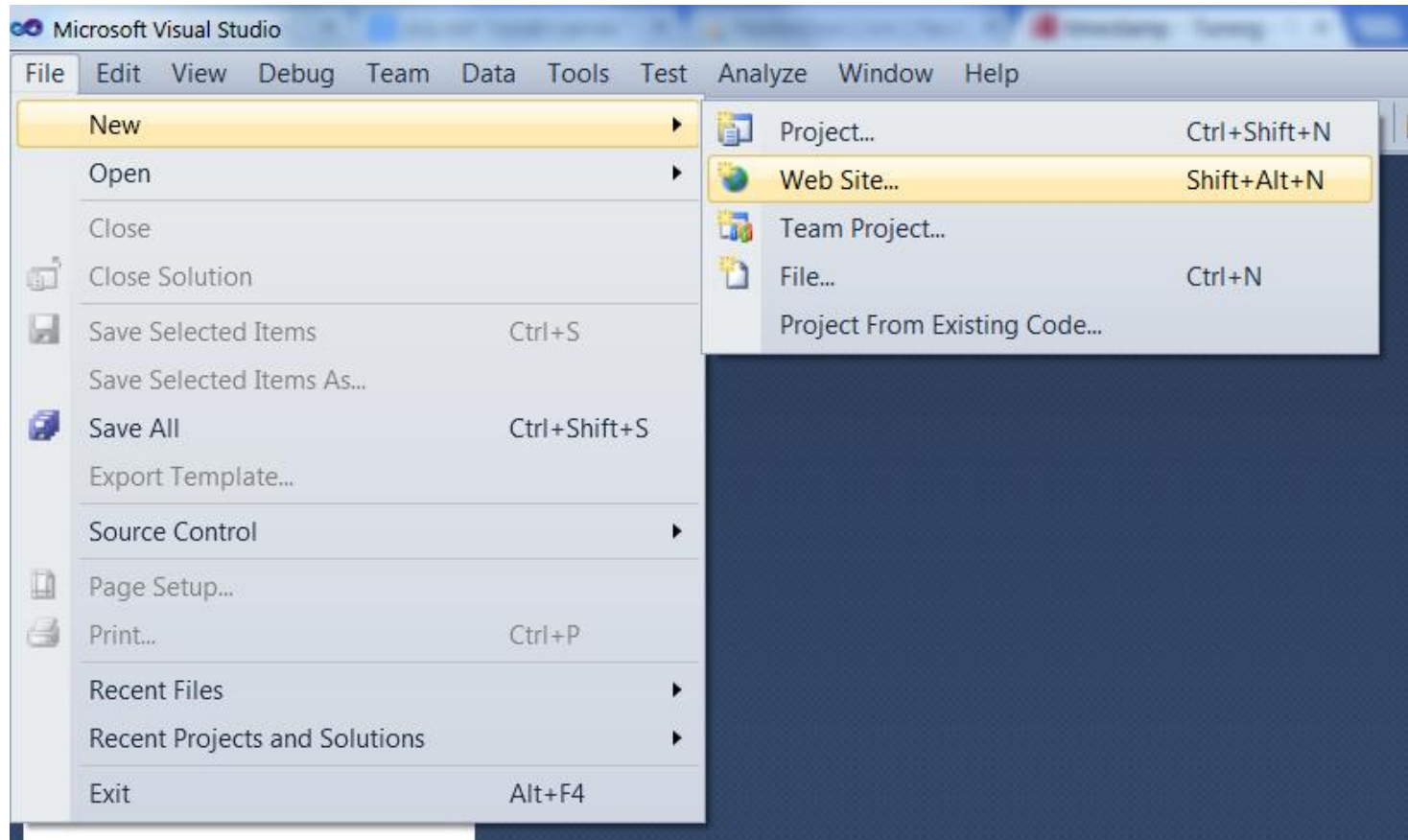


# **Getting Started with ASP.NET**

Asst. Prof. Dr. Özgü Can

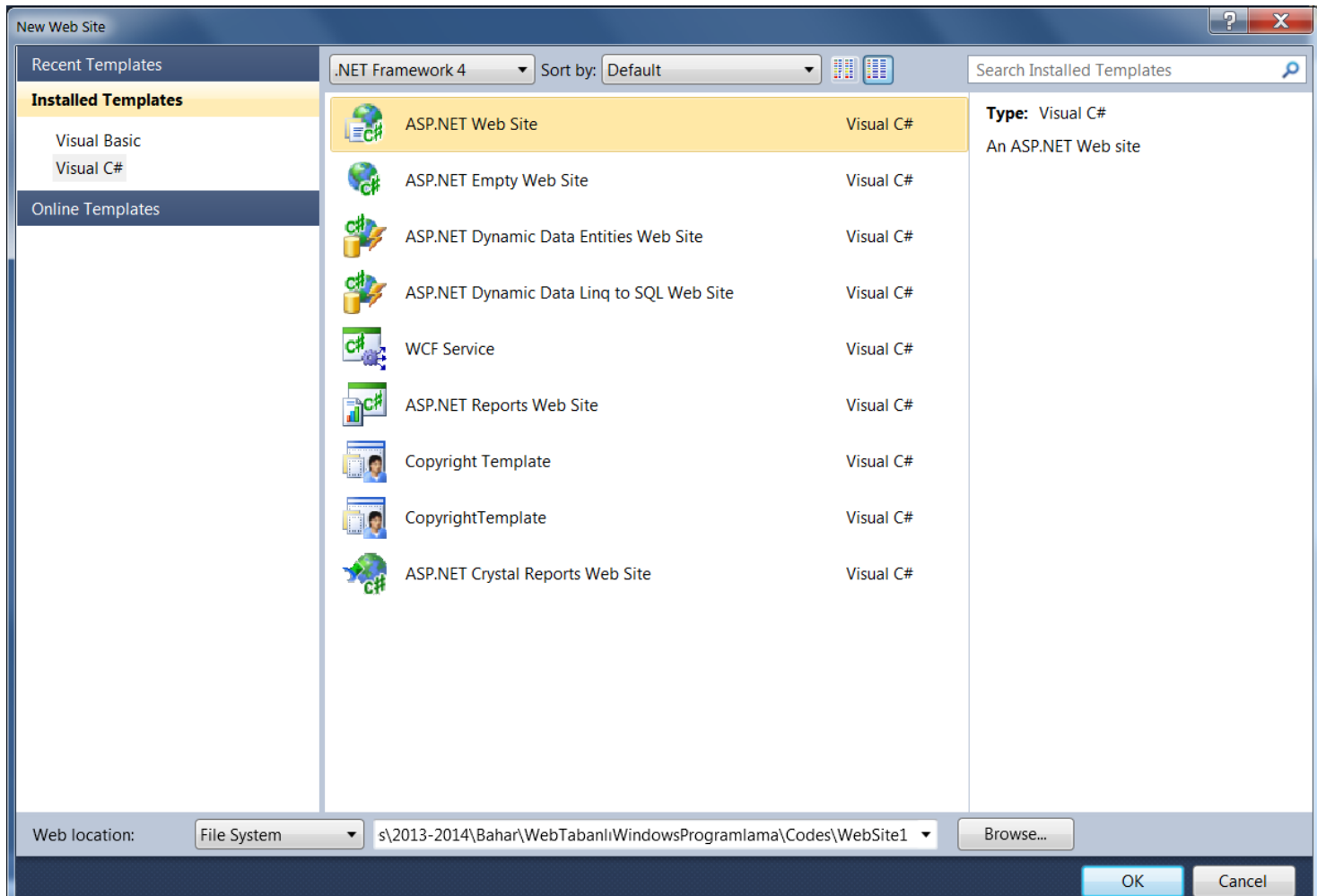
# Creating a Web Site

- File > New > Web Site



# Creating a Web Site

- ASP.NET Web Site



# Creating a Web Site

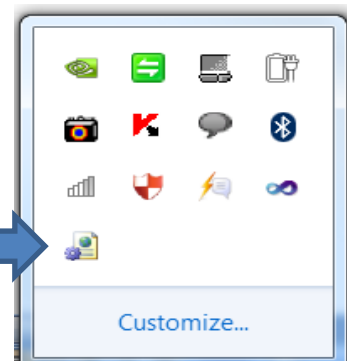


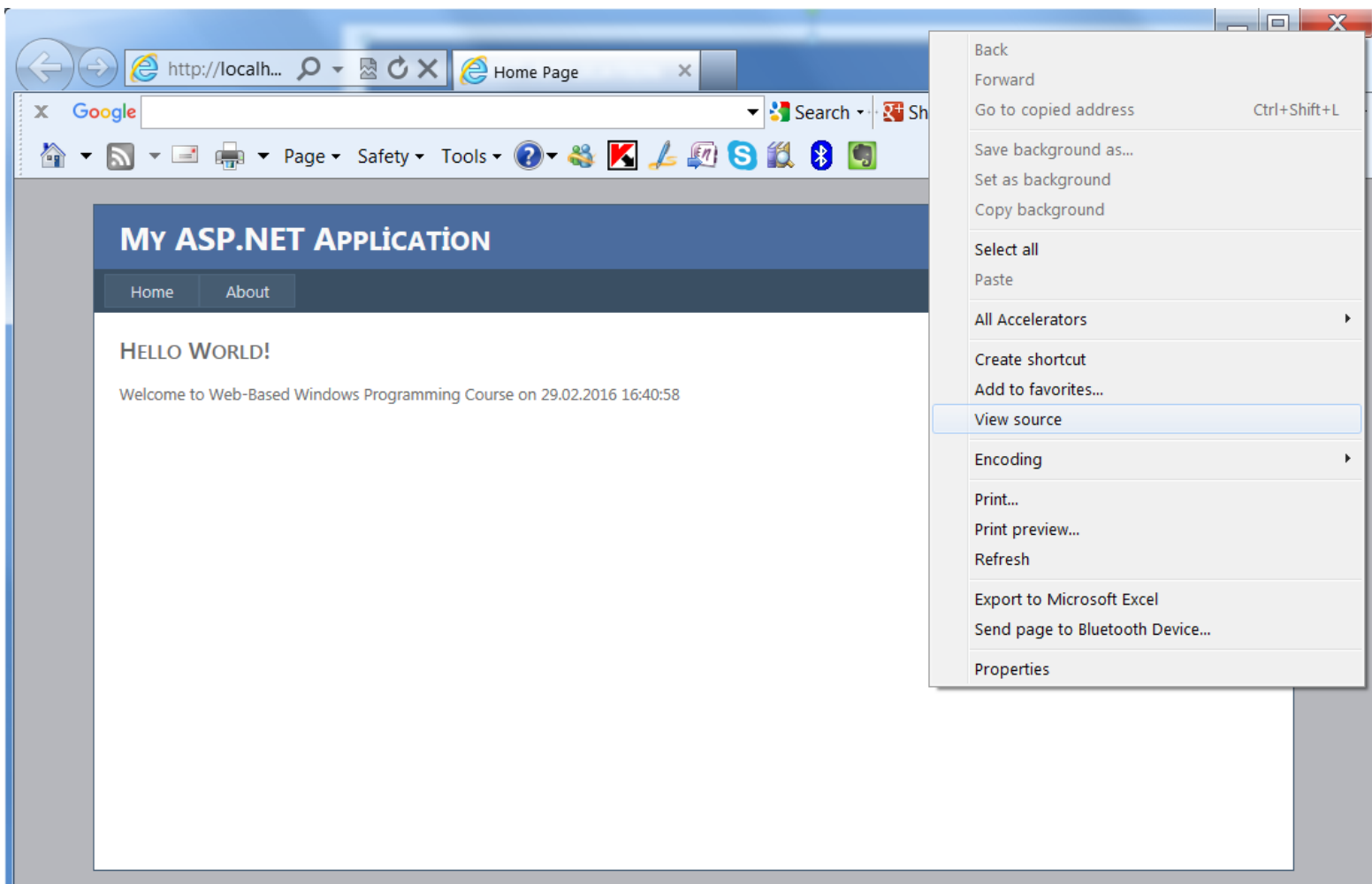
# Creating a Web Site

- File > New > Web Site > ASP.NET Web Site
- Default.aspx

```
<asp:Content ID="BodyContent" runat="server" ContentPlaceHolderID="MainContent">
  <h2>
    Hello World!
  </h2>
  <p>
    Welcome to Web-based Windows Programming.
    <br/>Current Time: <%=DateTime.Now.ToString() %>
  </p>
</asp:Content>
```

