CSS Positioning, Layering, and more advanced HTML and CSS.

**Tasks:**
1. Use an internal CSS for all of the CSS examples shown below and create a different page for each example.
2. Provide an example of relative positioning.
3. Provide an example of absolute positioning.
4. Provide an example of fixed positioning.
5. Create **at least two** examples of layers using z-index to control stacking order, should layer something over something else.
6. Create an example of overflow with scrolling.
7. Provide an example of an image that is floated with text wrapping around it, add some padding or a margin so text doesn’t ride up against image, add a border to image to matte image.
8. Create an example of a “tableless” layout using float that has minimum 2 columns and has a table like appearance, try centering in page.
9. Add a pseudo class to your page to style link states (hint a:)
10. Create an example of legend.
11. Create an example of iframe (try putting another html page inside iframe).
12. Provide an example of a tab menu using CSS.
13. Provide an example of the rounded corners look using CSS (very limited support).
14. Provide 2 table examples, one styled using html and one styled using CSS.
15. Provide an example of the box model.
16. Provide an example of block element and provide an example of inline element. Explain in your own words what the difference is. Provide an example of modifying a block element to display as an inline element using CSS.
Put this assignment in an A6 folder. Ok to do each example using internal CSS. Best to create each example on a separate page or your CSS will get too long and complicated. Create an index page inside your a6 folder, add links to all of your examples in order to make grading easiest. Modify the code and data shown in the examples, do not use the exact code and data …please! Most of the examples were taken from http://www.w3schools.com/

**CSS Positioning primer**

CSS Positioning

Positioning is one of the areas in which CSS provides formatting possibilities that are simply not available through HTML, and CSS positioning is not difficult. The essential properties used for positioning are:

- Position
- Left
- Top
- Width
- Height
- Z-Index (layers/layering)

(z-index:1
Default z-index is 0. Z-index -1 has lower priority. Meaning it will go behind any text or graphics in this same area)

**Definition**
The position property places an element in a static, relative, absolute or fixed position.

**Possible Values**

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>static</td>
<td>Default. An element with position: static always has the position the normal flow of the page gives it (a static element ignores any top, bottom, left, or right declarations)</td>
</tr>
<tr>
<td>relative</td>
<td>An element with position: relative moves an element relative to its normal position, so “left:20” adds 20 pixels to the element's LEFT position</td>
</tr>
<tr>
<td>absolute</td>
<td>An element with position: absolute is positioned at the specified coordinates relative to its containing block. The element's position is specified with the “left”, “top”, “right”, and “bottom” properties</td>
</tr>
<tr>
<td>fixed</td>
<td>An element with position: fixed is positioned at the specified coordinates relative to the browser window. The element's position is specified with the “left”, “top”, “right”, and “bottom” properties. The element remains at that position regardless of scrolling. Works in IE7 (strict mode)</td>
</tr>
</tbody>
</table>
Relative positioning example:

```html
<!DOCTYPE HTML><html><head><meta charset="utf-8">
<style type="text/css">
    .pos_left {
        position:relative;
        left:-20px
    }
    .pos_right {
        position:relative;
        left:20px
    }
</style>
<body>
<h2>This is a heading in normal position</h2>
<h2 class="pos_left">This heading is moved left to its normal position</h2>
<h2 class="pos_right">This heading is moved right to its normal position</h2>
<p>Relative positioning moves an element RELATIVE to its original position.</p>
<p>The style "left:-20px" subtracts 20 pixels from the element's original left position.</p>
<p>The style "left:20px" adds 20 pixels to the element's original left position.</p>
</body>
</html>
```

