ISTANBUL KÜLTÜR UNIVERSITY, DEPARTMANT OF COMPUTER ENGINEERING

CSE5001 WEB PROGRAMMING LAB MANUAL

Lab 03: Advanced CSS and ASP.NET environment

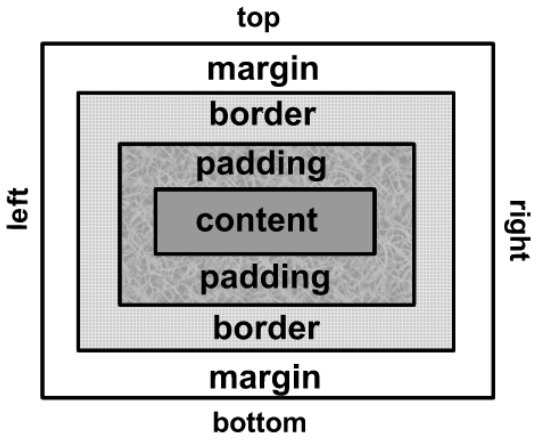
Objective: To understand the positioning and box model, how to control the margins, padding and borders and converting HTML Template to ASP.NET Page

Summary:

Positioning Elements: Elements can be positioned at any coordinates in the page

property	value	description
position	static	default position
	relative	Changes the location of an element in relation to where it would otherwise appear. offset from its normal static position.
	absolute	Precisely specifies the location of an element in the browser window. a fixed position within its containing element
	fixed	a fixed position within the browser window
top, bottom, left, right	positions of box's corners	

Margins and Padding: The box model



The Box Model works like this: in the middle you have the content area (let's say an image), surrounding that you have the padding, surrounding that you have the border and surrounding that you have the margin.

Content: Text & web page elements in the container

Padding: Area between the content and the border

Border: Between the padding and the margin

Margin: Determines the empty space between the element and adjacent elements

Procedure 01: Making border

1. Create a new blank html page with .html extension and save it as **Borders.html.**
2. Create a blank css file with .css extension and save it as **BorderStyle.css** in the same folder as your **Borders.html** file
3. Insert a table (or 12 div) that contains 3 rows and 4 columns to your html page to display different kind of borders

```
<table>
    <tr>
        <td class="border1">none</td>
        <td class="border2">hidden</td>
        <td class="border3">dotted</td>
        <td class="border4">dashed</td>
    </tr>
    <tr>
        <td class="border5">solid</td>
        <td class="border6">double</td>
        <td class="border7">groove</td>
        <td class="border8">ridge</td>
    </tr>
    <tr>
        <td class="border9">inset</td>
        <td class="border10">outset</td>
        <td class="border11">mix </td>
        <td class="border12">colorful </td>
    </tr>
</table>
```

4. Add style to your css file
   - *Apply **border width** and **background color** to your table and set **row** and **cell padding***

```
table {
    border-width: 3px;
    background-color: #9933ff;
}
tr, td {
    padding: 5px;}
```

   - *Create 12 classes to apply different border styles by setting **border-style** property*

```
.border1 {border-style:none;}
.border2 {border-style:hidden;}
.border3 {border-style:dotted;}
.border4 {border-style:dashed;}
.border5 {border-style:solid;}
.border6 {border-style:double;}
.border7 {border-style:groove;}
.border8 {border-style:ridge;}
.border9 {border-style:inset;}
.border10 {border-style:outset;}
.border11 {border-style: solid dotted dashed ridge;}
.border12{
border-style: solid;
/*border-color: red cyan black gold;*/
border-top-color: red;
border-right-color: cyan;
border-bottom-color: black;
border-left-color: gold;
}
```

Procedure 02: Rounded Corners

1. Create a new blank html page with .html extension and save it as **RoundedCorner.html.**
2. Create a blank css file with .css extension and save it as **RoundedCornerStyle.css** in the same folder as your **RoundedCorner.html** file
3. Insert 5 div to your html page to display different kind of corners

```
<p> Rounded corners </p>
<div id="roundCorner1">Rounded corner</div>
<div id="roundCorner2">Rounded corners with background color</div>
<div id="roundCorner3">Rounded corners with background image</div>
<div id="roundCorner4">Individual rounded corners</div>
<div id="roundCorner5">Individual rounded corners with shadow</div>
```