WebDev.WebServer40.exe



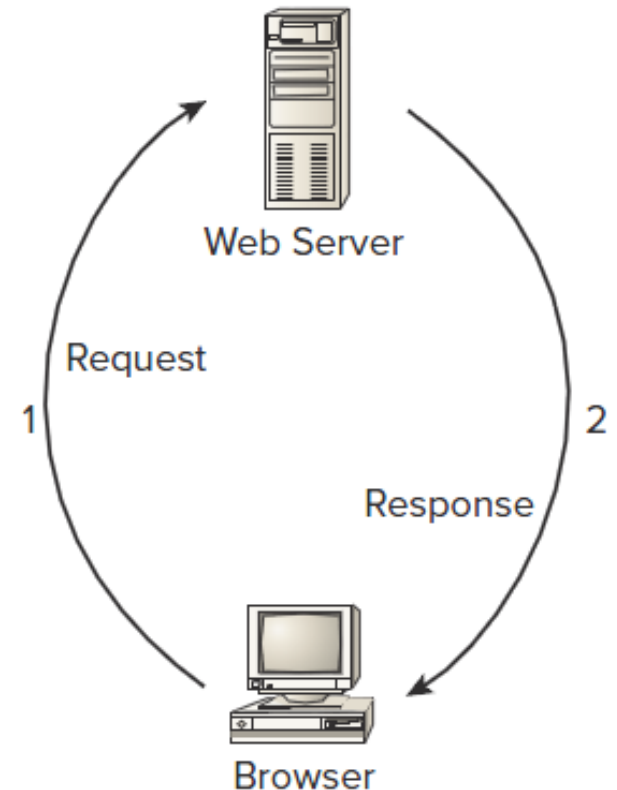


```
<h2>  
    Hello World!  
</h2>  
<p>  
    Welcome to Web-Based Windows Programming Course on 29.02.2016 16:40:58  
</p>
```

# HTTP

## Hyper Text Transfer Protocol

1. Send a *request* to the server.
2. When the server is active and the request is valid:
  - the server **accepts** the request
  - **processes** it
  - sends the **response** back to the client browser



# HTML

## HyperText Markup Language

- Language for creating web pages
- The text with angle brackets is referred to as a *tag*
- A pair of tags holding some text or other content is referred to as an *element*.

```
<h2>
  Hello World!
</h2>
<p>
  Welcome to Web-based Windows Programming.
  <br/>Current Time: 28.02.2013 15:04:33
</p>
```



# HTML

TAG	DESCRIPTION	EXAMPLE
<html>	Used to denote the start and end of the entire page.	<pre>&lt;html&gt;   ...All other content goes here &lt;/html&gt;</pre>
<head>	Used to denote a special section of the page that contains data about the page, including its title and references to external resources.	<pre>&lt;head&gt;   ... Content goes here &lt;/head&gt;</pre>
<title>	Used to define the title of the page. This title will appear in the browser's title bar.	<pre>&lt;title&gt;   Welcome to Planet Wrox 4 &lt;/title&gt;</pre>
<body>	Used to denote the start and end of the body of the page.	<pre>&lt;body&gt;   Page body goes here &lt;/body&gt;</pre>
<a>	Used to link one web page to another.	<pre>&lt;a href="http://www.wrox.com"&gt;   Visit the Wrox site &lt;/a&gt;</pre>
<img>	Used to embed images in a page.	<pre>&lt;img src="Logo.gif" /&gt;</pre>
<b> <i> <u>	Used to format text in a bold, italic, or underline font.	<pre>This is &lt;b&gt;bold text&lt;/b&gt; while &lt;i&gt;this text is in italic&lt;/i&gt;</pre>
<form> <input> <textarea> <select>	Used for input forms that enable users to submit information to the server.	<pre>&lt;input type="text" value="Some Text" /&gt;</pre>

# HTML Attributes

- Attributes contain *additional information* that changes the way a specific element behaves.
- The **<img>** tag that is used to display an image, the **src** attribute defines the source of that image.

```

```

- HTML standard:

<http://www.w3.org/TR/html401/index/elements.html>

# XHTML

## Extensible HyperText Markup Language

- XHTML is a reformulation of HTML in *XML* — *eXtensible Markup Language*.
- XHTML is in fact largely just HTML rewritten with XML rules.

# XHTML Rules

## Always Close Your Elements

- Start a paragraph with `<p>` & use `</p>` somewhere later to close the paragraph.
- Self-closing tags
  - `<img>`
    - ``
  - `<br>`
    - `<br />`

# XHTML Rules

## Always Use Lowercase for Tags & Attribute Names

- XML is **case sensitive**.
- Although the **tags** and **attributes** must be in all **lowercase**, the **actual value** doesn't have to be.

```

```

# XHTML Rules

## Always Enclose Attribute Values in Quotes

- Valid:

`` ✓

- Invalid:

`<img src=Logo.gif />` ✗

- You could also use *single quotes* to enclose the attribute value.

`<img src='Logo.gif' />` ✓

# XHTML Rules

## Nest Your Elements Correctly

- **First** close the **inner element** you opened last, and **then** close the **outer element**.

- Valid:

`<b><i>This is some formatted text</i></b>`



- Invalid:

`<b><i>This is some formatted text</b></i>`



# XHTML Rules

## Always Add a DOCTYPE Declaration to Your Page

- A **DOCTYPE** gives the browser information about the **kind of HTML** it can expect.
- By default: XHTML 1.0

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
```



# NOTES

- **CHECK**

HTML Tutorial

<http://www.w3schools.com/html/default.asp>


- **BOOK**

Jon Duckett, Beginning Web Programming with HTML, XHTML, and CSS, 2nd Edition.

# ASP.NET Markup

- Similar to that of HTML
- ASP.NET tags start with an **asp:** prefix.

eliminating  
the need  
to type a  
separate  
closing tag

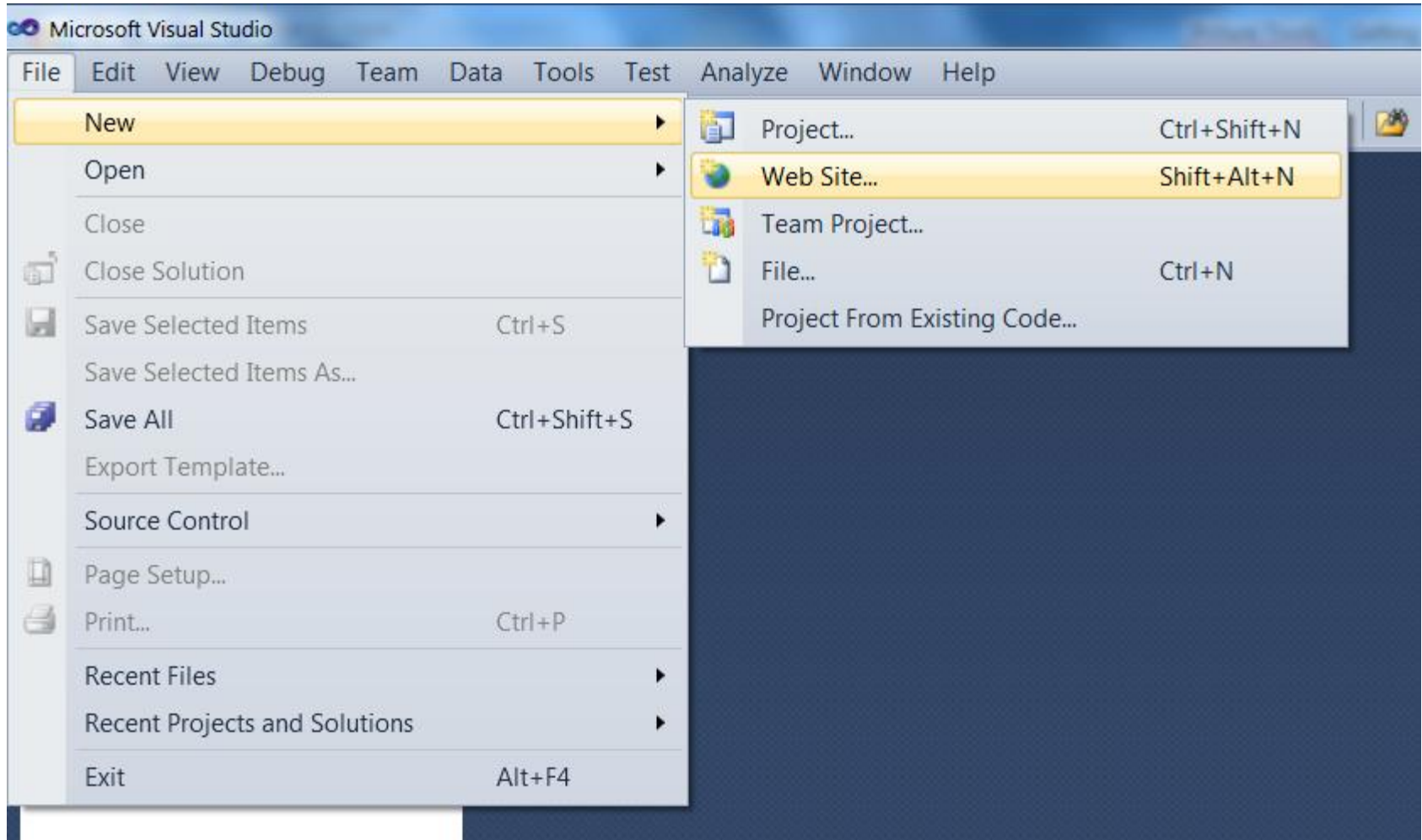


```
<asp:Button ID="Button1" runat="server" Text="Click Me" />
```

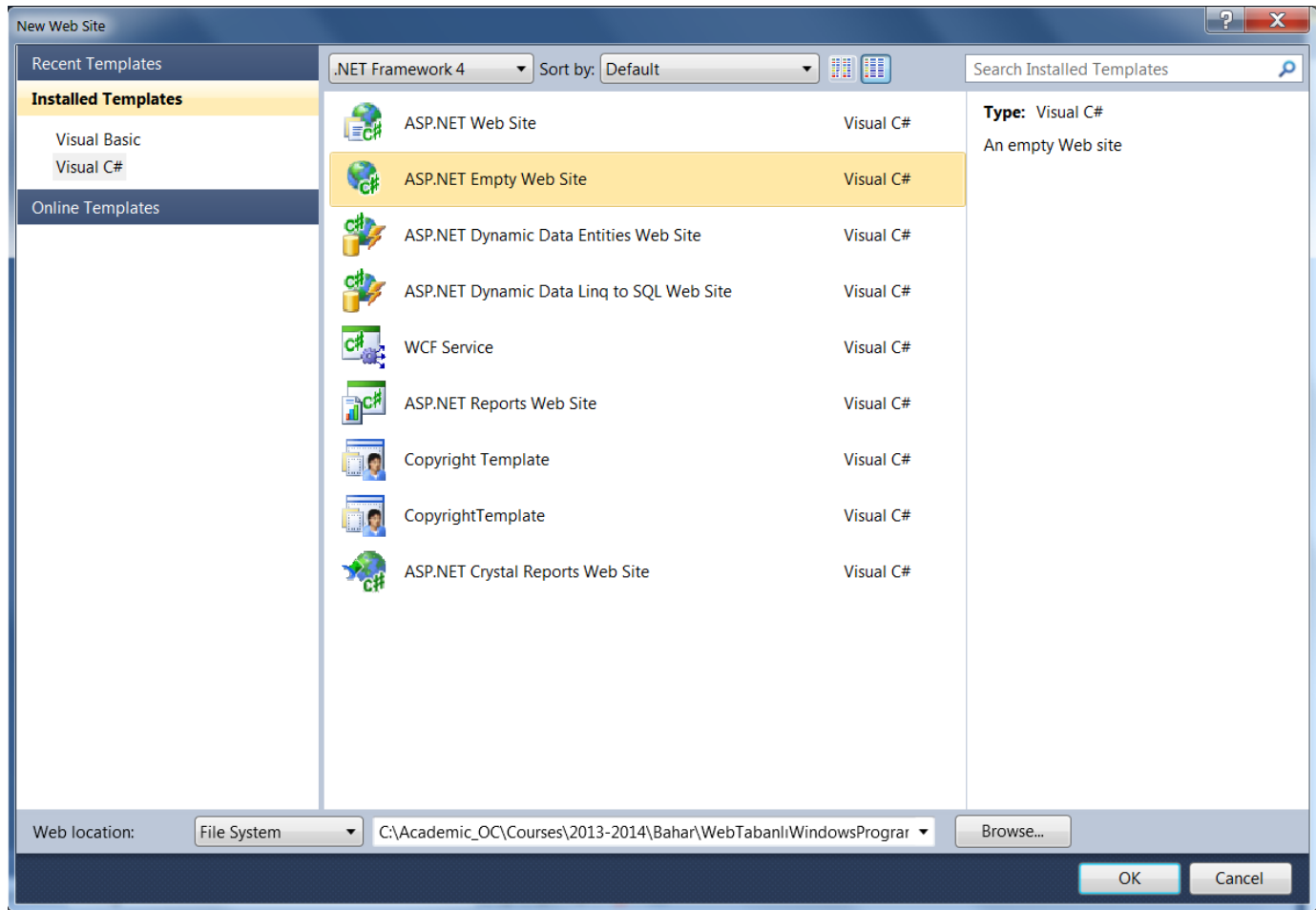
- Tag and attribute names are not necessarily in all lowercase.
- The code for the same button when rendered in the browser as XHTML:

