

How to Make a Gallery Webpage using HTML

4

In this chapter, we will learn the following to World Class Web standards:

- **Using a Storyboard to Create a Gallery Webpage**
- **Starting a HTML Gallery Webpage**
- **Adding Page Properties to the Body of the Web**
- **Adding a Table to the Web Page**
- **Adding the Thumbnail Image to the Gallery Webpage**
- **Adding Additional Hyperlinks to the Gallery Webpage**
- **Inserting a Copyright Statement in the Gallery Webpage**
- **Defining the Image Map in the Gallery Webpage**
- **Closing the HTML Web Page**
- **Viewing the Web Page with the Web Browser**

Using a Storyboard to Create a Gallery Webpage

In this chapter, we will learn how to make a gallery webpage using HTML, where we show the person browsing a series of smaller images and they can click on the thumbnail graphic to see a larger picture. From the storyboard shown in figure 4.1, we will use a table to separate text and images on the page. This scope of work always will require a complete storyboard showing the banner, the smaller thumbnail images, the name of the links for the navigation bars, and the copyright statement.

900

Careers in Design							75	
<div style="display: flex; justify-content: space-between;"> <div style="font-size: 2em; font-weight: bold;">The Artist</div> <div style="font-weight: bold;">Finest Artwork in Ohio</div> </div>							35	
Awards	Gallery	Art Lessons	Virtual Tour	Products	Art First	Contact Us	100	
<h3 style="margin: 0;">The Gallery</h3> <p style="margin: 0;">This gallery demonstrates a sample of 3D computer aided design.</p>							216	
circular_th.jpg		<p style="font-size: 0.8em;">This image was done to demonstrate 3D graphics for mechanical designers. The two parts are sitting in a virtual corner with a spotlight behind the camera.</p>					216	
bracket_th.jpg		<p style="font-size: 0.8em;">This image was done to demonstrate 3D graphics for mechanical designers. The three parts are sitting on a glass surface with the spotlight shining down.</p>					40	
Memberships		Press Release		About Us		Privacy Policy	Site Map	40
Copyright 2009 by Local Artist. All Rights Reserved.							40	

gallery.html

Figure 4.1 – The Local Artist’s Storyboard for their Gallery webpage

On the storyboard, we write the overall width of the page and the individual height of each row. When determining the size of the columns in the storyboard, divide the width of the whole layout by the number of columns, which in this example is 7. The answer comes to approximately 128 pixels. Place both the height and width of the webpage cells on the storyboard as shown in Figure 4.1.

In row1, we merge individual cells together for the banner, so we take the total width of 900 pixels. When we compute a region such as for circular_th.jpg image, we multiply 128 pixels times the three cell widths the graphic occupies and we arrive at 384 pixels. Now that we have a complete storyboard with digital measurements written on the diagram, we can make the gallery webpage.

Starting a HTML Gallery webpage

Begin the project by opening up Notepad by clicking the Start button on our desktop and choosing Programs/Accessories/Notepad. Select Format on the menu bar to see whether word wrapping is chosen.

Now we will begin to enter the HTML code into Notepad. The first thing we want to type into the page is `<html>` and `<head>` as shown in Figure 4.2.

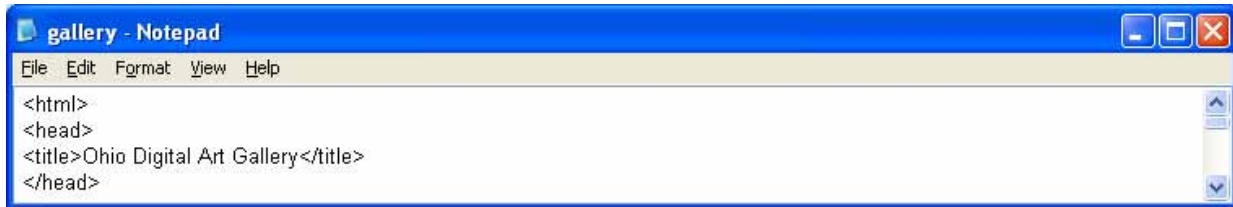


Figure 4.2 – Starting the Gallery webpage in Notepad

Next the `<title>` code identifies a document to the users. On the index or gallery webpage, we will just type the name of the website, Ohio Digital Art. When we view the webpage in Internet Explorer, the text “Ohio Digital Art” will appear in the document title on the upper left section of our computer window. Try to be specific with the titles on the pages since this another opportunity to identify the information be presented to the viewer. Do not just put word like gallery webpage in the title, since this could apply to anyone’s website.

