <strong>Communication</strong>, and <strong>Instructional Systems Technol
<p><br /><br /></p>
136
137
138
139
140
141 <h2><strong>Address</strong></h2>
142 <p class="style4">Department of Communication and Training</p>
143 <p class="style4">College of Arts and Sciences</p>
144 <p class="style4">Governors State University</p>
145 <p class="style4">University Park, Illinois 60466</p>
146
147 <p><br /><br /></p>
148

```

The next grouping of style codes are telling the browser how images should appear in relation to the text.

```
* Set the generic styles for display of images through the use of dependent classes */

img.leftAlign {
    background-color: white;
    border: solid 15px #006699;
    float: left;                /* Textual content will float to the right of the image. */
    padding: 10px;
    margin: 10px 25px 10px 5px;
}

img.centerAlign {
    background-color: white;
    border: solid 1px #b09c9d;
    text-align: center;        /* Image will be centered. Text above and below image. */
    padding: 10px;
    margin: 10px 5px 10px 25px;
}
```

Let's look at the first example:

```
img.leftAlign {
    background-color: white;
    border: solid 15px #006699;
    float: left;                /* Textual content will float to the right of the image. */
    padding: 10px;
    margin: 10px 25px 10px 5px;
}
```

Here we are telling the browser to align the image left of the text. Thus, the text will appear to the right of the image. We are also indicating that we want a border around the image. We are indicating that the border be solid, 15 pixels, and that the color is #006699, which is a bluish color.

The image will float to the left of the text and have a padding of 10 pixels and a margin of 10, 25, 10, and 5 around, which is, top-right-bottom-left.

The second example is similar to the first, but the image is centered. Notice the border and border color are also different.

If you return to the previous page, you'll see the image is to the left of the text. Here is how the body code incorporates the style.

<p>Line 134 shows the image code with the <i>leftAlign</i> code built-in to tell the browser to align the Mary image to the left.</p>	<pre>133 134 <p>img class="leftAlign" src="me.jpg" alt="Mary" width="200" height="100" /> 135 <p class="style3">Dr. Lanigan is a four-time ISPI Award of Excellence winner for performance technology CD in 2007). As an Associate Professor at Governors State recipient of three Faculty Excellence awards. Dr. Lanigan has presented papers at</pre>
---	--

The last style codes we created are illustrated below.

```
h1 {  
  color: navy;  
  text-align: center;  
}  
  
h2 {  
  color: navy;  
  text-align: center;  
}  
  
</style>  
</head>
```

The h1 and h2 are pre-defined elements. There are six heading elements. Similar to the other codes, here I have created specific features for each heading. For example, in heading one I tell the browser to list h1 text in navy and to align the text to the center. By default, the h1 heading will appear as 24 point font and h2 will be 18 point. The h2 heading is also coded to appear as navy and centered.

Notice after I get done coding all the styles, I close the style section with a closed style tag, that is, `</style>`. This tells the browser I am done listing my styles.

Next, I close the head section with a closed head tag. This tells the browser I am done with the head section.

Step 5: Begin Creating the Body.

You are now ready to create the body for your homepage. First, you need to **create an open body tag**. Type the open body tag as indicated below.

```
<body>
```

Next we will throw in some break elements. A **break element** is the equivalent of pressing the *Enter* key on your computer. It creates a hard return.

The break element is an empty element. It has no contents and it contains both the open and closed tags all in one. Thus, the break element is written like this: `
` (that is `<br space />`).