```
<input type="submit" name="Button1" value="Click Me" id="Button1" />
```

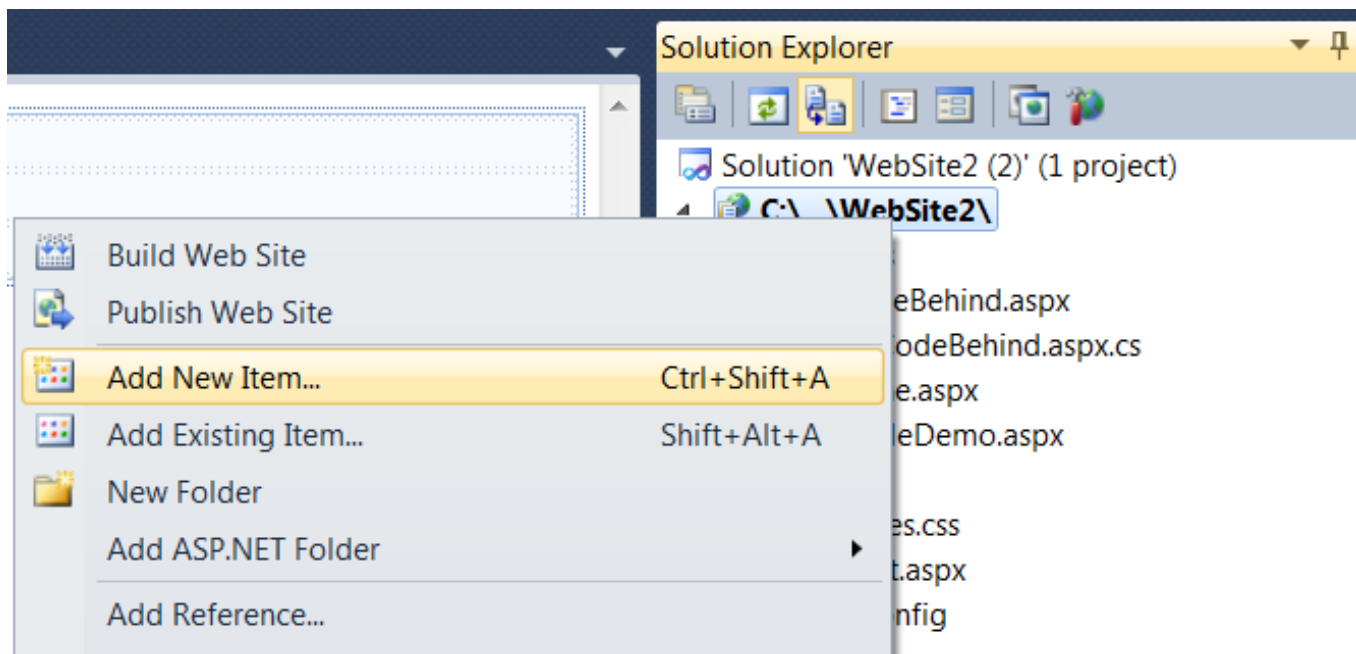
# Create a Web Site



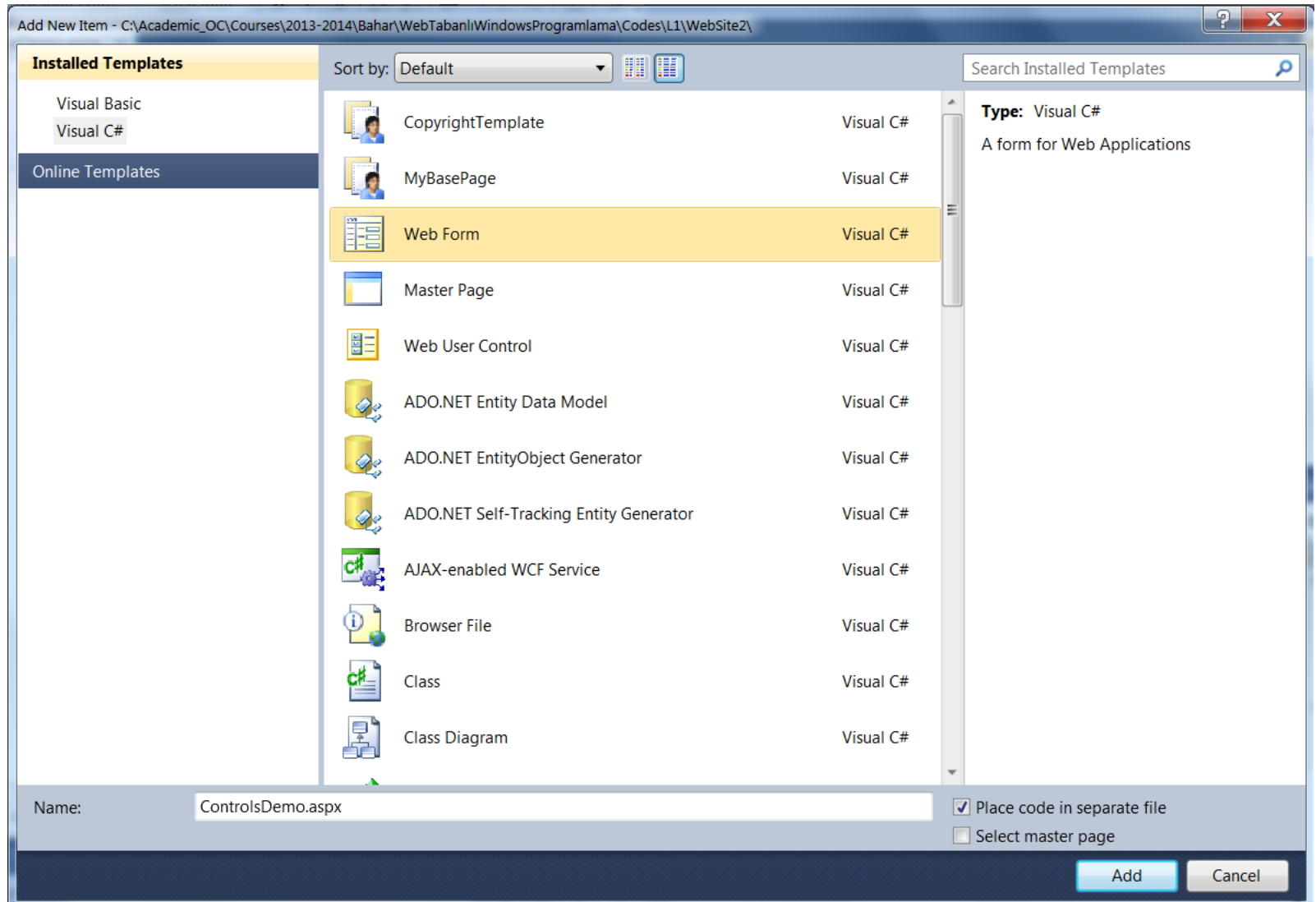
# Create a Web Site



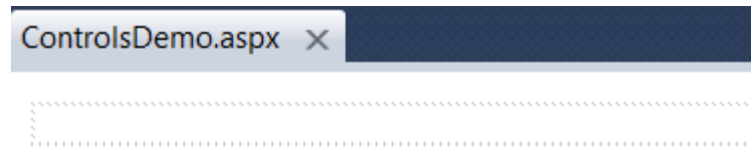
# Creating a Web Site



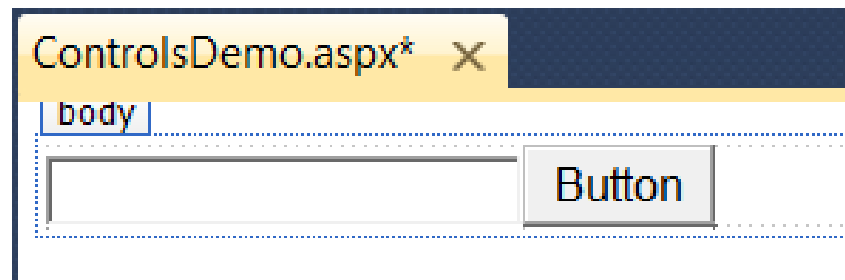
# Creating a Web Site



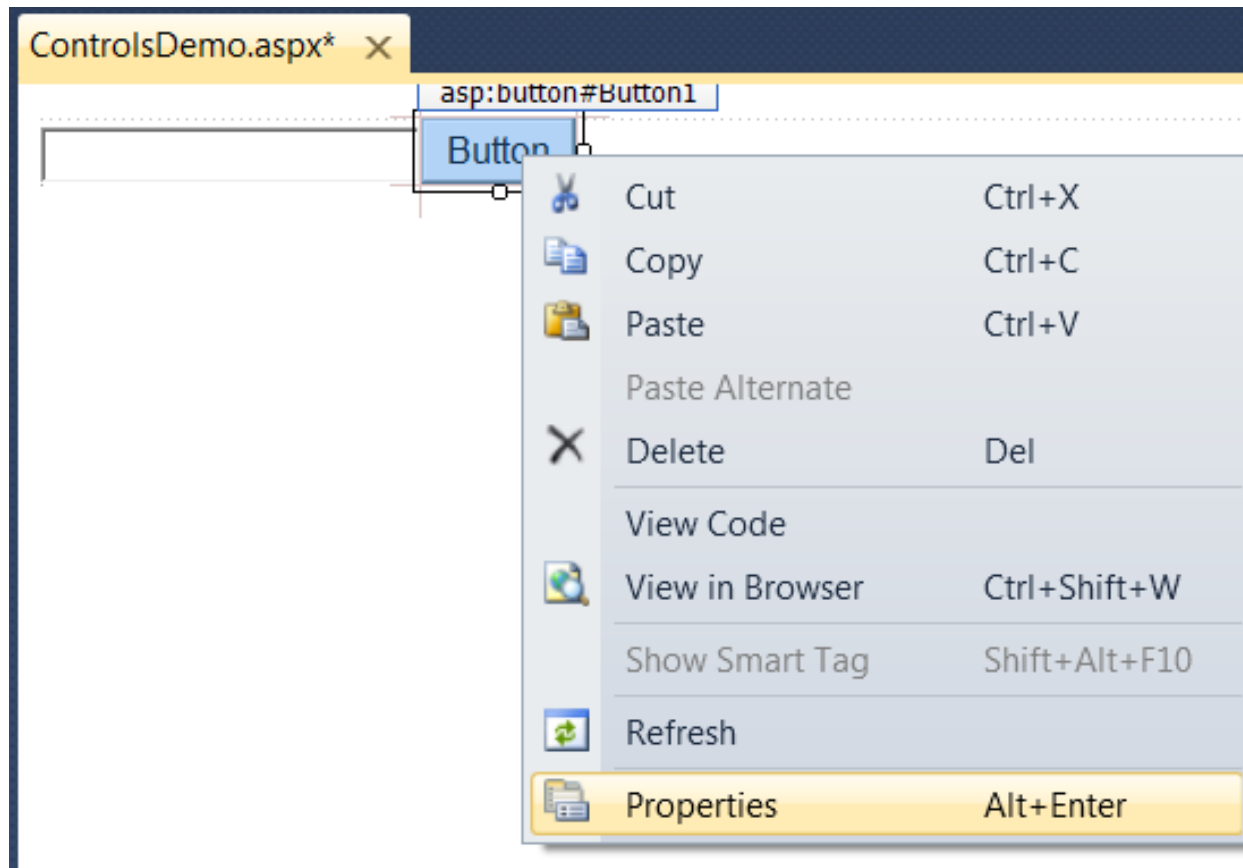
# Creating a Web Site



- Drag a **Textbox** and a **Button**

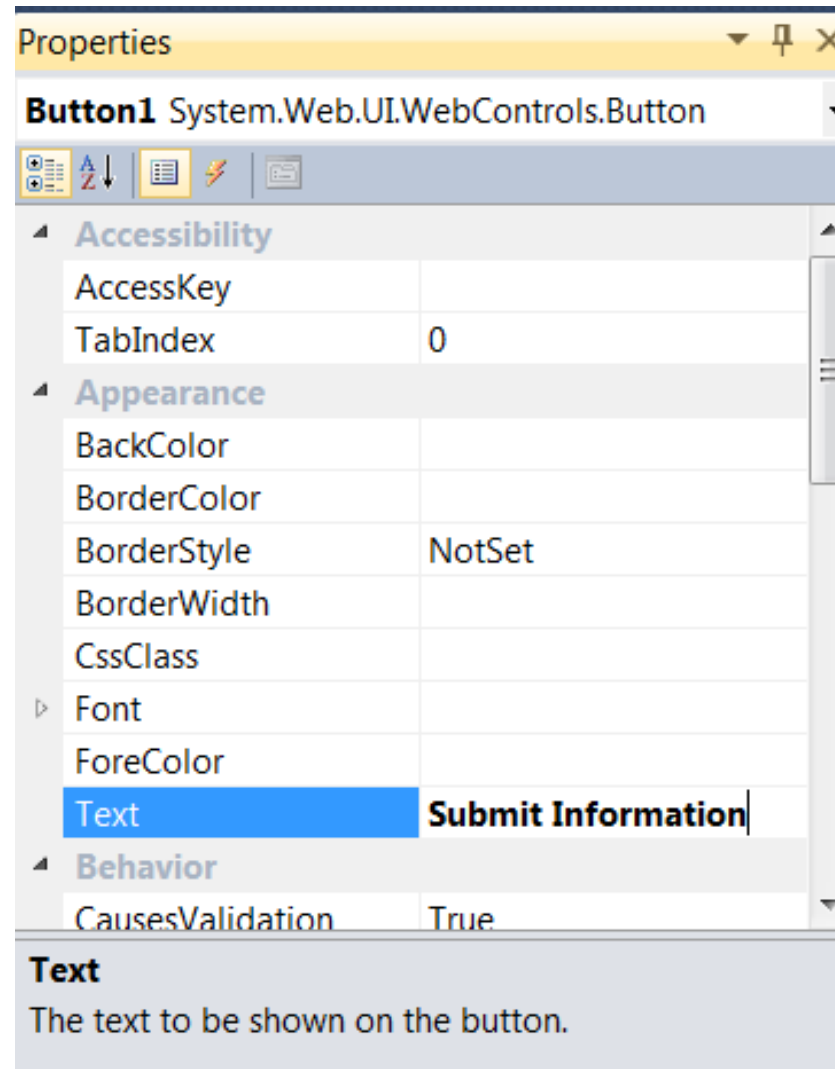


# Creating a Web Site

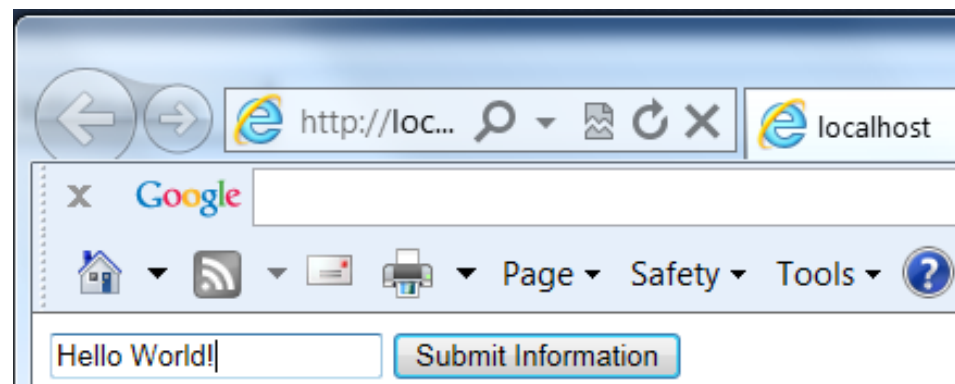
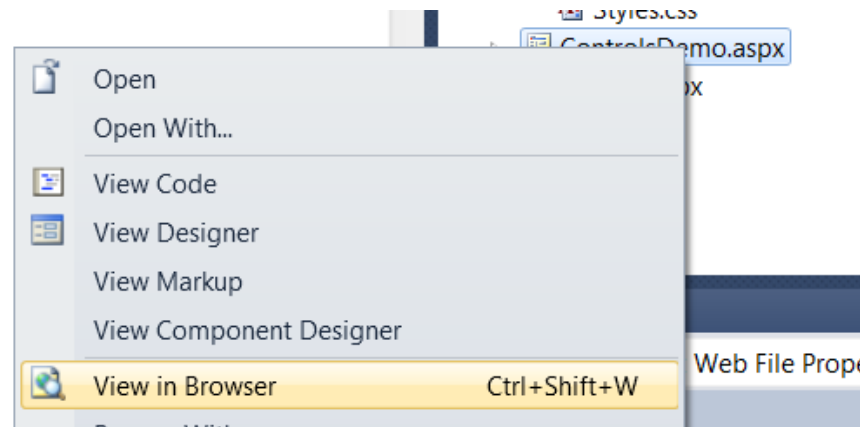