5. Add style to your css file

```
#roundCorner1{/* Rounded corner */
    border-radius: 30px;
    border: 3px solid #87AA00;
    width: 200px;
    height: 100px;
    display: flex;
    align-items: center;
    justify-content: center;
    text-align:center;
}
#roundCorner2{/* Rounded corners with background color */
    border-radius: 20px 20px 20px 20px;
    background: #87AA00;
    width: 200px;
    height: 100px;
    display: flex;
    align-items: center;
    justify-content: center;
    text-align:center;
}
#roundCorner3{/* Rounded corners with background image */
    border-radius: 40px;
    background: url(myImage.png);
    background-repeat: repeat;
    width: 200px;
    height: 100px;
    display: flex;
    align-items: center;
    justify-content: center;
    text-align:center;
}
#roundCorner4{/* Individual rounded corners */
    border-radius: 40px 10px 40px 10px;
    background: #00F;
    width: 200px;
    height: 100px;
    display: flex;
    align-items: center;
    justify-content: center;
    text-align:center;
}
#roundCorner5{/* Individual rounded corners with shadow */
```

```
    box-shadow: 10px 10px 25px 0px rgba(0,0,0,0.75);
    border-radius: 0 50px 0 50px;
    background: #F00;
    width: 200px;
    height: 100px;
    display: flex;
    align-items: center;
    justify-content: center;
    text-align:center;
}
```

Procedure 03: Making some changes on your previous week's lab procedure

1. Download Previous weeks' lab manual solution (**VAIndex.html and VAStyle.css**) from cats.iku.edu.tr or use your solution. (or you can use yours)
2. Add a div to cover of your html document content for modifying the layout(**VAIndex.html**)

```
<div id="wholeSite">
…
</div>
```

3. Modify the style sheet (**VAStyle.css**)
   - To center the content of your page

```
#wholeSite
{
width:800px;
margin-left:auto;
margin-right:auto;
}
```

   - To make a border add following lines to your id selector(**#banner**) that contains banner properties

```
border-radius:40px;
border: 2px solid;
```

   - To make a border and rotate items, add following lines to your id selector (**#navBar li a**) that contains navigation bar properties

```
border: 2px solid;
border-radius: 0px 25px 0px 25px;
transform: rotate(-5deg);
```

   - To make a rounded border in the top left corner, add following line to **#leftArea**

```
border-radius:20px 0 0 0;
```

   - To make a rounded border in the top right corner, add following line to **#rightArea**

```
border-radius:0 20px 0 0;
```

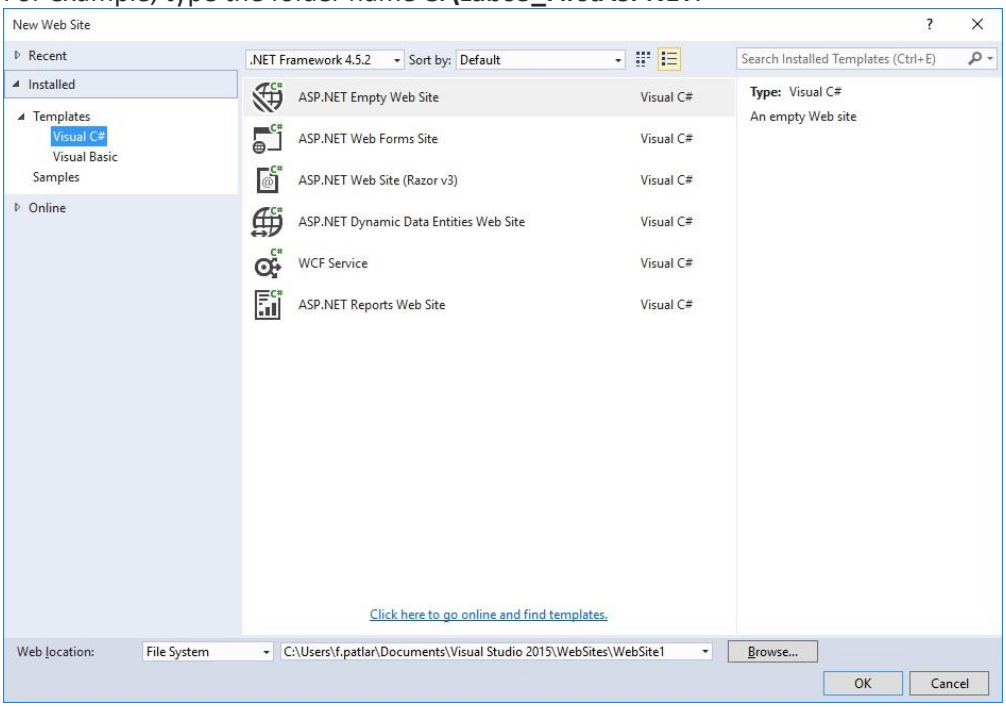
   - To change body color from black to gradient in **body** selector, update the first line with the following code

```
background:linear-gradient(black, gray);
```