Next, we will want to save our work. Chose File on the menu bar and then pick Save. Save the file as index.html. We call the majority of gallery webpage documents, Index. There will be a few occasions in later chapters where we will name the gallery webpage another name.

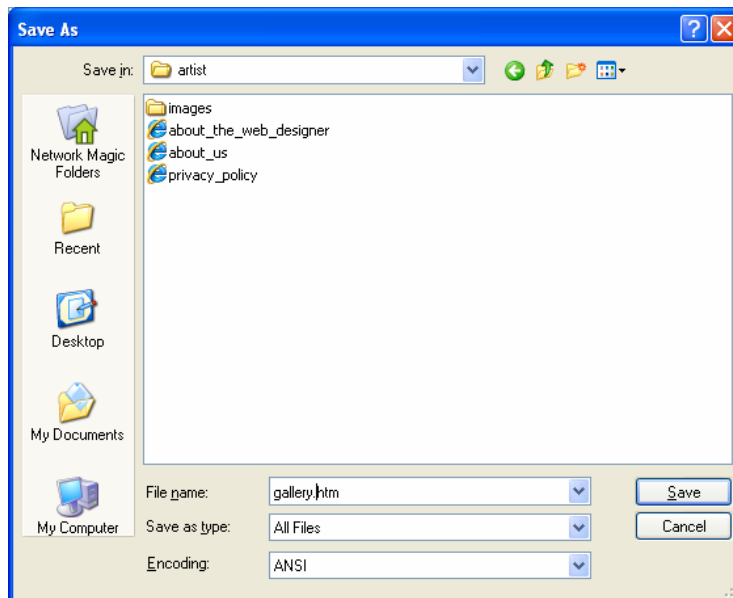


Figure 4.3 – Saving the Gallery webpage

Adding Page Properties to the Body of the Web Page

Now when we code the body of the HTML file, we will set the background color, the text color, the hyperlink text color, the visited links color and the active links color on the page. The background color for the Ohio Digital Art gallery webpage is black which is coded as `bgcolor="000000"`. Sometimes, we will want to specify another color, so we can check in a graphics program, like Corel's Paint Shop Pro for the hexadecimal name of the color we want to use. The code begins as shown below.

```
<body bgcolor="000000"
```

>

And we will add more elements to this HTML expression.

In many graphic application programs, the Color window or dialogue box will have a text box that displays the HTML code for any color we select. If we choose a basic red the HTML Color code is `#FF0000`. When we are in the graphic program, we can use the Dropper tool to pick a color on our own image and again the HTML code in the Color window will reflect our choice.

After picking the web page's background color, we will assign the text color. We will type `text="#FFFFFF"` for white inside the Body expression after the `bgcolor` element.

Now we will assign precise colors to the hyperlinks in the gallery webpage. There are three areas we want to code, link color, active link color and visited link color.