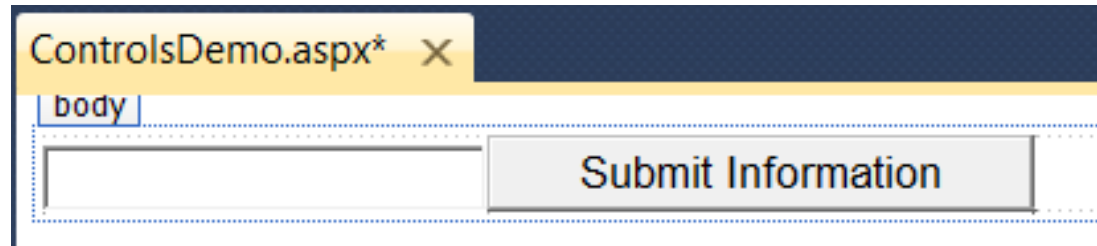




# Creating a Web Site



# Creating a Web Site



Hello World!

Submit Information

Back

Forward

Go to copied address

Ctrl+Shift+L

Save background as...

Set as background

Copy background

Select all

Paste

All Accelerators



Create shortcut

Add to favorites...

View source

Encoding



Print...

Print preview...

Refresh

Export to Microsoft Excel

Send page to Bluetooth Device...

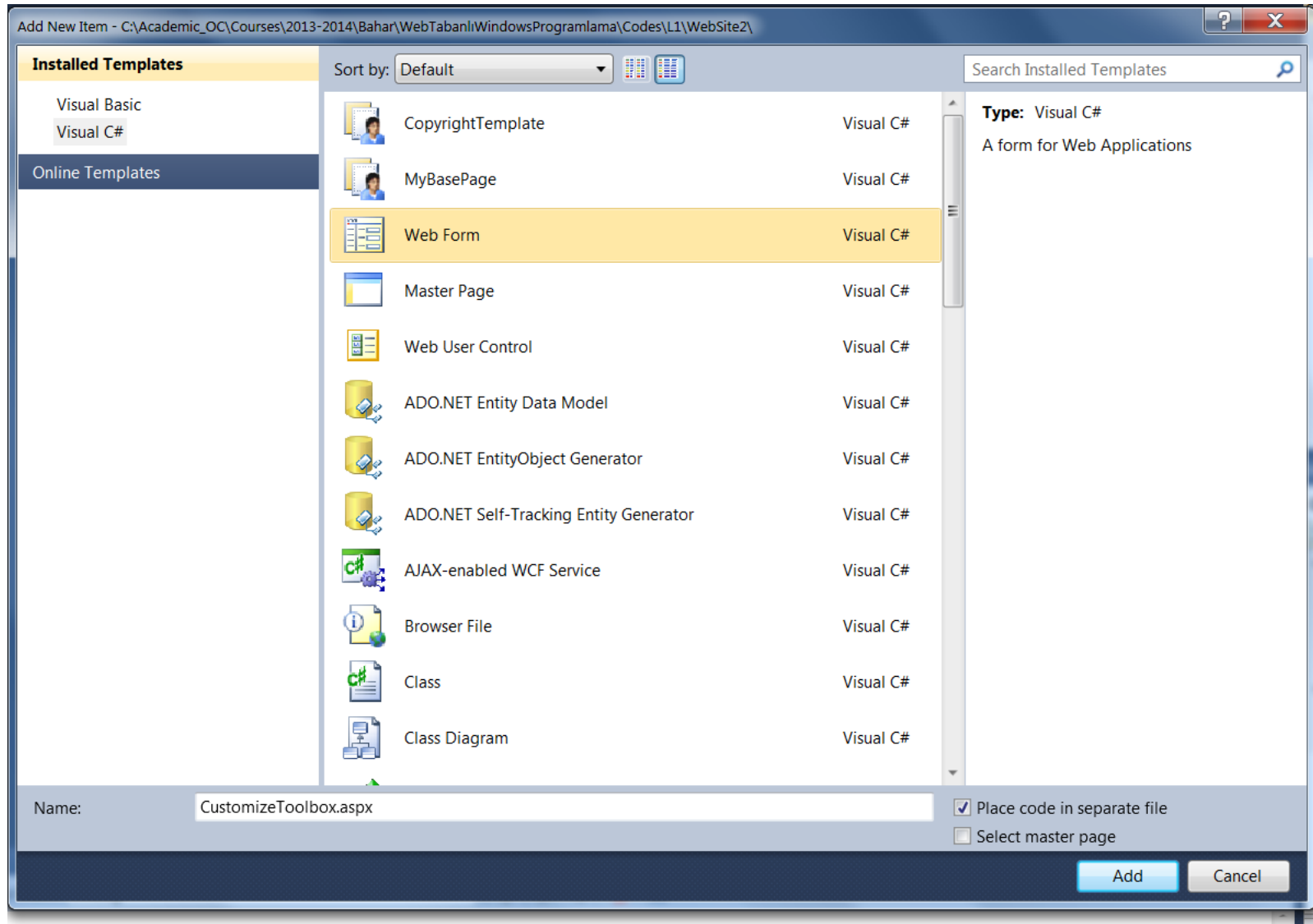
Properties

ss your

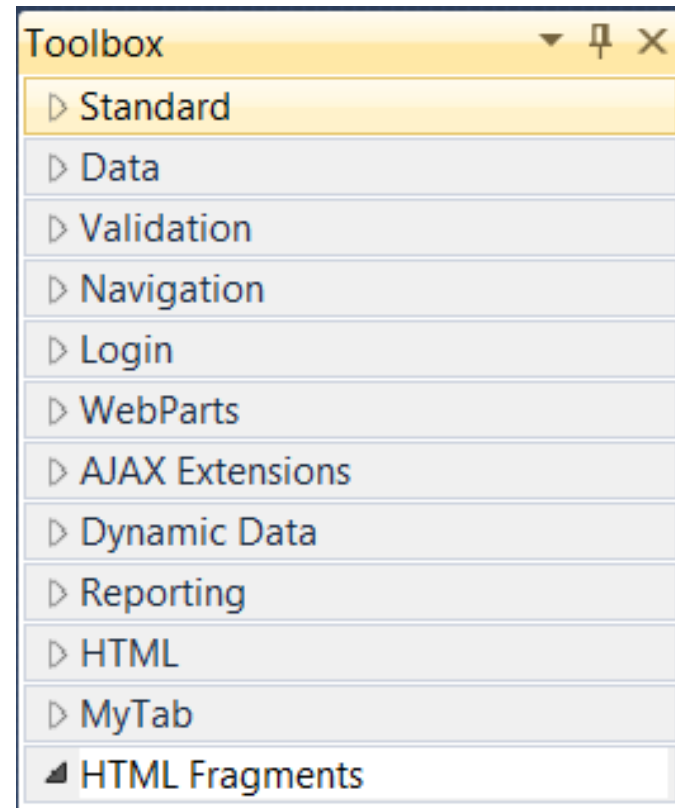
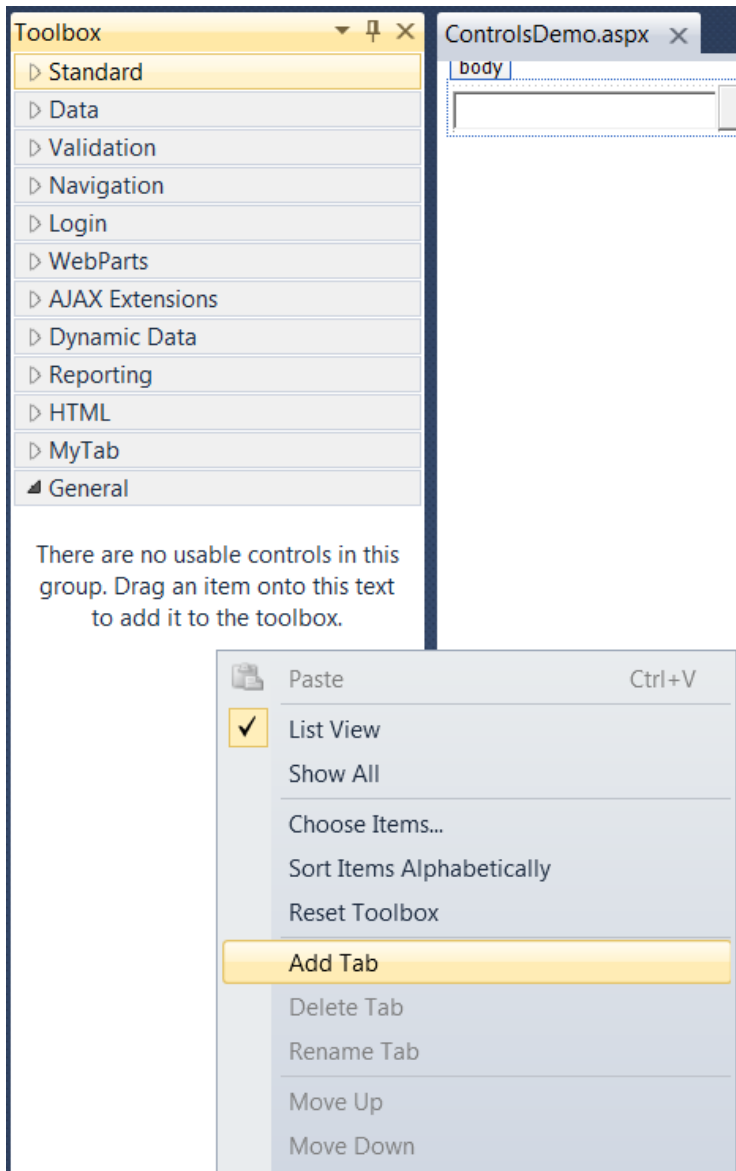
40. To fill initially empty items in a collection