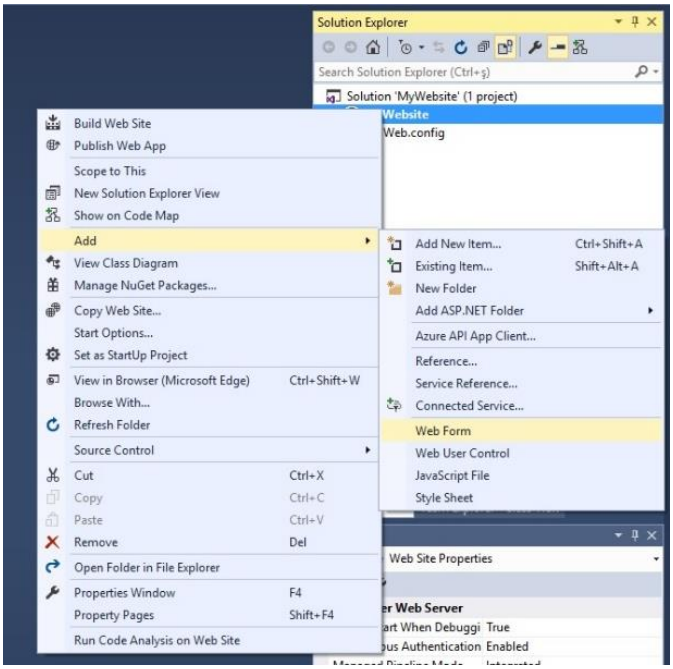
4. Save your work and display.

Procedure 04: HTML Template to ASP.NET Page

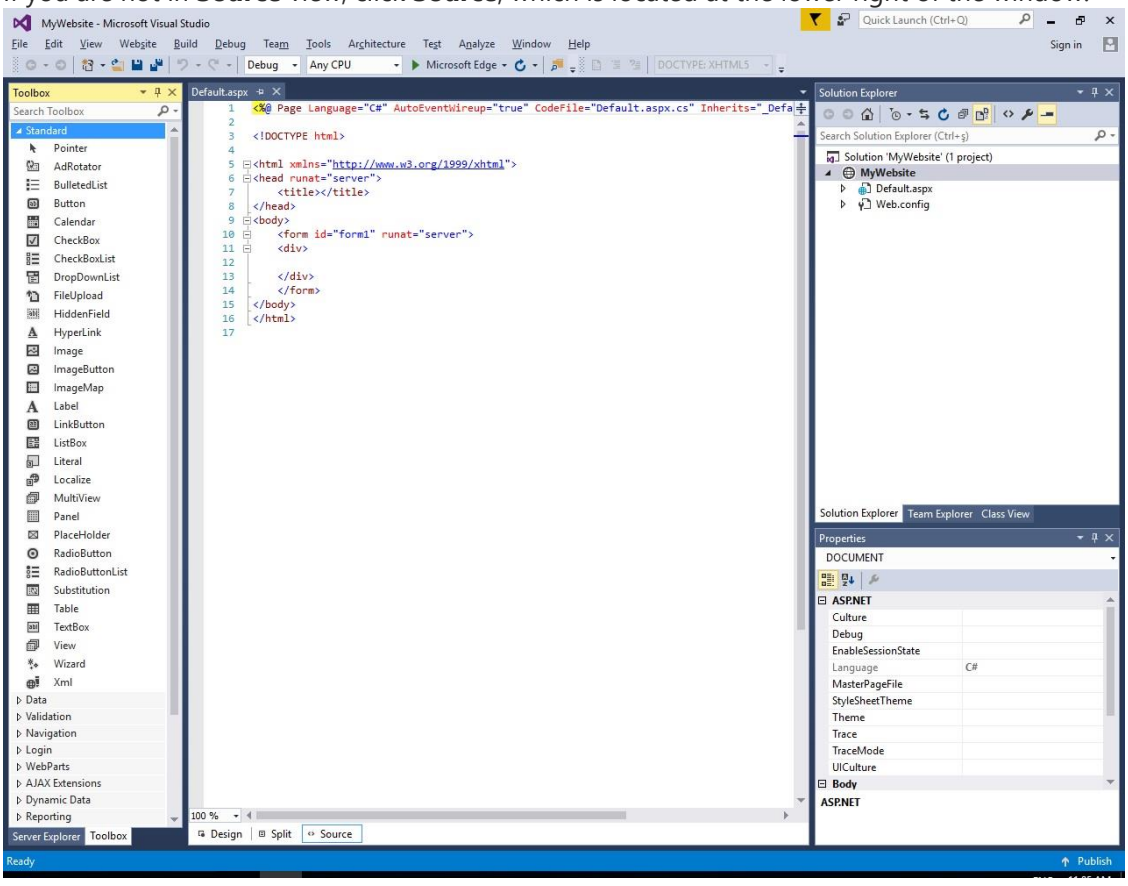
1. Open Visual Studio for Web.
2. In the **File** menu, click **New Web Site**. *The **New Web Site** dialog box is displayed.*
3. Under **Installed**, click **Visual C#** and then select **ASP.NET Empty Web Site**.
4. In the **Web location** box, select **File System**, and then enter the name of the folder where you want to keep the pages for your website.
   For example, type the folder name **C:\Lab03_FirstASPNET**.