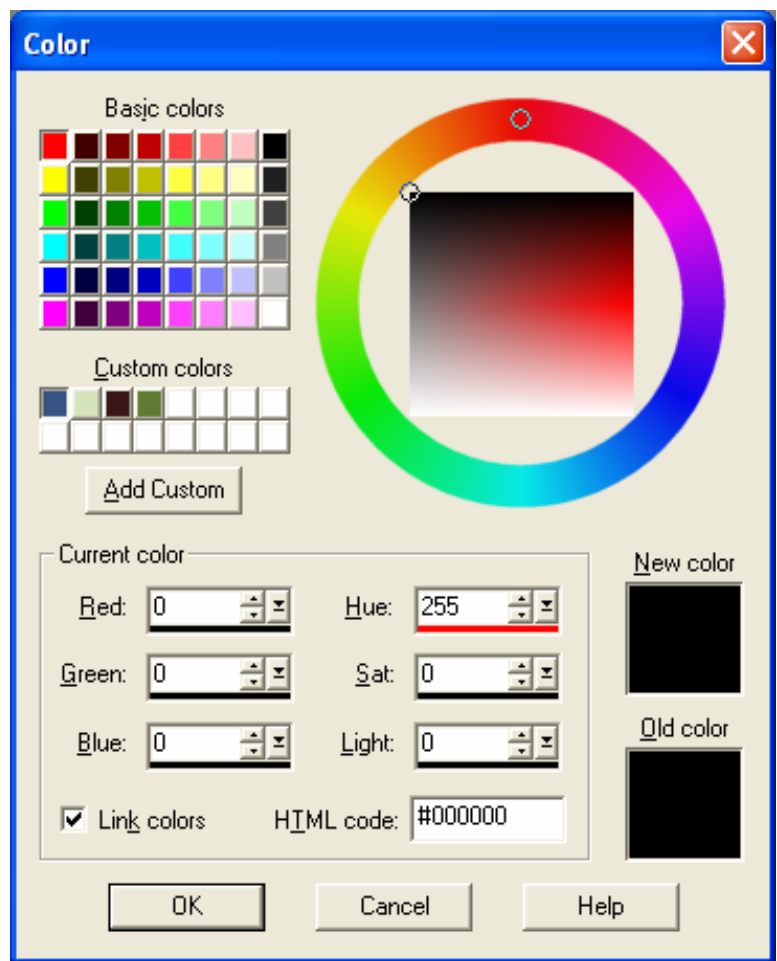


Figure 4.4 – Determining the HTML Color Code

The `link` color is the shade of the hyperlink while we are just viewing the gallery webpage. When we are screening the gallery webpage in the web browser and we did not select any hyperlinks yet, the link color is what we see. The default link is blue. We will type `link="#FFFFFF"` for white inside the body code after the text element for our project to override the default color.

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The **alink** color is the shade of the hyperlink while we are selecting the link. The active link color does not appear on the faster computers we use today, since the modern computer will quickly open the new page, so we would not see the active link color. We suggest that link and active link colors should remain the same. Therefore we will type **alink="#FFFFFF"** for white inside the body code after the **alink** element.

The **vlink** color is the shade of the hyperlink after we visited the webpage. The default visited link color for our computer is purple. In our Ohio Digital Art website, we assign the visited link as white or **vlink="#FFFFFF"**. This code is typed inside the body after the **vlink** element.

To see the example of the entire body expression, refer to Figure 4.5.

```

gallery - Notepad
File Edit Format View Help
<html>
<head>
<title>Ohio Digital Art Gallery</title>
</head>
<body bgcolor="#000000" text="#FFFFFF" link="#FFFFFF" vlink="#FFFFFF" alink="#FFFFFF">
  
```

Figure 4.5 – Starting the Body and Defining the Page Properties

Element	Name	Description
Bgcolor	Background Color	Gives a background color to the page body, table or cell
Example	Start Tag	End Tag
<<body bgcolor="#000000" text="#000000" link="#FFFFFF" vlink="#FFFFFF" alink="#FFFFFF">		
</body>		

Element	Name	Description
text	Text Color	Gives a color to the text
Example	Start Tag	End Tag
<<body bgcolor="#000000" text="#000000" link="#FFFFFF" vlink="#FFFFFF" alink="#FFFFFF">		
</body>		

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Element	Name	Description
link	Link Color	Gives a color to the hyperlink text
Example	Start Tag	End Tag
<pre><<body bgcolor="#000000" text="#000000" link="#FFFFFF" vlink="#FFFFFF" alink="#FFFFFF"> </body></pre>		

Element	Name	Description
vlink	Visited Link Color	Gives a color to the hyperlink text when the page is visited
Example	Start Tag	End Tag
<pre><<body bgcolor="#000000" text="#000000" link="#FFFFFF" vlink="#FFFFFF" alink="#FFFFFF"> </body></pre>		

Element	Name	Description
alink	Active Link Color	Gives a color to the hyperlink text during the selection process
Example	Start Tag	End Tag
<pre><<body bgcolor="#000000" text="#000000" link="#FFFFFF" vlink="#FFFFFF" alink="#FFFFFF"> </body></pre>		

By defining the hyperlink, text and background colors as elements in the body expression, we override the standard defaults and we do not have to define these colors later in the HTML code. Now, we are ready to insert the table.