```

<body>
<p><br /><br /><br /></p>

<h1>Mary L. Lanigan, Ph.D.</h1>
<p><br /><br /><br /></p>

```

Notice I added an open and closed **p** element, which is a block-level element. The six heading elements mentioned earlier are also block-level elements. Most in-line elements such as breaks, images, links, etc. need to be sandwiched between block-level elements, which you will see as we continue adding code to the body of our web page.

After adding three break elements sandwiched between open and closed **p** elements, next you will create your first header. Type the **h1** code just as it appears above. After the **h1** code, type in your name and then close the **h1** tag as illustrated above. Afterwards, add three more break commands along with the **p** elements as illustrated above.

Note: The browser doesn't recognize hard returns after codes. As such, you could place the break elements immediately following the **h1** closed tag and still get the same result. However, it is recommended to create space to help you visually see what you created. Otherwise, you can get lost in the codes.

Before viewing our work, let's add an image and some text. To make this process a little less time consuming, you are going to enter the appropriate codes and then copy and paste the text from your *Data Sheet* completed in *Exercise 2*. You are also going to use the image of yourself that you saved in the *htmlexercise* folder.

Next type the image source code as illustrated on line 134. However, instead of typing *me.jpg* use the name of your image. So if you saved your picture as: *mypic.jpg*, then type that name between the quotes.

```

133
134 <p></p>

```

Notice in the image source code line, you have to indicate an *alt*. The *alt* is the text name of your image. This text appears when the user hovers over

the image and it is used for the disabled. For my image, I indicated the alt to equal “Mary.” Following the alt are the width and height of the image. I’m indicating my picture size to be 200 by 100 pixels. You can adjust these sizes to see how the picture varies when you change the height and width. After playing with the image height and width, next you will begin your first line of text. Type the following code:

```
<p class=“style3”>
```