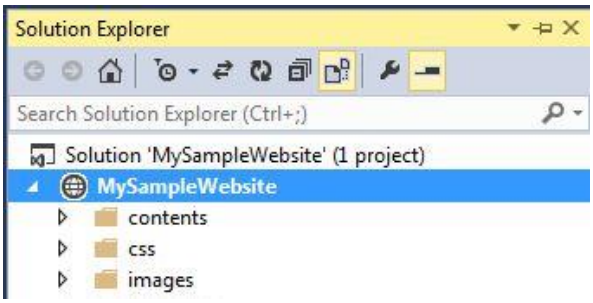
5. Click **OK**.
6. In **Solution Explorer**, right-click the root of your Web site, and then click **Add New Item**.



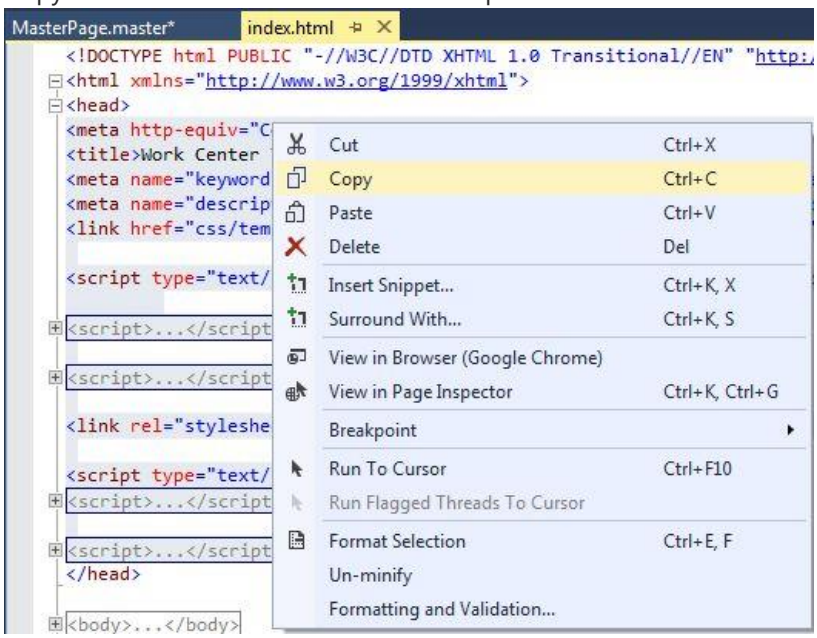
7. Select **Web Form**, name the file Default.aspx, and then click **Add**.
8. If you are not in **Source** view, click **Source**, which is located at the lower right of the window.