Adding a Table to the Web Page

We use tables to control the images and text within a web page. For our first webpage project that employs a table, we will define the width to be 900 pixels, and the background color to be black. We will turn the cell's borders, the cellspacing and cellpadding off and that we align the table in the center of the webpage. The coded expression appears as follows.

```
<table bgcolor=#000000 width="900" border="0" cellspacing="0" cellpadding="0" align="center">
```

Tag	Name	Description
Table	Table	Places a table in the webpage or inside another table
Example	Start Tag	End Tag
<body> </body>	<table>	</table>

One might suspect that after we write the first expression of the table code then the difficulty of designing a gallery webpage using a table is complete. The real work comes to the web designer as we program each row of the table.



Figure 4.6 – Adding a Table to the Web Page

In Figure 4.6, we add the following coded expression.

```
<tr><td colspan="7" height="75"></td></tr>
```

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A row begins with the HTML tag `<tr>`. After a new row commences, we then can define the cell starting with `<td>` tag. The elements we normally place in the cell code is width and height, however sometimes we will merge all the cells together and the breadth will default to the table width designation.

The `colspan` element in the cell description denotes that there are seven columns and we want to merge them together. The height of the cells in row one is 75 pixels. We only want one 900 pixel wide cell in row one, so we can insert a single JPG banner image. For this webpage, we will show have an image map, so the person browsing the page can click on an area of the graphic to go to the homepage or go to the careers web page. On many websites and on this one, the web designer hyperlinks the organization's logo or name on the left side of the banner to the homepage. The definition of the image map will be at the end of the code and we will characterize those HTML expressions when we are done with the page.

The next row is the horizontal navigation bar and we can copy the HTML expressions from the index.html page or type the code.

```
<tr>
<td width="128" height="35">
<b><center><font face="Arial" size="2"><a href="awards.htm">Awards</a></font></center></b>
</td>
```

Beginning a new row, we will define every cell with a width of 128 pixels and a height of 35 pixels. In the first cell of the second row, we have a hyperlink for Awards. The bold, size 2, centered and Arial font text will link to the webpage, awards.htm.

In the second cell of the second row, we have a hyperlink for Gallery. The bold, size 2, centered and Arial font text will link to the webpage, gallery.htm. In the third cell of the second row, we have a hyperlink for Art Lessons. The bold, size 2, centered and Arial font text will link to the webpage, art_lessons.htm. In the fourth cell of the second row, we have a hyperlink for Virtual Tour. The bold, size 2, centered and Arial font text will link to the webpage, virtual_tour.htm. In the fifth cell of the second row, we have a hyperlink for Products. The bold, size 2, centered and Arial font text will link to the webpage, products.htm. In the sixth cell of the second row, we have a hyperlink for Art First. The bold, size 2, centered and Arial font text will link to the webpage, art_first.htm. In the seventh and last cell of the second row, we have a hyperlink for Contact Us. The bold, size 2, centered and Arial font text will link to the webpage, contact_us.htm.