```
<input name="TextBox1" type="text" value="Hello World!" id="TextBox1" />  
<input type="submit" name="Button1" value="Submit Information" id="Button1" />
```

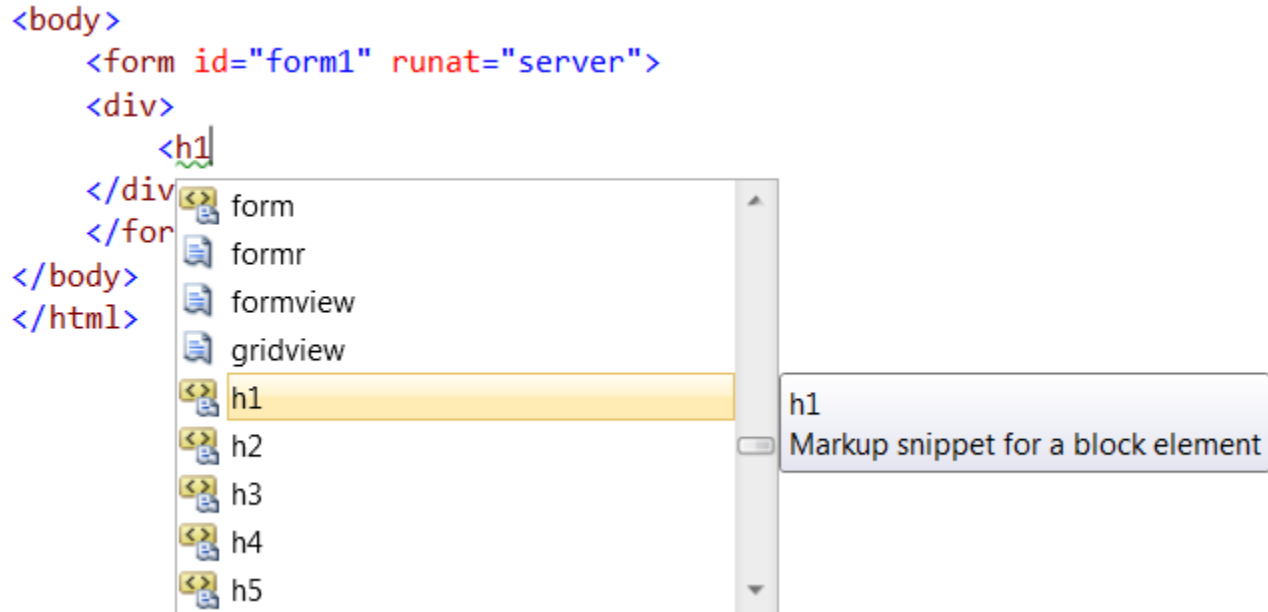
# Customizing the Toolbox



# Customizing the Toolbox



# Customizing the Toolbox



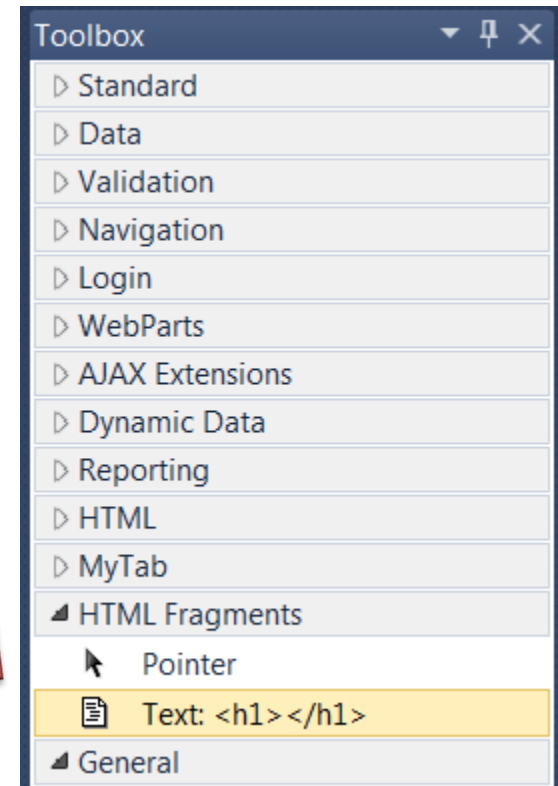
```
<form id="form1" runat="server">  
<div>  
  <h1></h1>  
</div>  
</form>
```

# Customizing the Toolbox

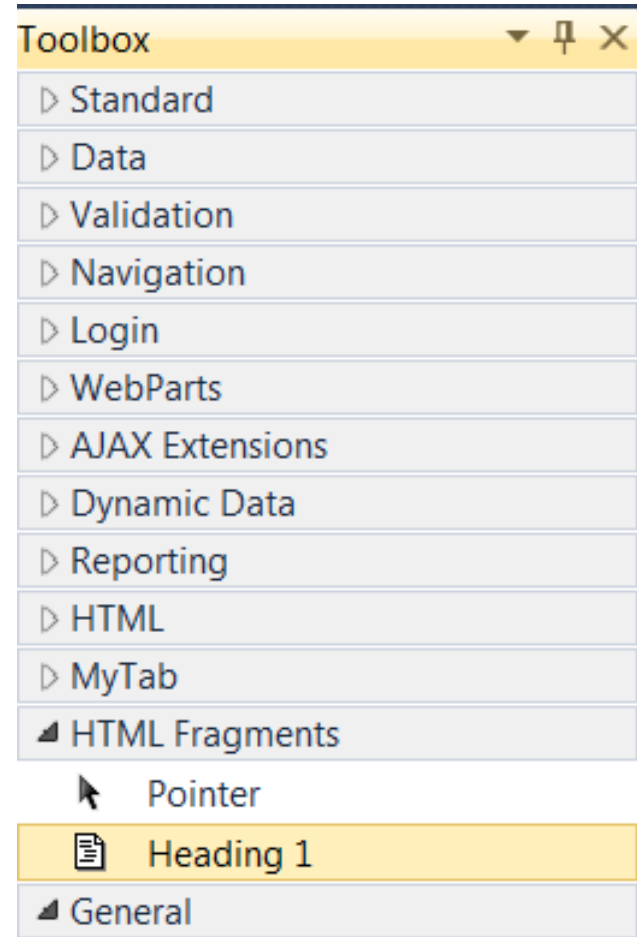
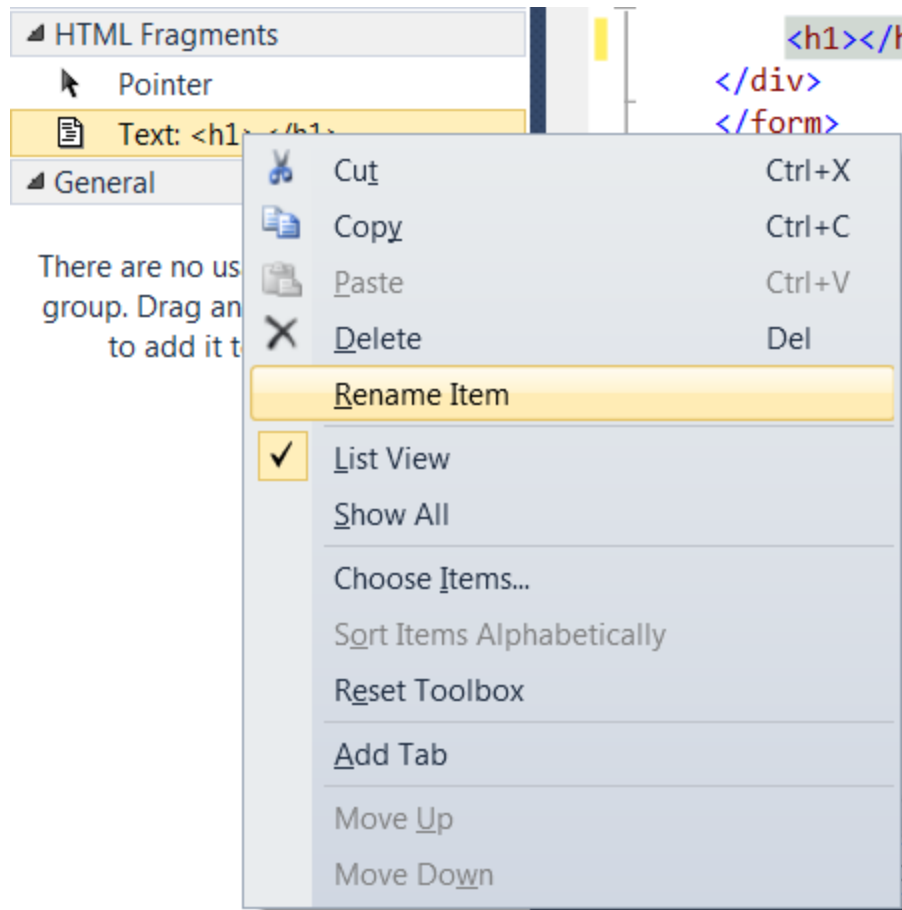
- Highlight `<h1></h1>`