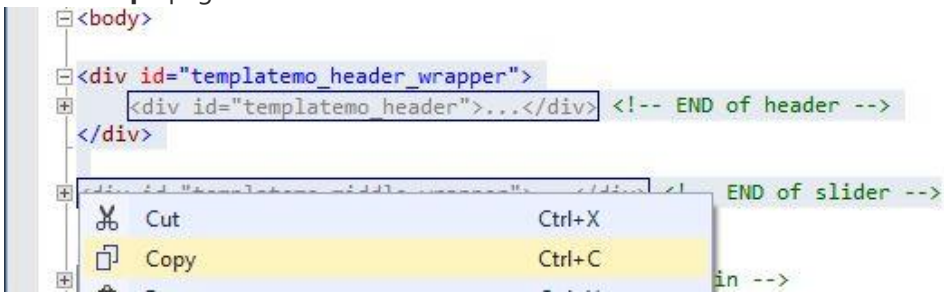
9. Open your .html file for appling Template.
10. Import needed CSS and Image files. Copy all your resource and paste them to the solution window



11. Copy template code into Default.aspx page.
    - Copy the **header** info from the .html template into the header for the Default.aspx page.



    - Then copy the contents of the **body** from the .html template into the body of the **Default.aspx** page.



    - Check the **references** to the required CSS and other files, and make any changes as necessary.
12. Run your Project

Now you can start your lab assignment!

USEFUL INFORMATION

The Box Model

When you set the width of an element, the element can actually appear bigger than what you set: the element's border and padding will stretch out the element beyond the specified width. Look at the following example, where two elements with the same width value end up different sizes in the result.

```
.simple {
  width: 500px;
  margin: 20px auto;
}

.fancy {
  width: 500px;
  margin: 20px auto;
  padding: 50px;
  border-width: 10px;
}
```

Position: Relative

Relative behaves the same as static unless you add some extra properties.
Setting the top, right, bottom, and left properties of a relatively-positioned element will cause it to be adjusted away from its normal position. Other content will not be adjusted to fit into any gap left by the element.

```
.relative1 {
  position: relative;
}
.relative2 {
  position: relative;
  top: -20px;
  left: 20px;
  background-color: white;
  width: 500px;
}
```

Position: Absolute

Allows you to literally place any page element exactly where you want it.

```
#positionAbsolute
{
width:30px; height:40px;
position:absolute;
left: 500px;
top: 150px;
background-color:red;
}
```

Position: fixed

A fixed element is positioned relative to the viewport, which means it always stays in the same place even if the page is scrolled. As with relative, the top, right, bottom, and left properties are used.

```
.fixed {
  position: fixed;
  bottom: 0;
```

```
        right: 0;
        width: 200px;
        background-color: white;}
```

Z-Index

Modifies the stacking order of elements on a Web page. The default z-index value is “0". Elements with higher z-index values will appear stacked on top of elements with lower z-index values rendered on the same area of the page.

```
      /* Keyword value */
      z-index: auto;

      /* integer values */
      z-index: 0;
      z-index: 3;
      z-index: 289;
      z-index: -1; /* Negative values to lower the priority */

      /* Global values */
      z-index: inherit;
      z-index: initial;
      z-index: unset;
```

Eg.

HTML:

```
<div class="dashed-box">Dashed box
  <span class="gold-box">Gold box</span>
  <span class="green-box">Green box</span>
</div>
```

CSS:

```
.dashed-box {
  position: relative;
  z-index: 1;
  border: dashed;
  height: 8em;
  margin-bottom: 1em;
  margin-top: 2em;
}
.gold-box {
  position: absolute;
  z-index: 3; /* put .gold-box above .green-box and .dashed-box */
  background: gold;
  width: 80%;
  left: 60px;
  top: 3em;
}
.green-box {
  position: absolute;
  z-index: 2; /* put .green-box above .dashed-box */
  background: lightgreen;
  width: 20%;
  left: 65%;
  top: -25px;
  height: 7em;
  opacity: 0.9;
}
```