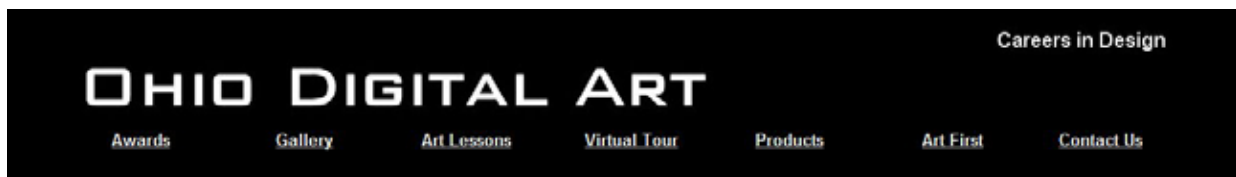


Figure 4.7 – The Ohio Digital Art Banner and Navigation Bar

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Once we type the following code and test the gallery webpage file with our browser software, the webpage will appear as shown in Figure 4.7.

```

<td width="128" height="35">
<b><center><font face="Arial" size="2"><a href="gallery.htm">Gallery</a></font></center></b>
</td>
<td width="128" height="35">
<b><center><font face="Arial" size="2"><a href="art_lessons.htm">Art Lessons</a></font></center></b>
</td>
<td width="128" height="35">
<b><center><font face="Arial" size="2"><a href="virtual_tour.htm">Virtual Tour</a></font></center></b>
</td>
<td width="128" height="35">
<b><center><font face="Arial" size="2"><a href="products.htm">Products</a></font></center></b>
</td>
<td width="128" height="35">
<b><center><font face="Arial" size="2"><a href="art_first.htm">Art First</a></font></center></b>
</td>
<td width="128" height="35">
<b><center><font face="Arial" size="2"><a href="contact_us.htm">Contact Us</a></font></center></b>
</td>

```

After placing all seven hyperlinks in the second row, we type the end tag `</tr>` to close that row of the table.

Tag	Name	Description
TR	Table Row	Inserts a new row in a table
Example	Start Tag	End Tag
<pre> <tr><td colspan="7" height="75"></td></tr> </pre>	<pre> <tr> </pre>	<pre> </tr> </pre>

Tag	Name	Description
TD	Table Cell	Inserts a new cell in a table row
Example	Start Tag	End Tag
<pre> <tr><td colspan="7" height="75"></td></tr> </pre>	<pre> <td> </pre>	<pre> </td> </pre>

Adding the Thumbnail Images to the Gallery webpage

Begin the third row with the start tag `<tr>` and we want to place the title “The Gallery”. We will choose a size 5, Arial font that is centered in the cell. We use another paragraph in the cell for a short introduction concerning the collection of images. Type the HTML expressions as follows.

```
<tr>
  <td height="100" colspan="7">
    <p align="center"><font face="Arial, Helvetica, sans-serif" size="5"> The
      Gallery</font> </p>
    <p align="center"><font face="Arial, Helvetica, sans-serif" size="3"> This gallery
      demonstrates a sample of 3D computer aided design.</font></p>
  </td>
</tr>
```

For the first cell of the fourth row, we will insert the first thumbnail image by typing `<td colspan="3" height="216" bgcolor="#666666">` to merge three cells and then we type `` to insert the premium 3D picture that Ohio Digital Art is capable of producing. Notice that the compressed JPG graphic called `circular_th` is in a folder called `images`. There is a forward slash between the folder name and the file name. Whenever we use a thumbnail and a large image combination, the smaller image has a “_th” at the end of the filename and the larger graphic can have “_lg” or just the regular name. The image `circular_th.jpg` will have to be located in a subfolder called “images” in the parent Ohio Digital Art web page folder. Following the name of the image and the graphic’s location, we have the width and the height of the picture in pixels. Close the cell with `</td>`.

We type the hyperlink code `` In front of the `

</td>
```

For the second cell of the fourth row, we place a eloquent sentence describing the image. Again, we will use the `<blockquote>` to move the left aligned text to the right. A web designer does not want the text right against the image.

```
<td height="73" colspan="4" align="left" valign="top" bgcolor="#666666" border="0">
 <blockquote>