```
<div>  
  <h1></h1>  
</div>
```

- Drag and drop the selection to the new Toolbox tab



# Customizing the Toolbox

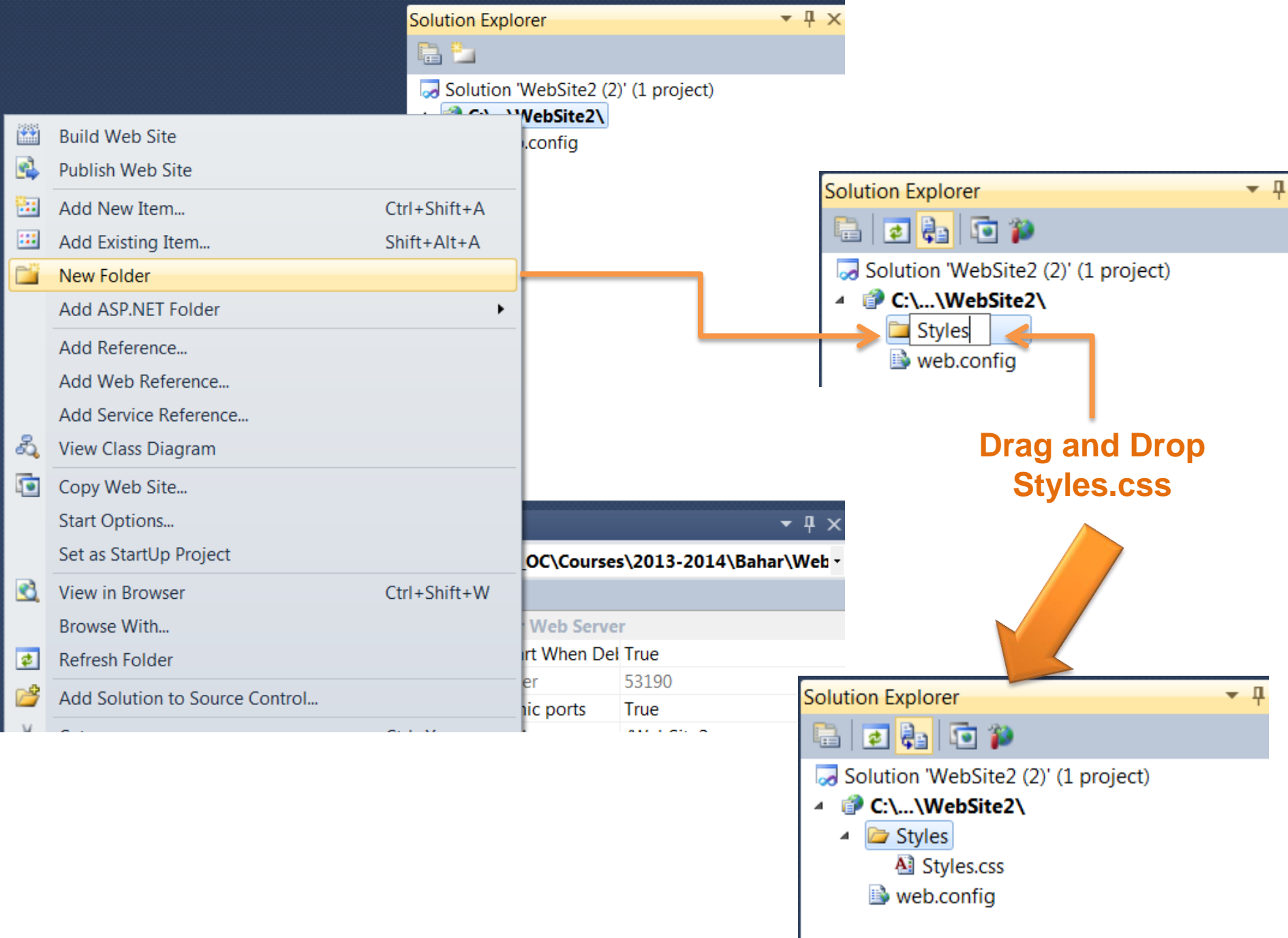




# Adding Existing Files

1. Create a **txt** file on Desktop.
2. Rename the text file **Styles.css**. Make sure the **.txt** extension is replaced by **.css**.
3. Click the CSS file on the desktop and while holding down the mouse button, drag the file into the ***Solution Explorer***.

**Make sure** you drag the file into the Solution Explorer and not in other parts of VS, or the file won't be added.



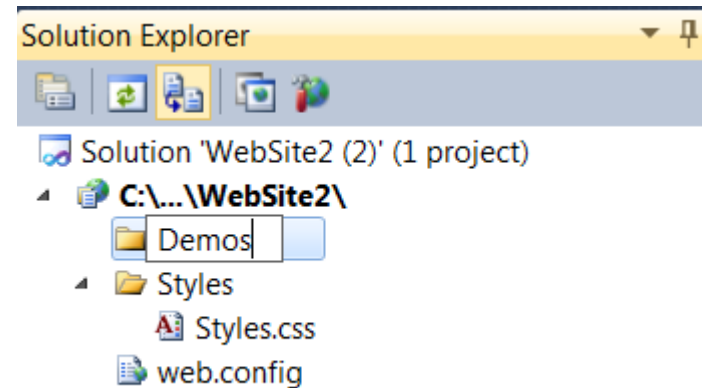
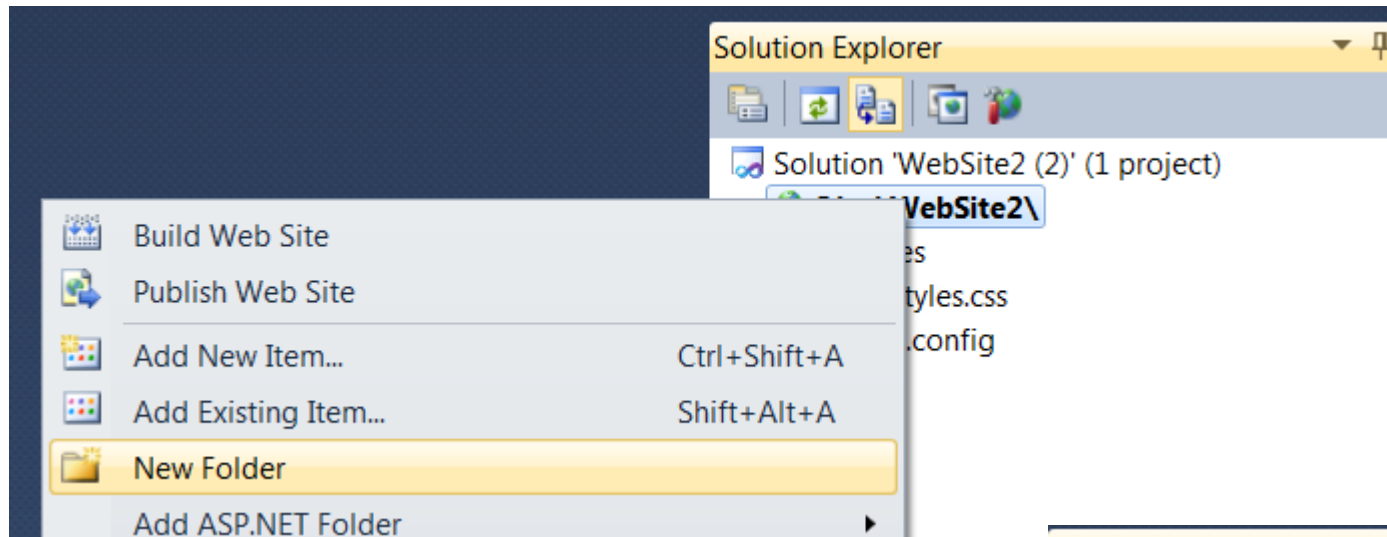
# Code Behind vs. Inline Code

- Web Forms come in two flavors:
  - either as an `.aspx` file with a *Code Behind* file (a file named after the Web Form with an additional `.vb` or `.cs` extension)

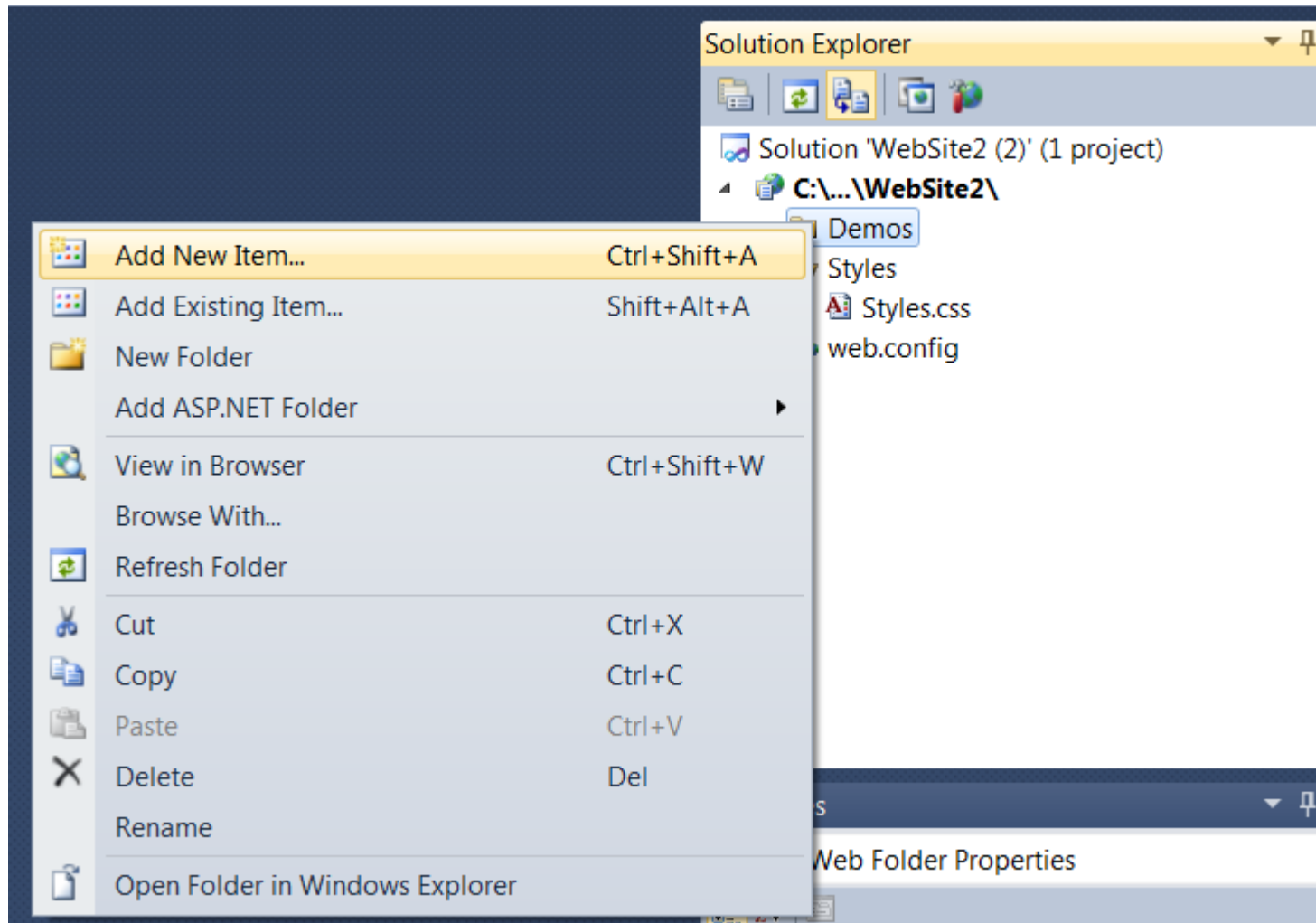
or

- as `.aspx` files that have their code embedded, often referred to as Web Forms with *Inline Code*

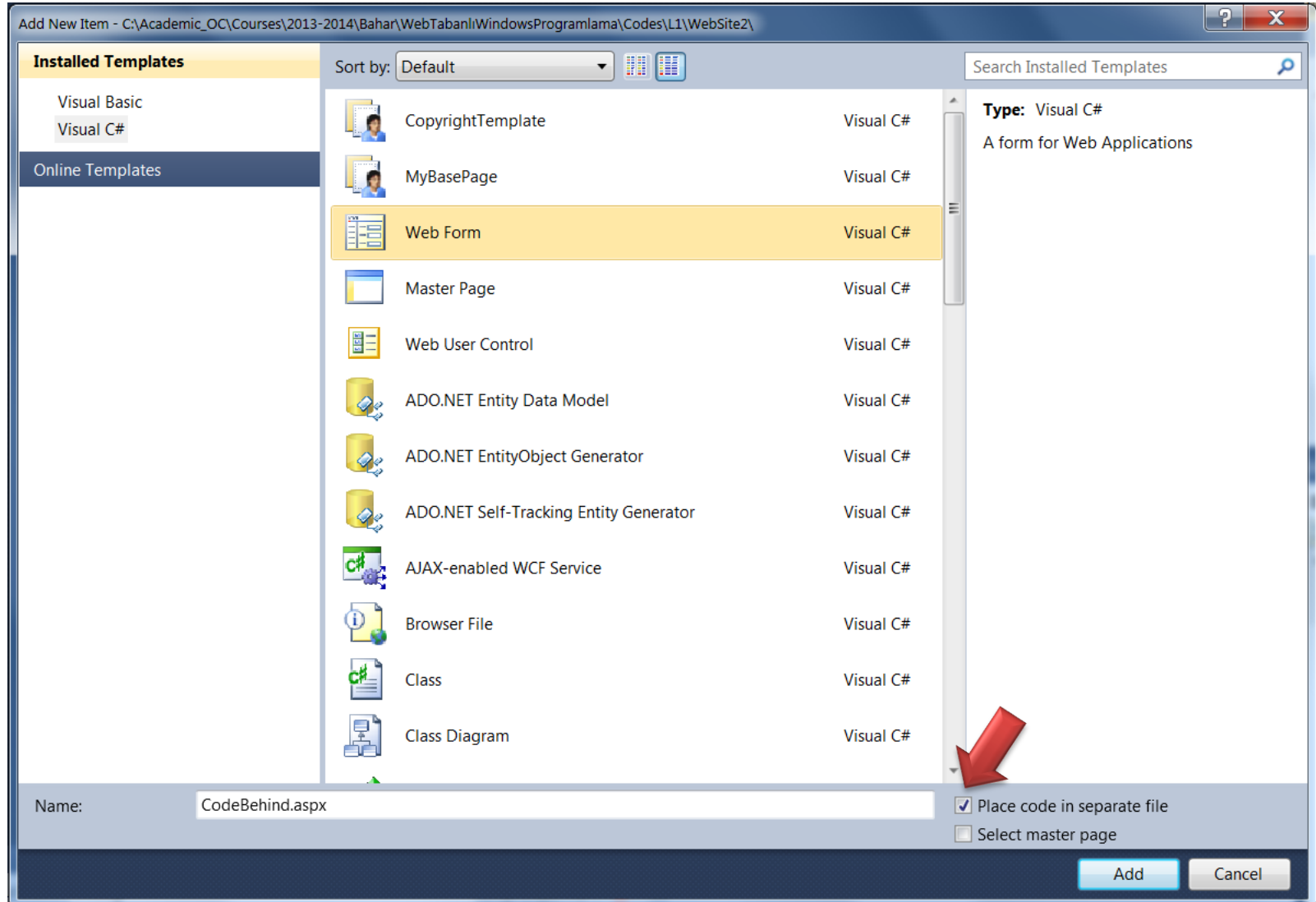
# Adding Web Forms with Code Behind



# Adding Web Forms with Code Behind



# Adding Web Forms with Code Behind



# Adding Web Forms with Code Behind

Demos/CodeBehind.aspx x

Client Objects & Events (No Events)

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="CodeBehind.aspx.cs" Inherits="Demos_CodeBehind" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
    <div>

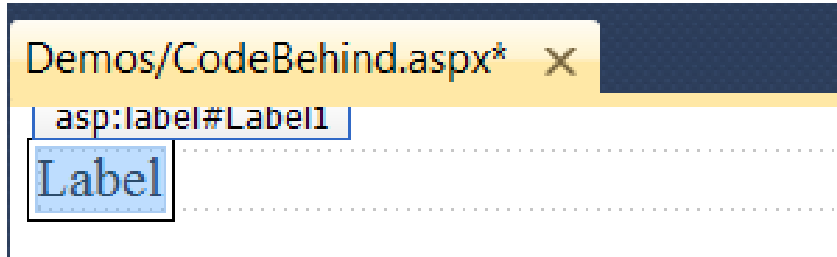
    </div>
  </form>
</body>
</html>
```