Notice: When indicating the style within the body of the web page code, you do NOT put the period in front of the style number. Simply type the style number as illustrated above.

Do you remember from our coding style sheets what we are telling the browser to do when we indicate *style3*?

The **<p** part of the code acknowledges the beginning of a new paragraph and the **class=“style3”** indicates that we are using the style3, which is font size 14. After the greater sign, copy and paste the information you typed on your data sheet regarding your career accomplishments.

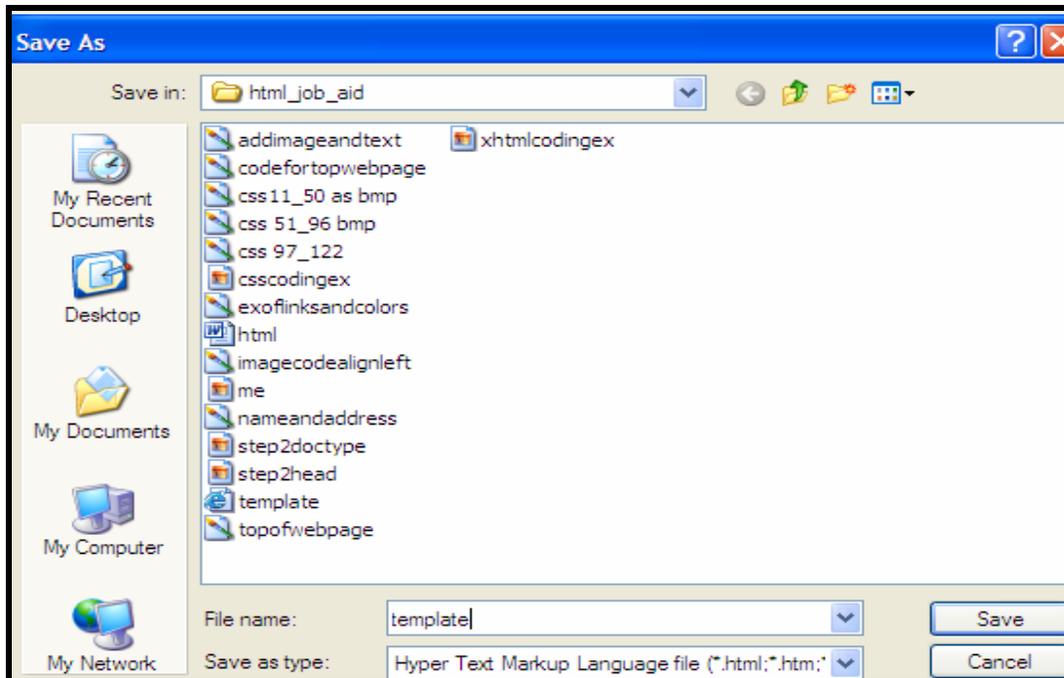
After pasting in your career accomplishments, on the next line type a closed paragraph tag, that is, **</p>**.

On the next line, add three break elements sandwiched between an open and closed p element.

Step 6: Saving and Viewing Your Work.

At this point, you are probably wondering what your web page looks like. Before viewing the document in the browser, you need to save your work.

In Notepad++, **click File; click Save As.**
Make sure you save the page in your *htmlexercise* folder.



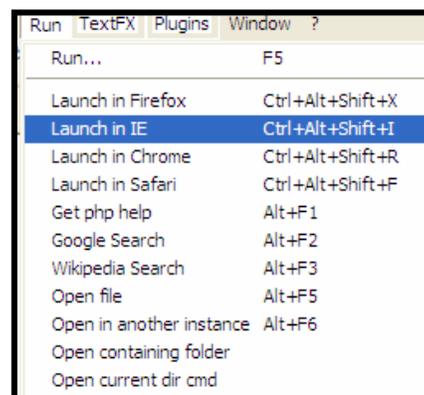
When the Save As box appears, give your page a file name. Notepad++ automatically saves your document as *.html*. As such, you can either click save, or if you want your document to be saved as an *.htm* file, then you need to add the file extension in the file name. For example: *template.htm*.

Note: Both *.html* and *.htm* are web document file extensions. Some web designers prefer to use the *.htm* file extension because it is one less letter to type in the URL. It is up to you which extension you want to use.

After you have saved the document, you are ready to view your work. In Notepad++, go to the top menu and **click Run**.

Afterwards, **click Launch in IE**.

Next, Internet Explorer opens and your web page appears in the browser window.



Step 7: Adding Section Titles.

Let's create four distinct sections with the titles: **Address; Professional Experience; Educational Background;** and, **Important Links Regarding Performance Improvement.** We will bold these titles by using the *strong* open and closed tags. You will see in the h2 line tags that I added `` and `` before and after each title to bold the titles.

Side Note: The code to italicize text is:

```
<em> The text goes here and you close the tag. </em>
```

Let's end each section with three break elements sandwiched between the open and closed p elements. We are also going to copy and paste in the data from the data sheets we created in Exercise 1. Follow the headings and styles codes used in the illustration on the next page.

Look at the following illustration. Type in the code exactly as you see it in red and blue; but insert your information into the content area (that is, the text written in black).

REMEMBER: Make sure you put in all quotation marks, greater than and less than signs, etc. Otherwise, your code will get messed up.

```

<h2><strong>Address</strong></h2>
<p class="style4">Department of Communication and Training</p>
<p class="style4">College of Arts and Sciences</p>
<p class="style4">Governors State University</p>
<p class="style4">University Park, Illinois 60466</p>

<p><br /><br /><br /></p>

<h2><strong>Professional Experience</strong></h2>
<p class="style4">Associate Professor, Governors State University</p>
<p class="style4">Training and Instructional Designer, Publishers Circulation Fulfillment</p>
<p class="style4">Training and Instructional Designer, First Midwest Bank</p>

<p><br /><br /><br /></p>

<h2><strong>Educational Background</strong></h2>
  <p class="style4">Ph.D., Instructional Systems Technology, Indiana University </p>
  <p class="style4">M. S., Instructional Systems Technology, Indiana University</p>
  <p class="style4">M. S., Educational Psychology, Indiana University</p>
  <p class="style4">M. S., Communications, Illinois State University</p>
  <p class="style4">B. A., Speech Communications, University of Illinois- Urbana/Champaign</p>