 <p>
 This image was done to demonstrate 3D graphics for mechanical designers.
 The two parts are sitting in a virtual corner with a spotlight behind the
 camera.</p>
 </blockquote>
</td>
```

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End the fourth row with the start tag `<tr>`.

Tag	Name	Description
<code>img</code>	Image	Insert an image
Example	Start Tag	End Tag
<code>&lt;td colspan="5" height="317"&gt;&lt;img src="images/3dmain.jpg" width="640" height="317"&gt;&lt;/td&gt;</code>	<code>&lt;img</code>	<code>&gt;</code>

Tag	Name	Description
Blockquote	Increase Indent	Tabs the text over in the webpage body
Example	Start Tag	End Tag
<code>&lt;blockquote&gt; &lt;p&gt;&lt;font face="Arial" size="4"&gt;So You Can Sit Back and Relax&lt;/font&gt;&lt;/p&gt;&lt;/blockquote&gt;</code>	<code>&lt;blockquote&gt;</code>	<code>&lt;/blockquote&gt;</code>

Tag	Name	Description
<code>a</code>	Hyperlink	Create a link to a web page using an image.
Example	Start Tag	End Tag
<code>&lt;a href="awards.htm"&gt;&lt;img src="images/awards.jpg" width="128" height="128" border="0"&gt;&lt;/a&gt;</code>	<code>&lt;a&gt;</code>	<code>&lt;/a&gt;</code>

## Adding Additional Hyperlinks to the Gallery webpage

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Many web pages have a second navigation bar for minor links such as privacy policy, press release and memberships. The Ohio Digital Art gallery webpage has five of these hyperlinks at the bottom of the storyboard. For the first and last of the cell definitions, we will not add any text. The middle five will have hyperlinked text as shown below.

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```
<tr>
<td width="128" height="20">
</td>
<td width="128" height="20">
<center>Membership</center>
</td>
<td width="128" height="20">
<center>Press Release</center>
</td>
<td width="128" height="20">
<center>About Us</center>
</td>
<td width="128" height="20">
<center>Privacy Policy</center>
</td>
<td width="128" height="20">
<center>Site Map</center>
</td>
<td width="128" height="20">
</td>
</tr>
```

After placing all the images in the sixth row, we want to end the row with the `</tr>`.

## Inserting a Copyright Statement in the Gallery webpage

---

For our copyright statement, we choose an Arial font and a HTML font size of 1. Again, as in row six, we merge the columns with `<td colspan="7" height="40">`. Type `&copy;` to get the copyright © symbol. A copyright statement should be at the bottom of every web page.

Type the expression as shown below.

```
<tr>
<td colspan="7" height="20"><center>
Copyright © 2009 by Local Artist. All Rights Reserved.</center>
</td>
</tr>
```

Now, we type `</table>` to close the table in the gallery web page.

## Defining the Image Map in the Gallery webpage

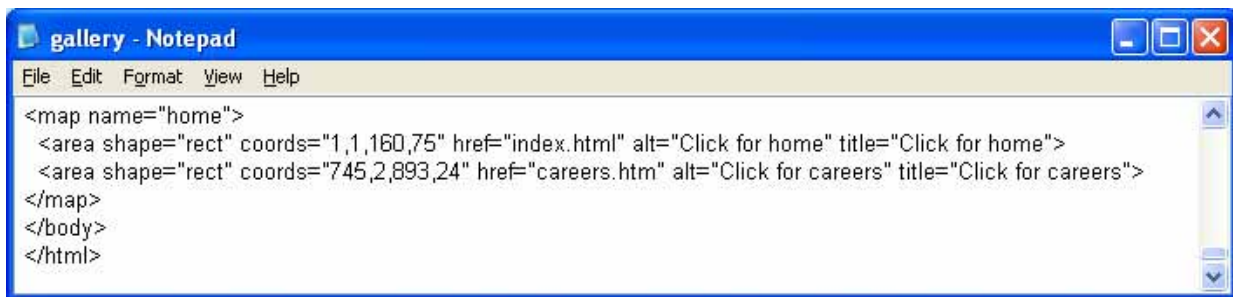
---

When we hyperlink an area of an image rather than the whole graphic, we use image maps. Remember, we placed the `usemap="#home"` code in the banner HTML expression. Now after closing the table, we type the following code:

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```
<map name="home">
 <area shape="rect" coords="1,1,160,75" href="index.html" alt="Click for home"
 title="Click for home">
 <area shape="rect" coords="745,2,893,24" href="careers.htm" alt="Click for careers"
 title="Click for careers">
</map>
```

For the area of the map, we can choose rectangle, circle or polygon. For our first map, we pick rectangular and type "rect". We define the upper left and bottom right coordinates of the pick area. For the link to the homepage we use "1,1" and "160,75". These measurements come from the left and then the top. Next, we add the name of the file that we hyperlink such as "index.html". The alt element causes a text message to appear when the person browsing floats their mouse over the mapped area.