Source View



# Adding Web Forms with Code Behind

- Label

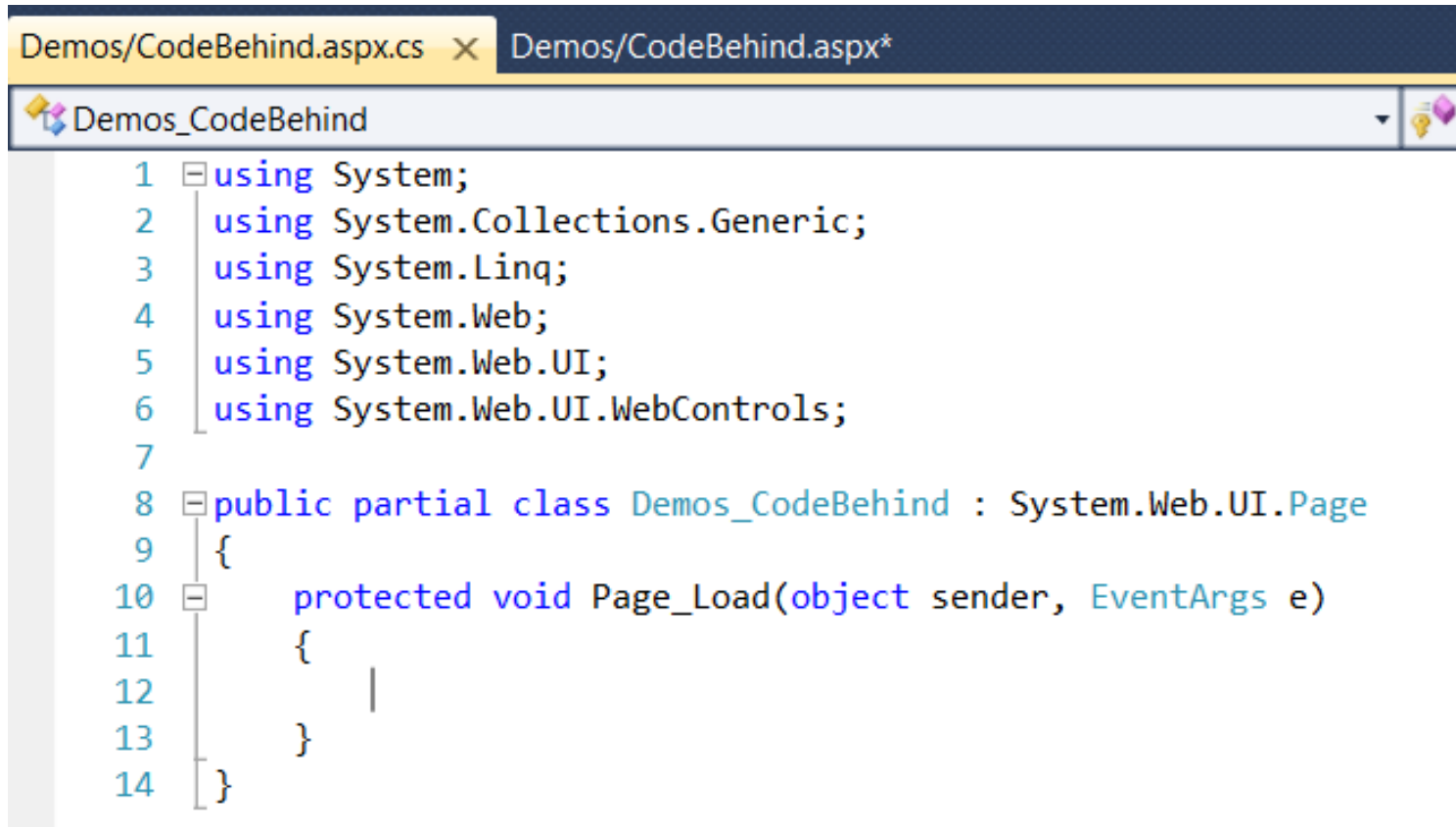


```
Demos/CodeBehind.aspx* x
Client Objects & Events (No Events)
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="CodeBehind.aspx.cs" Inherits="Demos_CodeBehind" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
<title></title>
</head>
<body>
<form id="form1" runat="server">
<div>
<asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
</div>
</form>
</body>
</html>
```



# Adding Web Forms with Code Behind

- Double-click in Design View



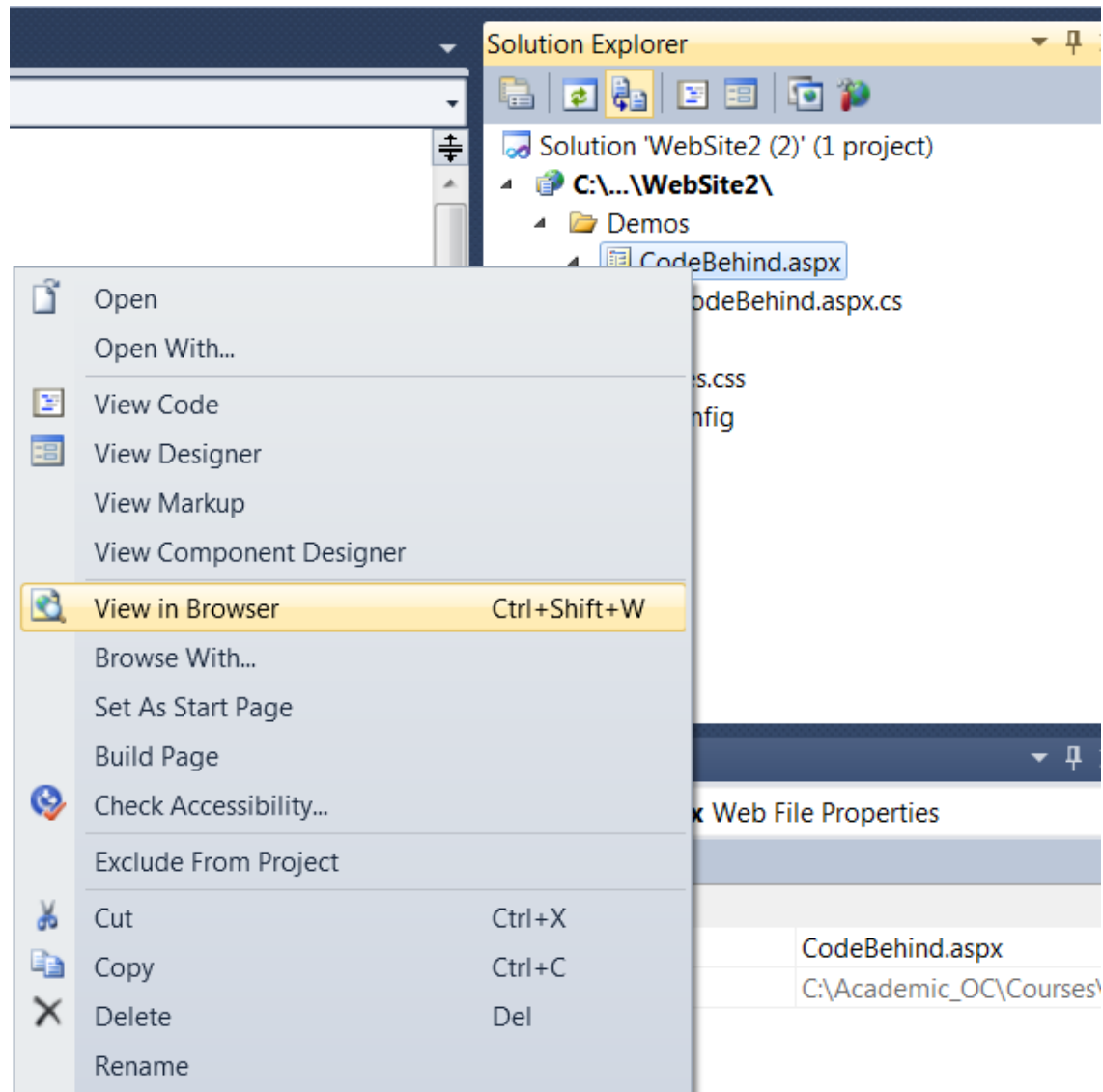
The screenshot shows the Visual Studio IDE with two tabs at the top: 'Demos/CodeBehind.aspx.cs' and 'Demos/CodeBehind.aspx\*'. The 'Demos/CodeBehind.aspx.cs' tab is active, displaying the code-behind file. The file name 'Demos\_CodeBehind' is shown in the breadcrumb. The code is as follows:

```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Web;
5 using System.Web.UI;
6 using System.Web.UI.WebControls;
7
8 public partial class Demos_CodeBehind : System.Web.UI.Page
9 {
10     protected void Page_Load(object sender, EventArgs e)
11     {
12     }
13 }
14
```

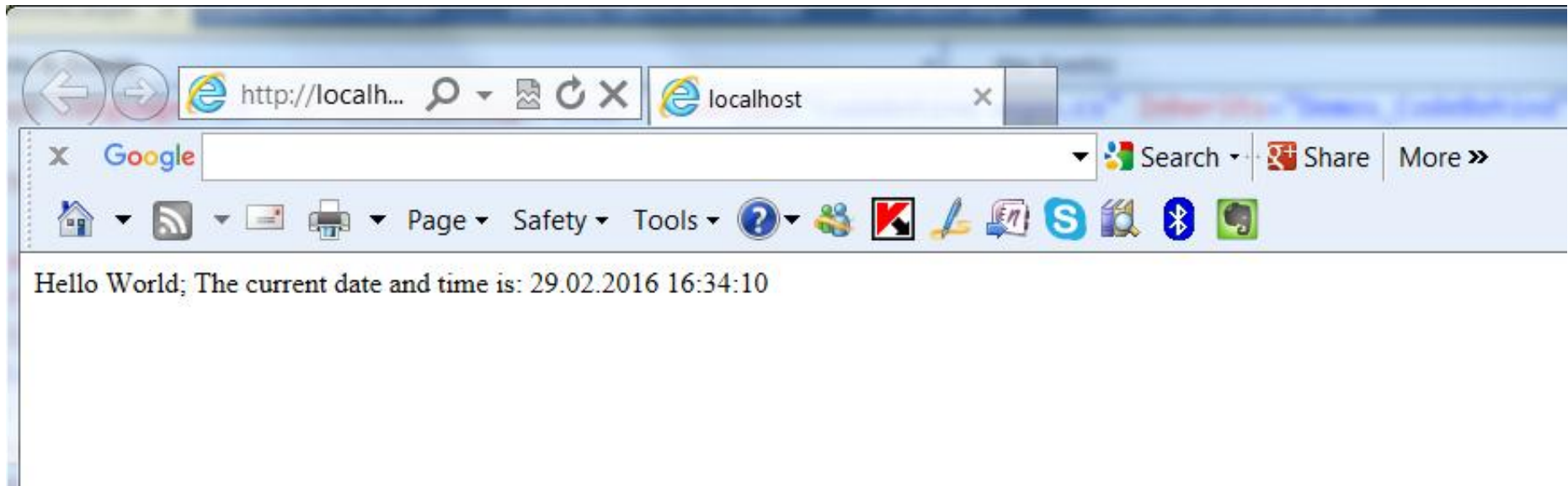
# Adding Web Forms with Code Behind

```
public partial class Demos_CodeBehind : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        Label1.Text = "Hello World; The current date and time is: " + DateTime.Now.ToString();
    }
}
```