Absolute positioning example:

```html
<!DOCTYPE HTML><html><head><meta charset="utf-8">
<style type="text/css">
    .pos_abs {
        position:absolute;
        left:100px;
        top:150px
    }
</style>
<body>
<h2 class="pos_abs">This is a heading with an absolute position</h2>
<p>With absolute positioning, an element can be placed anywhere on a page. The heading below is placed 100px from the left of the page and 150px from the top of the page.</p>
</body>
</html>
```
Fixed positioning example:

```
<!DOCTYPE HTML><html><head><meta charset="utf-8">
<style type="text/css">
body {
    background-attachment: fixed;
    background-image: url(bg.jpg);
}
.fixedExample
{
    position: fixed;
    left: 5px;
    top: 5px;
}
</style>
</head>
<body>
<p class="fixedExample">Fixed positioning An element with position: fixed is positioned at the specified coordinates relative to the browser window. The element's position is specified with the "left", "top", properties. The element remains at that position regardless of scrolling. Note doesn't work in IE. Try body bg fixed, in this example a bg image within the body rule is also fixed.</p>
</body>
</html>
```
Layering/layers z-index example:

```html
<!DOCTYPE HTML><html><head><meta charset="utf-8">

<style type="text/css">
.x {
  position:absolute;
  left:0px;
  top:0px;
  z-index:-1
}
</style>

</head>
<body>
<h1>This is a Heading</h1>
<img class="x" src="image.gif" width="100" height="180">
<p>Default z-index is 0. Z-index -1 has lower priority.</p>
</body>
</html>
```

Overflow example:

```html
<!DOCTYPE HTML><html><head><meta charset="utf-8">

<style type="text/css">
div {
  background-color:#00FFFF;
  width:150px;
  height:150px;
  overflow: scroll
}
</style>

</head>
<body>
<p>The overflow property decides what to do if the content inside an element exceeds the given width and height properties.</p>
<div>You can use the overflow property when you want to have better control of the layout. Try to change the overflow property to: visible, hidden, auto, or inherit and see what happens. The default value is visible. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec volutpat augue at nunc. In id odio ut ante consectetur aliquam. Integer commodo pharetra augue. Proin ac turpis. Donec tincidunt nisli eu urna. Mauris scelerisque. Aliquam scelerisque purus vel dolor. Nullam vulputate placerat nisl. Sed nibh neque, vestibulum sed, congue sit amet, lacinia ut, felis. In tincidunt malesuada ante. Suspendisse risus. Morbi commodo nibh vitae velit. Phasellus mollis elit id urna.</div>
</body>
</html>
```
Float image with text example:

<!DOCTYPE HTML><html><head><meta charset="utf-8">

<style type="text/css">
img {
float:right;
border:1px dotted black;
margin:0px 0px 15px 20px;
}
</style>

<body>
<p>In the paragraph below, the image will float to the right. A dotted black border is added to the image. We have also added margins to the image to push the text away from the image: 0 px margin on the top and right side, 15 px margin on the bottom, and 20 px margin on the left side of the image.</p>
<p><img src="image.gif" width="100" height="100"/>
This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. This is some text. 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</p>
</body>
</html>
Tableless layout example:

```html
<!DOCTYPE HTML><html><head><meta charset="utf-8">
<style type="text/css">
.container {
  margin:0px;
  border:1px solid gray;
}
.header{
  padding:0.25em;
  color:white;
  background-color:gray;
}
.footer {
  padding:0.25em;
  color:yellow;
  background-color:black;
  clear:left;
}
.left {
  float:left;
  width:160px;
  margin:0;
  padding:1em;
}
.content {
  margin-left:190px;
  border-left:1px solid gray;
  padding:1em;
}
</style>

<body>
<div class="container">
  <div class="header"><h1 class="header">W3Schools.com</h1></div>
  <div class="left"><p>"Never increase, beyond what is necessary, the number of entities required to explain anything." William of Ockham (1285-1349)</p></div>
  <div class="content">
    <h2>Free Web Building Tutorials</h2>
    <p>At W3Schools you will find all the Web-building tutorials you need, from basic HTML and XHTML to advanced XML, XSL, Multimedia and WAP.</p>
    <p>W3Schools - The Largest Web Developers Site On The Net!</p>
  </div>
  <div class="footer">Copyright 1999-2005 by Refsnes Data.</div>
</div>
</body>
</html>
```
Pseudo class example:

```html
<!DOCTYPE HTML>
<html>
<head>
<meta charset="utf-8">
<style type="text/css">
a:link {color: #FF0000}
a:visited {color: #00FF00}
a:hover {color: #FF00FF}
a:active {color: #0000FF}
</style>
</head>
<body>
<p><b><a href="default.asp" target="_blank">This is a link</a></b></p>
<p>Note:</b> a:hover MUST come after a:link and a:visited in the CSS definition in order to be effective!!</p>
<p>Note:</b> a:active MUST come after a:hover in the CSS definition in order to be effective!!</p>
</body>
</html>
```