```
gallery - Notepad
File Edit Format View Help
<map name="home">
 <area shape="rect" coords="1,1,160,75" href="index.html" alt="Click for home" title="Click for home">
 <area shape="rect" coords="745,2,893,24" href="careers.htm" alt="Click for careers" title="Click for careers">
</map>
</body>
</html>
```

Figure 4.8 – The Image Map Code

## Closing the HTML Web Page

After keying in all of the rows and cells, we type `</body>` to close the body of our web page. Press the Enter button and type `</html>` to close the HTML web page.

The entire solution for our gallery webpage is shown below.

```
<html>
<head>
<title>Ohio Digital Art Gallery</title>
</head>

<body bgcolor="#000000" text="#FFFFFF" link="#FFFFFF" vlink="#FFFFFF" alink="#FFFFFF">
<table bgcolor=#000000 width="900" border="0" cellspacing="0" cellpadding="0" align="center">
 <tr>
 <td colspan="7" height="75"></td>
 </tr>
 <tr>
 <td width="129" height="35">
 <center>Awards</center>
 </td>
 <td width="129" height="35">
```

## How to Make a Gallery Webpage using HTML

```
<center>Gallery</center>
</td>
<td width="129" height="35">
 <center>Art Lessons</center>
</td>
<td width="129" height="35">
 <center>Virtual Tour</center>
</td>
<td width="129" height="35">
 <center>Products</center>
</td>
<td width="129" height="35">
 <center>Art First</center>
</td>
<td width="126" height="35">
 <center>Contact Us</center>
</td>
</tr>
<tr>
<td height="100" colspan="7">
 <p align="center"> The Gallery </p>
 <p align="center"> This gallery demonstrates a sample of 3D
 computer aided design.
 </p>
</td>
</tr>
<tr>
<td height="73" colspan="3" bgcolor="#666666">

</td>
<td height="73" colspan="4" align="left" valign="top" bgcolor="#666666" border="0">
 <blockquote>

 <p>
 This image was done to demonstrate 3D graphics for mechanical designers.
 The two parts are sitting in a virtual corner with a spotlight behind the camera.</p>
 </blockquote>
</td>
</tr>
<tr>
<td height="216" colspan="3" bgcolor="#FFFFFF">

</td>
<td height="216" colspan="4" align="left" valign="top" bgcolor="#FFFFFF">
 <blockquote>

 <p>
 This image was done to demonstrate 3D graphics for mechanical designers.
 The three parts are sitting on a glass surface with the spotlight shining
 down. </p>
 </blockquote>
</td>
</tr>
</tr>
```

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```
<tr>
 <td width="129" height="20"> </td>
 <td width="129" height="20">
 <center>Membership</center>
 </td>
 <td width="129" height="20">
 <center>Press Release</center>
 </td>
 <td width="129" height="20">
 <center>About Us</center>
 </td>
 <td width="129" height="20">
 <center>Privacy Policy</center>
 </td>
 <td width="129" height="20">
 <center>Site Map</center>
 </td>
 <td width="126" height="20"> </td>
</tr>
<tr>
 <td colspan="7" height="20">
 <center> Copyright © 2009 by Local Artist. All Rights Reserved.
 </center>
 </td>
</tr>
</table>
<map name="home">
 <area shape="rect" coords="1,1,160,75" href="index.html" alt="Click for home" title="Click for home">
 <area shape="rect" coords="745,2,893,24" href="careers.htm" alt="Click for careers" title="Click for careers">
</map>
</body>
</html>
```

## Viewing the Web Page with the Web Browser

To check and see if our HTML web page works properly go to Internet Explorer. Chose file/open and search for the file we saved as our HTML gallery webpage. Open the file.