<p><br /><br /><br /></p>

<h2><strong>Important Links Regarding Performance Improvement</strong></h2>

<p class="style3">To learn more information about earning a degree in instructional design and training
links below.</p>
<p><br /></p>
<p class="style3">To obtain specific information such as class syllabi, plan of study examples and more,
<p><br /></p>
<p class="style3">To obtain specific information about admissions and fees, then go to: <a href="http://
<p><br /><br /></p>
<p class="style3">To view a YouTube video on instructional design and training, click on the video prese
<p><br /><br /></p>

```

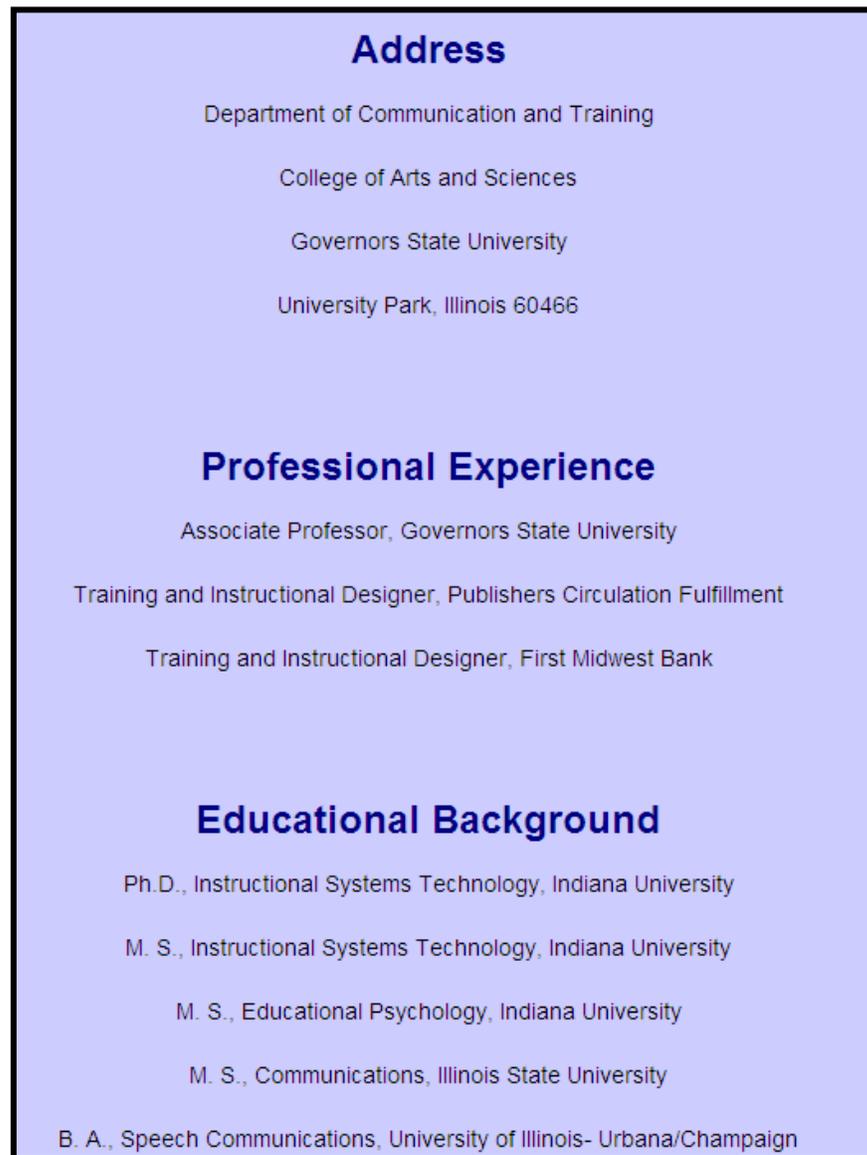
Step 8: Save and View Your Work.

After entering the appropriate codes above and copying and pasting your data into the content text, next view your work.

In Notepad++, **click the disk icon** at the top of the page to save.

Next, **click Run; click Launch in IE.**

If you did your code correctly, then the middle of your web page should look something like this image.



If your image doesn't look like this, recheck your coding to make sure you wrote all the text correctly. If you did, then the problem might be that you launched the web page in a different browser than Microsoft Internet Explorer. All browsers have unique features that interpret code differently; and as a result, web pages don't always appear the same in different browsers even though the code is exactly the same. Re-run your work and make sure you clicked to launch in IE.

Step 9: Adding Links.

After viewing your web page, let's return to the *Important Links Regarding Performance Improvement* section. We are now going to add links to connect to external web pages:

One link will go to: <http://www.hpandt.com>

The second link will go to: <http://www.govst.edu>

The code to create a link is:

`The text to describe the link`

Thus, you have the open `` and the closed ``. Let's see how this code looks in Notepad++.