Legend example:

```html
<!DOCTYPE HTML>
<html>
<head>
<meta charset="utf-8">
</head>
<body>
<fieldset>
<legend>The legend element defines a caption for a fieldset for a form:</legend>
<form action="">
Height <input type="text" size="3" />
Weight <input type="text" size="3" />
</form>
</fieldset>
<p>Note:</b> If there is no border around the form, your browser does not support fieldset.</p>
</body>
</html>
```
iframe example:

<!DOCTYPE HTML><html><head><meta charset="utf-8"></head>
<body>
<p> The iframe element creates an inline frame that contains another document.</p>
<iframe src="http://www.cnn.com width="100%"></iframe>
</body>
</html>
CSS Tab Menu (or search for “css tab menu” at google)

<!DOCTYPE HTML><html><head><meta charset="utf-8">

<style type="text/css">
  #navlist{
    padding: 3px 0;
    margin-left: 0;
    border-bottom: 1px solid #778;
    font: bold 12px Verdana, sans-serif;
  }
  #navlist li{
    list-style: none;
    margin: 0;
    display: inline;
  }
  #navlist li a{
    padding: 3px 0.5em;
    margin-left: 3px;
    border: 1px solid #778;
    border-bottom: none;
    background: #DDE;
    text-decoration: none;
  }
  #navlist li a:link { color: #448; }
  #navlist li a:visited { color: #667; }
  #navlist li a:hover{
    color: #000;
    background: #AAE;
    border-color: #227;
  }
  #navlist li a#current{
    background: white;
    border-bottom: 1px solid white;
  }
</style>

</head>

<body>

<div id="navcontainer">
  <ul id="navlist">
    <li id="active">
      <a href="#" id="current">Home</a></li>
    <li><a href="#">Gallery</a></li>
    <li><a href="#">Contact</a></li>
    <li><a href="#">Help</a></li>
    <li><a href="#">Links</a></li>
  </ul>
</div>

</body>

</html>

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Rounded corners example:

Note ONLY works on some of the newest browsers since it’s CSS 3.
(remember you can alternatively find your own example, try to google css rounded corners)
Checkout example at http://border-radius.com/

<!DOCTYPE HTML><html><head><meta charset="utf-8">

<style type="text/css">
.rounded{
    border-radius: 5px;
    background-color: #900;
}
</style>

</head>
<body>
<div class=rounded>
    <p>This is some text. This is some text. This is some text.<br>
       This is some text. </p>
    <p>This is some text. This is some text.<br>
       This is some text. This is some text. </p>
    <p>This is some text.<br>
       This is some text. This is some text. This is some text.</p>
</div>
</body>
</html>

-------------------------------------------------------
Provide 2 table examples, one styled using html and one styled using CSS