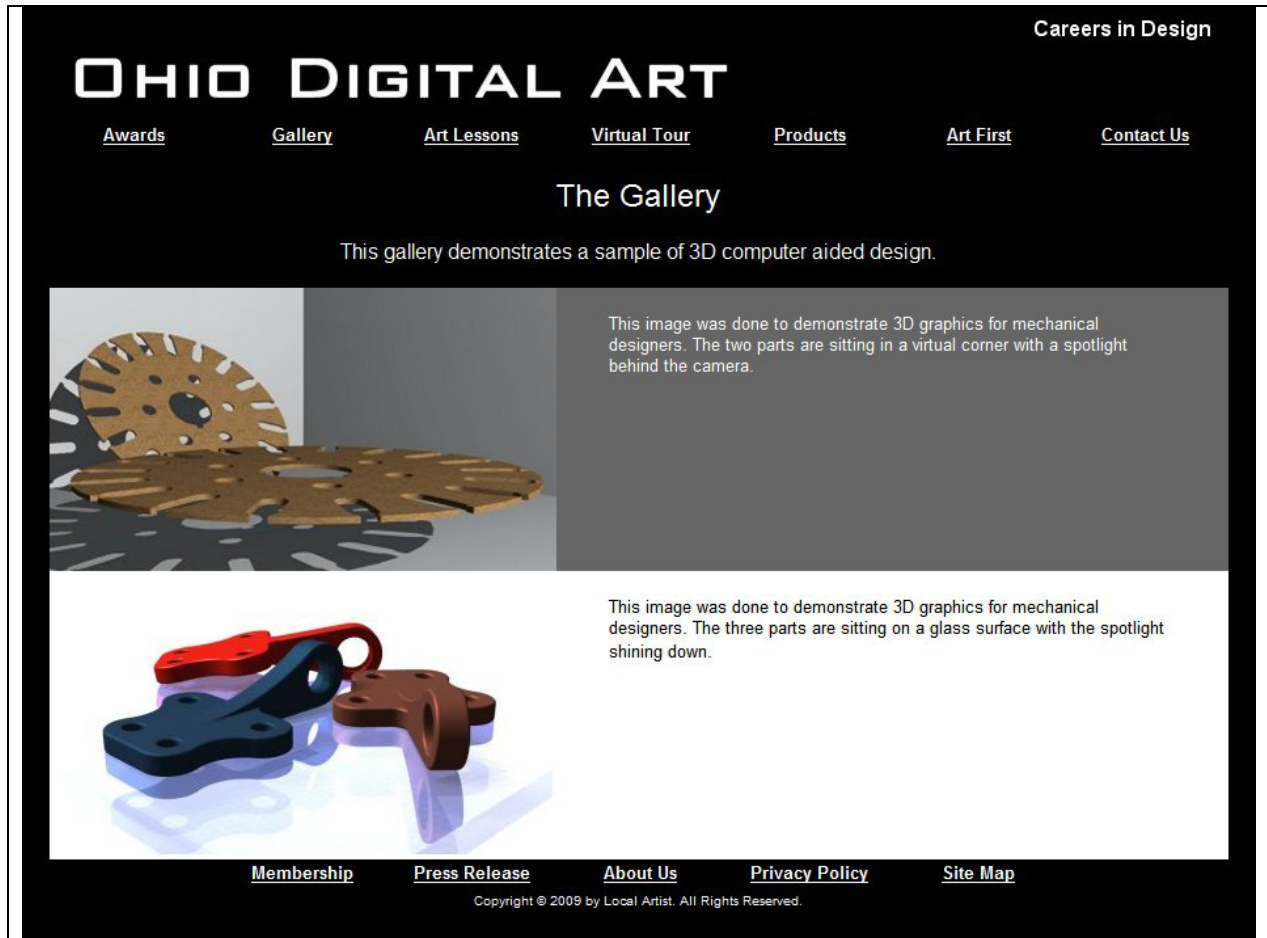


Figure 4.9 – Viewing the Gallery webpage in the Web Browser

Once we chose our file and open up our HTML gallery webpage, the page should show the banner, graphics and text. If the page does not show anything or the looks funny, then there is an error in our code. Make sure we have all our brackets in the right place and that no code is missing a bracket. After we make our changes, save the HTML file again and view the page in the browsing application. When our page is error free, then we have just successfully made our first gallery webpage using HTML programming.

**\* World Class CAD Challenge 15-7 \* - Create a gallery webpage in Microsoft Notepad or other similar software application that communicates adequately to your target audience. The web page should contain no errors. Complete this task in less than 60 minutes to maintain your World Class ranking.**



## How to Make a Gallery Webpage using HTML

**Send your best time and a copy of your webpage for verification to the authors of these problems to have your name, location and time posted. See the web site for instructions.**

**[www.worldclasscad.com](http://www.worldclasscad.com)**