```
<h2><strong>Important Links Regarding Performance Improvement</strong></h2>

<p class="style3">To learn more information about earning a degree in instructional design and
training (also known as performance improvement or performance technology), click on the links
below.</p>
<p><br /></p>
<p class="style3">To obtain specific information such as class syllabi, plan of study examples
and more, then go to: <a href="http://www.hpandt.com">Human Performance and Training</a></p>
<p><br /></p>
<p class="style3">To obtain specific information about admissions and fees, then go to: <a href=
"http://www.govst.edu">Governors State University</a></p>
<p><br /><br /></p>
```

Notice how the links are written above. We first begin the paragraph with our paragraph tag and style codes. Next, we write some text that will go before the link. We then create the link, followed by the text which will be activated, and then we close the link tag with ``. Thus, in the above examples, the words, *Human Performance and Training* and *Governors State University* are the linked text. The image below shows how the code appears on the web site.

Important Links Regarding Performance Improvement

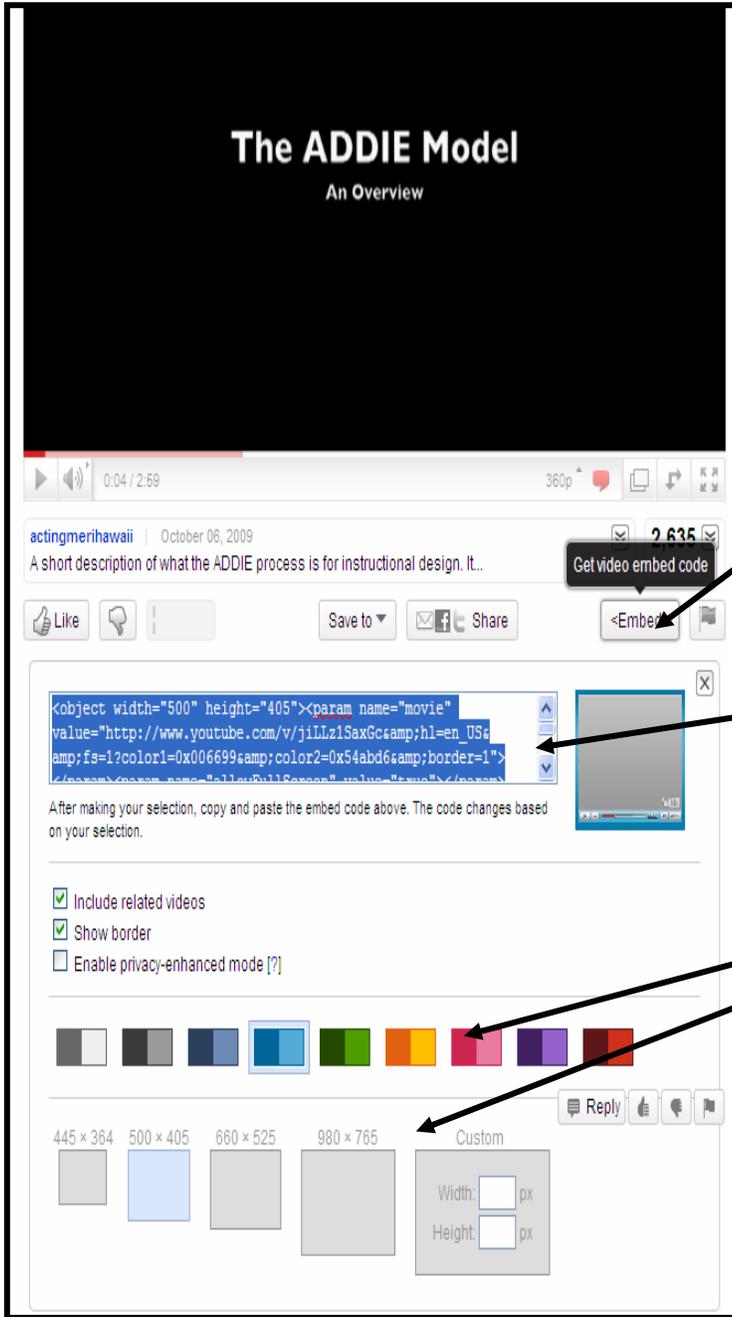
To learn more information about earning a degree in instructional design and training (also known as performance improvement or performance technology), click on the links below.

To obtain specific information such as class syllabi, plan of study examples and more, then go to: [Human Performance and Training](http://www.hpandt.com)

To obtain specific information about admissions and fees, then go to: [Governors State University](http://www.govst.edu)

Step 10: Embedding a YouTube video.

The links we created above moved the user from your web page to another external web page. This time we want the user to remain on our site as well as bring a YouTube video into our web page. To complete this task, go to: <http://www.youtube.com> and find yourself a video on instructional design. After you locate a video, then follow the instructions below.



Click the Embed button.

You will see the code that you will copy and paste into your Notepad++.

You will also see the options to pick your border colors and screen size.

Make sure you **select** your **border colors** and **screen size** before copying the embedded code because the code will be different depending on the options you select.

Once you **copy** the **code**, **paste** it into **Notepad++**.

Your Notepad++ code will look something like the bolded text below. Before the text, add some wording such as: *To view a YouTube video on instructional design and training, click on the video presentation below.*

Notice how the wording is placed into a paragraph tag and closed off with a closed paragraph tag. Next, I added two break elements. After the embedded YouTube coding, I placed four break elements.