HTML styled table example:

```html
<!DOCTYPE HTML>
<html><head>
<meta charset="utf-8">
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>HTML table</title>
</head>
<body>
<table width="200" border="10" cellpadding="10" cellspacing="5" background="red" bordercolor="#CCCCCC">
  <caption>This is a caption</caption>
  <tr>
    <td bgcolor="#666666">&nbsp;</td>  
    <td bgcolor="#000066">&nbsp;</td>  
    <td bgcolor="#009999">&nbsp;</td>
  </tr>
  <tr>
    <td bgcolor="#0033FF">&nbsp;</td>  
    <td bgcolor="#009999">&nbsp;</td>  
    <td bgcolor="#666666">&nbsp;</td>
  </tr>
  <tr>
    <td bgcolor="#009999">&nbsp;</td>  
    <td bgcolor="#666666">&nbsp;</td>  
    <td bgcolor="#000066">&nbsp;</td>
  </tr>
</table>
</body>
</html>
```
CSS styled table example:

```html
<!DOCTYPE HTML><html><head><meta charset="utf-8"><meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>css styled table</title>

<style type="text/css">
<!--
  table{
    background-color: #FF0;
    border: 10px solid #900;
    border-collapse:separate;
    border-spacing:10px;
  }
  tr{
    background-color: #CCC;
  }
  .tableCellStyle {
    background-color: #909;
  }
-->
</style>

<body>
<table width="200" border="1" class="two">
<caption>This is a caption</caption>
<tr>
<td>&nbsp;</td>
<td class="tableCellStyle">&nbsp;</td>
<td>&nbsp;</td>
</tr>
<tr>
<td class="tableCellStyle">&nbsp;</td>
<td>&nbsp;</td>
<td class="tableCellStyle">&nbsp;</td>
</tr>
<tr>
<td>&nbsp;</td>
<td class="tableCellStyle">&nbsp;</td>
<td>&nbsp;</td>
</tr>
</table>
<p>&nbsp;</p>
</body>
</html>
```
Box model

<!DOCTYPE HTML><html><head><meta charset="utf-8"><meta http-equiv="Content-Type" content="text/html; charset=utf-8" /><title>box model folks</title>

<style type="text/css">

.boxModel {
  background-color: #FF0;
  padding: 50px;
  border: 5px dotted #F00;
  margin: 25px;
}

</style>

<body>

<p><span class="boxModel">Box Model Example</span> wow that's cool!!</p>

<p>&nbsp;</p>

<p>works with images too!! Margins are outside the box, padding is inside.</p>

<img src="http://www.valdosta.edu/~lfmoore/monkeyhugesmile.jpg" width="191" height="180" class="boxModel" />

</body>

</html>
CSS Display - Block and Inline Elements

A block element is an element that takes up the full width available, and has a line break before and after it.

Examples of block elements:
<h1></h1>
<p></p>
<div></div>

An inline element only takes up as much width as necessary, and does not force line breaks.

Examples of inline elements:
<span></span>
<a></a>
<strong></strong>

Example of modifying a block element to display as an inline element using CSS:

```html
<!DOCTYPE HTML><html><head><meta charset="utf-8">

<style type="text/css">
li{
    display:inline
}
</style>

<body>
<p>Display this link list as a horizontal menu:</p>
<ul>
    <li><a href="#" target="_blank">HTML</a></li>
    <li><a href="#" target="_blank">CSS</a></li>
    <li><a href="#" target="_blank">JavaScript</a></li>
    <li><a href="#" target="_blank">XML</a></li>
</ul>
</body>
</html>
```
Extra Credit: Alternative Pseudo class and Mozilla/Firefox Rounded corners example

<!DOCTYPE HTML><html><head><meta charset="utf-8"><meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<title>hi</title>

<style type="text/css">
body {
    background: #000000;
}
.pagewrap {
    -moz-border-radius: 30px;
    background: #ffffff;
    border: 5px solid #ffffff;
    min-height: 200px;
    padding: 2em;
    width: 300px;
}
.pagewrap:hover {
    background: yellow;
}
</style>

<body>
<div class="pagewrap">
You can also see that this content box and the content box below have rounded corners using the -moz-border-radius style. Must view with in non ie browsers? Hover over the content boxes to see the pseudo class example.
This is some text. This is some text. This is some text.
This is some text. This is some text. This is some text.
This is some text. This is some text. This is some text.
This is some text. This is some text. This is some text.
This is some text. This is some text. This is some text.
</div>
</body>
</html>