```
<p class="style3">To view a YouTube video on instructional design and training, click on the video
presentation below.</p>
<p><br /><br /></p>

<object width="500" height="405"><param name="movie"
value="http://www.youtube.com/v/jiLLz1SaxGc&amp;hl=en_US&amp;fs=1?color1=0x006699&amp;
;color2=0x54abd6&amp;border=1"></param><param name="allowFullScreen"
value="true"></param><param name="allowscriptaccess" value="always"></param><embed
src="http://www.youtube.com/v/jiLLz1SaxGc&amp;hl=en_US&amp;fs=1?color1=0x006699&amp;c
olor2=0x54abd6&amp;border=1" type="application/x-shockwave-flash" allowscriptaccess="always"
allowfullscreen="true" width="500" height="405"></embed></object>
<p><br /><br /></p>

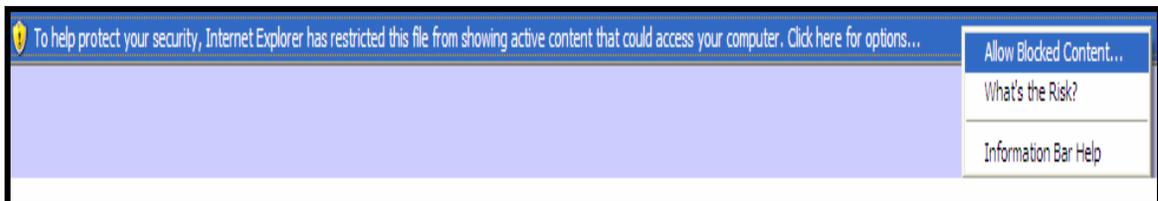
<p><br /><br /></p>
```

Let's save the code in Notepad++ and launch it to see how it looks.

NOTE: After launching the page in Internet Explorer, make sure you click the active content bar. **Click the yellow box.**



Next, **click Allow Blocked Content.**



If you don't allow blocked content, your video will not show up.

Your web page should look something like the image below.

Important Links Regarding Performance Improvement

To learn more information about earning a degree in instructional design and training (also known as performance improvement or performance technology), click on the links below.

To obtain specific information such as class syllabi, plan of study examples and more, then go to: [Human Performance and Training](#)

To obtain specific information about admissions and fees, then go to: [Governors State University](#)

To view a YouTube video on instructional design and training, click on the video presentation below.

ADDIE **The ADDIE Model**

The diagram illustrates the ADDIE model. It consists of five colored circles arranged vertically: a red circle 'A' at the top, a green circle 'D', an orange circle 'D', a purple circle 'I', and a blue circle 'E'. A central light blue box labeled 'Formative Evaluation' is connected to the 'D' and 'I' circles by yellow arrows. A grey box with a play button icon is positioned between the two 'D' circles. A thick grey arrow on the right side points from the 'E' circle back up to the 'A' circle, indicating a feedback loop. A thick grey arrow on the left side points from the 'A' circle down to the 'I' circle, indicating a downward flow. A thick grey arrow at the bottom points from the 'I' circle to the 'E' circle. A 'YouTube' logo is visible in the bottom right corner of the video frame.

Step 11: Creating Lists.

Another coding feature you may wish to implement into your web page is ordered and unordered lists. An ordered list uses numbers while an unordered list uses bullet points.

In my web page example, I created an ordered list as illustrated below.

The top five things you should know about performance technology:

1. The goal of the field is to raise employees' performances to optimal levels.
2. To determine if the goal has been met, performance technologist must compare the benchmarks of optimal performance to what is actually happening on the job.
3. After comparing the benchmarks to actual performance, performance technologists determine gaps, causes, and solutions.
4. The solutions implemented will be training and/or non-training interventions.
5. All interventions are evaluated and matched back to the benchmarks to see if the solutions enhanced employees' performances back to optimal levels.

You will do the same. To do so, we will use the `` open command, followed by `` open and closed `` commands for each listed item, and then we will close the list with a ``. Thus, first type your first paragraph codes introducing the list. Then on the next line, type your ``. On the next line type `<li class="style3">`. This command tells the browser we are entering a listed item but want the font to appear as 14 (as indicated by style3). Then close the first listed item with a `` tag. Follow the same process for the remaining listed items. After listing each, close the ordered list with a closed tag.

```
<p class="style3">The top five things you should know about performance technology:</p>
<ol>
  <li class="style3">The goal of the field is to raise employees' performances to optimal levels. </li>
  <li class="style3">To determine if the goal has been met, performance technologist must compare the benchmarks of optimal performance to what is actually happening on the job.
<li class="style3">After comparing the benchmarks to actual performance, performance technologists determine gaps, causes, and solutions. </li>
  <li class="style3">The solutions implemented will be training and/or non-training interventions.</li>
  <li class="style3">All interventions are evaluated and matched back to the benchmarks to see if the solutions enhanced employees' performances back to optimal levels.</li>
</ol>
```

Save and view your web page.

Step 12: Creating Anchors.

Anchor elements allow users to move from one part of the web page to another. An anchor is a type of internal link.

On my web page, I created two anchors.

```
<p id="anchor1">
  <p class="style3">If you have questions about the field or the graduate program at Governors State
  University, contact <a href="mailto:m-lanigan@govst.edu">Dr. Lanigan</a>. </p>
  <br /><br />
  <p><a href="#top">Back to Top</a></p>
</body>
</html>
```

Let's begin with the second anchor, that is, the *Back to Top* link. Most (not all) browsers recognize the code “#top” as an indication to send the user back to the top of the page. As such, you can simply type the code as illustrated.

```
<p><a href="#top">Back to Top</a></p>
```

Thus, when the users click the words, *Back to Top*, the link will send them to the top of the page.

Unlike the *Back to Top* anchor, most anchors need an id to link to. For example, on the top of my page, I created an anchor link between the words performance improvement classes as illustrated below.

```
<p class="style3">Dr. Lanigan is a four-time ISPI Award of Excellence winner for
her evaluation research (1999), book (2001) and CD training workshops
(evaluation CD in 2005 and performance technology CD in 2007). As an
Associate Professor at Governors State University, she teaches various <a href
="#anchor1">performance improvement classes </a>and is the recipient of three
Faculty Excellence awards. Dr. Lanigan has presented papers at national and
regional conferences sponsored by the <em>International Society of Performance
Improvement </em>and the <em>American Society of Training and
Development</em>. She has written articles for Performance Improvement,
Performance Improvement Quarterly, The Journal of Insurance Trainers and
Educators, and the International Journal of Intercultural Relations. Her doctorate is
from Indiana University, specifically, the <a
href="http://site.educ.indiana.edu/Default.aspx?alias=site.educ.indiana.edu/ist">In
structional Systems Technology </a>program and her Masters degrees are in
<strong>Educational Psychology</strong>, <strong>Communication</strong>,
and <strong>Instructional Systems Technology</strong>.
</p>
```

Next, I created an id to tell this anchor were to go when the user activates the link. In this example, I placed the id at the bottom of my web page.

```
<p id="anchor1">
  <p class="style3">If you have questions about the field or the
  graduate program at Governors State University, contact <a
  href="mailto:m-lanigan@govst.edu">Dr. Lanigan</a>. </p>
  <br /><br />
  <p><a href="#top">Back to Top</a></p>
</body>
</html>
```

Thus, when the user activates the above link, the browser will send them down to the bottom of the web page.

To practice the anchor link, insert the anchor into the top portion of you text similar to the way I did it. Then add an anchor id to the bottom of your page. Follow the coding just as I illustrated in the above two examples.

Afterwards, save and view your web page. Click on the links to make sure they work.

Step 13: Mailto Link.

You may have noticed at the end of my web page, I write the following.

If you have questions about the field or the graduate program at Governors State University, contact [Dr. Lanigan](mailto:m-lanigan@govst.edu).

The *Dr. Lanigan* words are linked with a mailto code. The mail to code is:

```
<a href="mailto:m-lanigan@govst.edu">Dr. Lanigan</a>.
```

Thus, you use the `<a href =` code and in between the quotation marks, you type in **mailto:** and *an e-mail address*. Between the greater and less than signs, you type text that describes whose e-mail address it is. Close the tag with ``.

(Please Note: This tag does not work in all browsers. It does work in Microsoft Internet Explorer, typically opening up Outlook.)

At this point, my web page is complete. Assess your own web page to make sure all the codes are in order.

ADDENDUM

Adding Audio

You may wish to add sound to your web page. For example, you may want music, or your voice, etc. After you have saved an audio file, then decide where you wish to place the audio link on your web page.

To link a sound file, type the following code into your web page.

```
<p><a href="name of audio file.extension"></a></p>
```

For example: Let's say I have an audio file called, *introduction.wav*.

The link would be:

```
<p><a href="introduction.wav"></a></p>
```

And if I wanted to link the audio to the words, "Click here to listen to the audio," then the link would be as follows.

```
<p class="style3"> <a href="introduction.wav">Click here</a> to  
listen to the audio.</p>
```

Notice I placed a style code within my p element in order to communicate to the browser how to read my text, that is, "Click here to listen to the audio." The text will appear as a style3 or a 14 point font.

If you wish to have a picture act as an icon to activate your sound, then your code would look something like this.

```
<p><a href="name of audio file.extension"></a></p>
```