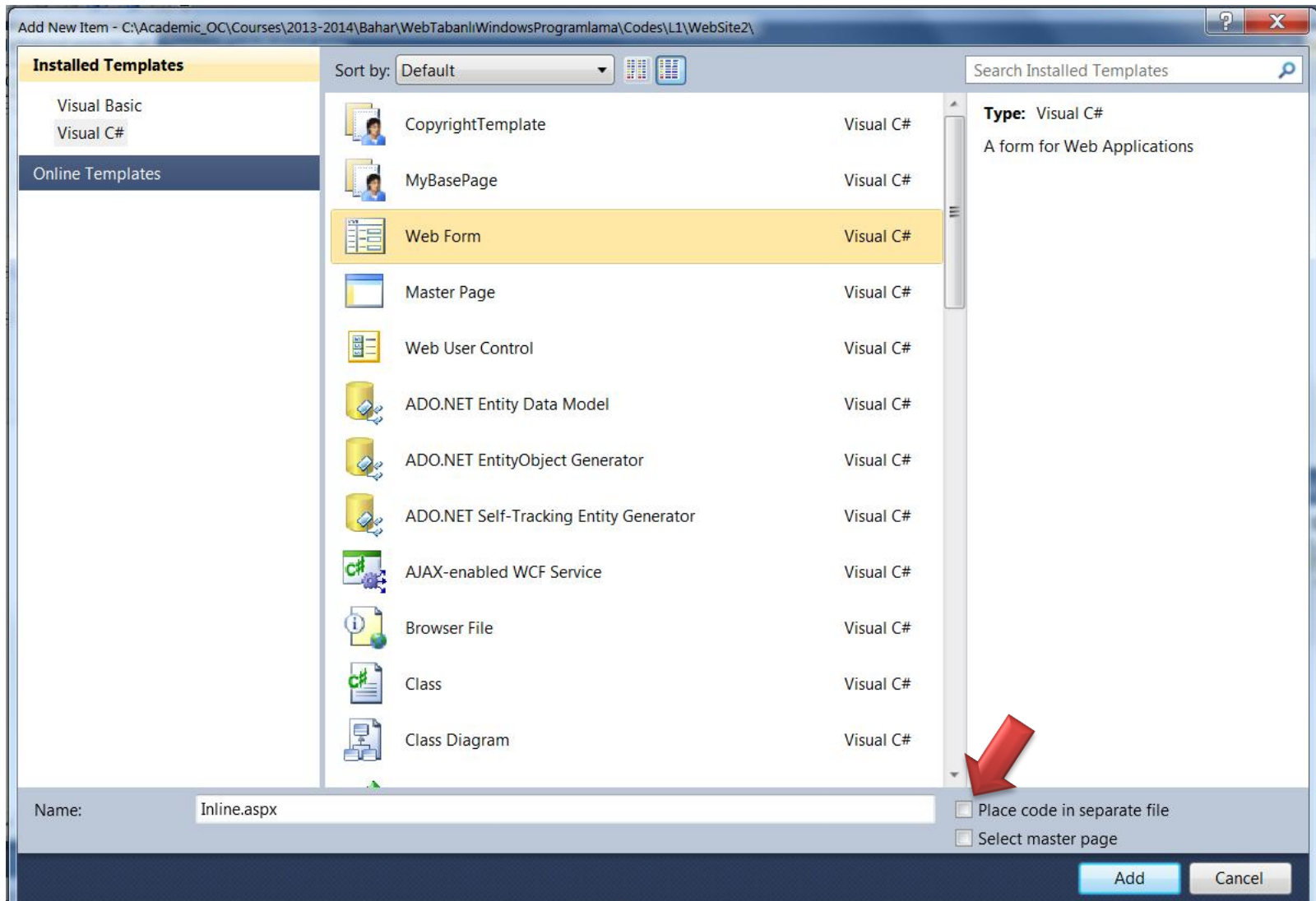
# Adding Web Forms with Code Behind



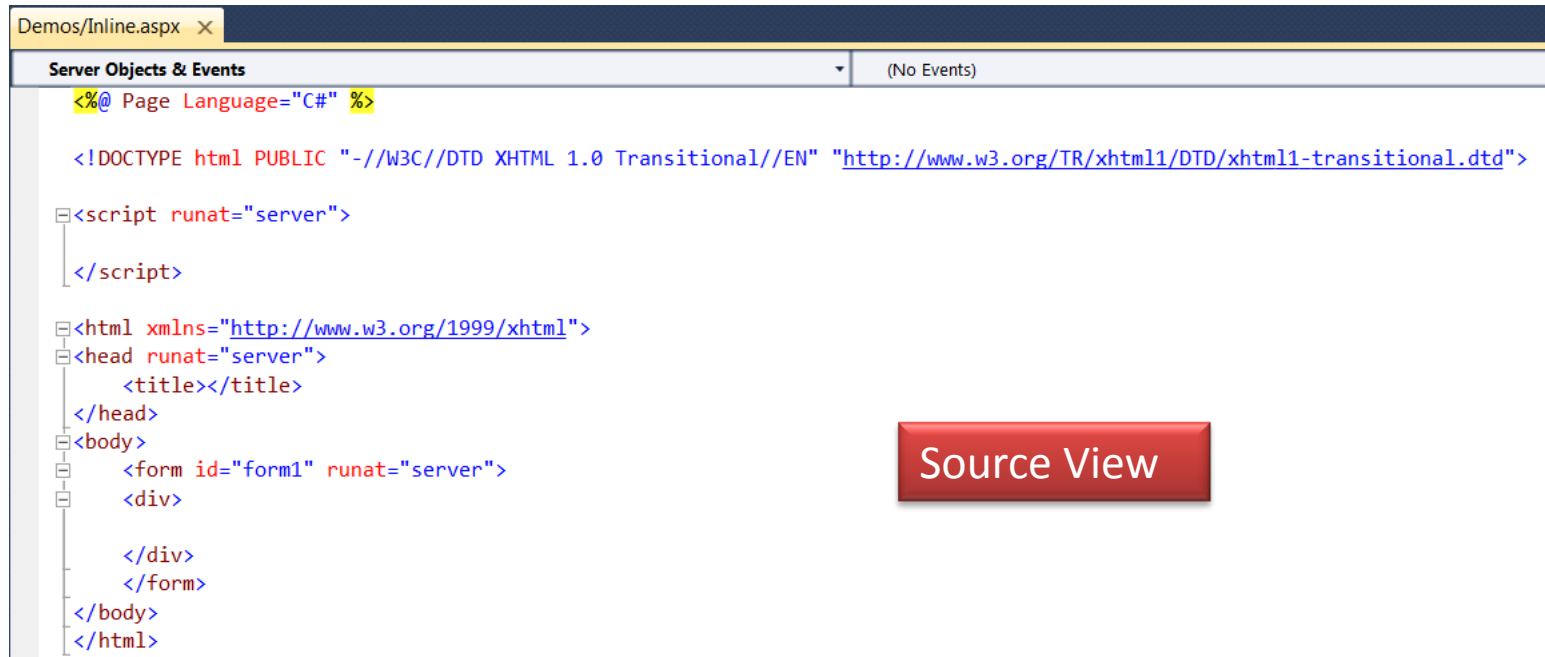
# Adding Web Forms with Code Behind



# Adding Web Forms with Inline Code



# Adding Web Forms with Inline Code



```
<%@ Page Language="C#" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<script runat="server">
</script>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
<title></title>
</head>
<body>
<form id="form1" runat="server">
<div>

</div>
</form>
</body>
</html>
```

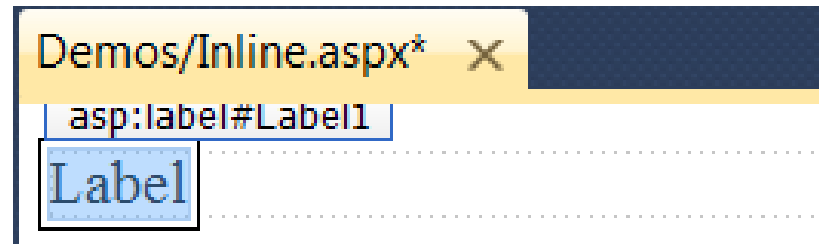
Source View

Demos/Inline.aspx

Design View

# Adding Web Forms with Inline Code

- Label



# Adding Web Forms with Inline Code

- Double-click the page



The screenshot shows the Visual Studio IDE with the file 'Demos/Inline.aspx' open. The 'Server Objects & Events' pane is active, showing '(No Events)'. The main editor displays the following code:

```
<%@ Page Language="C#" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<script runat="server">

    protected void Page_Load(object sender, EventArgs e)
    {
        |
    }

</script>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>

            <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>

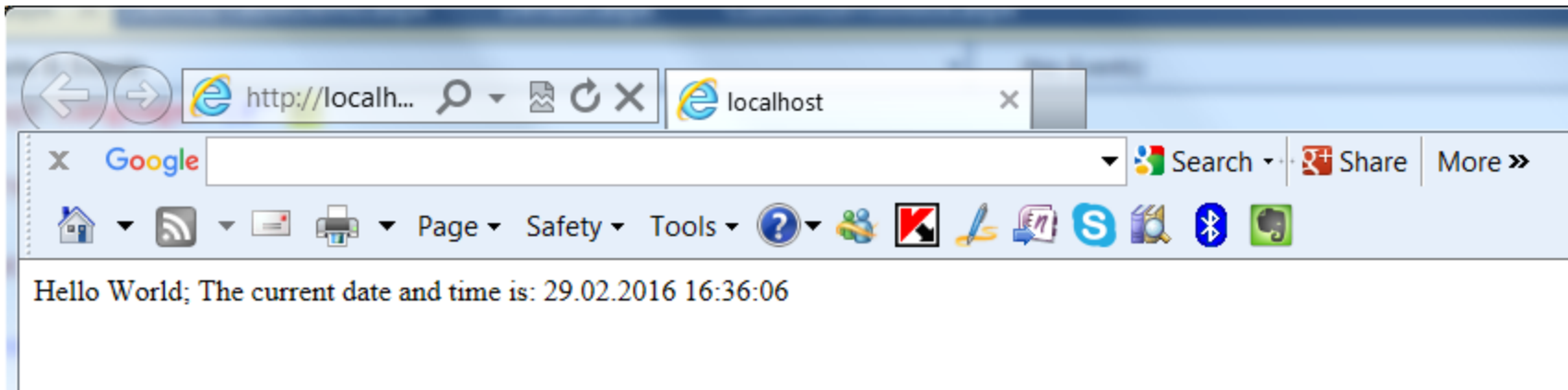
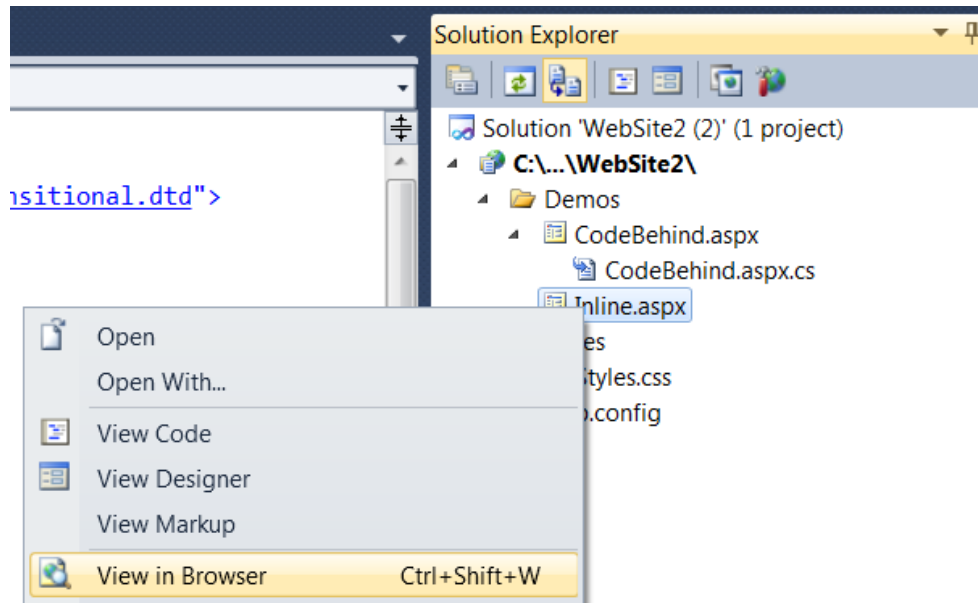
        </div>
    </form>
</body>
</html>
```



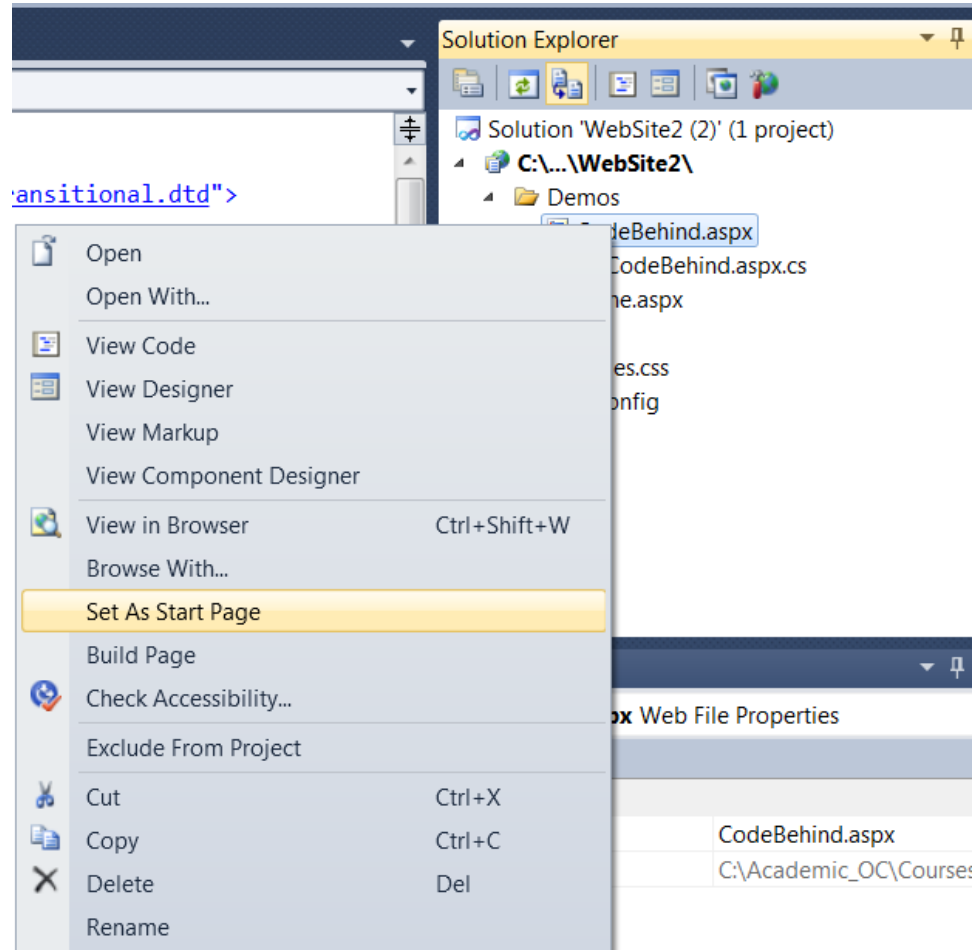
# Adding Web Forms with Inline Code

```
<script runat="server">  
  
    protected void Page_Load(object sender, EventArgs e)  
    {  
        Label1.Text = "Hello World; The current date and time is: " + DateTime.Now.ToString();  
    }  
</script>
```

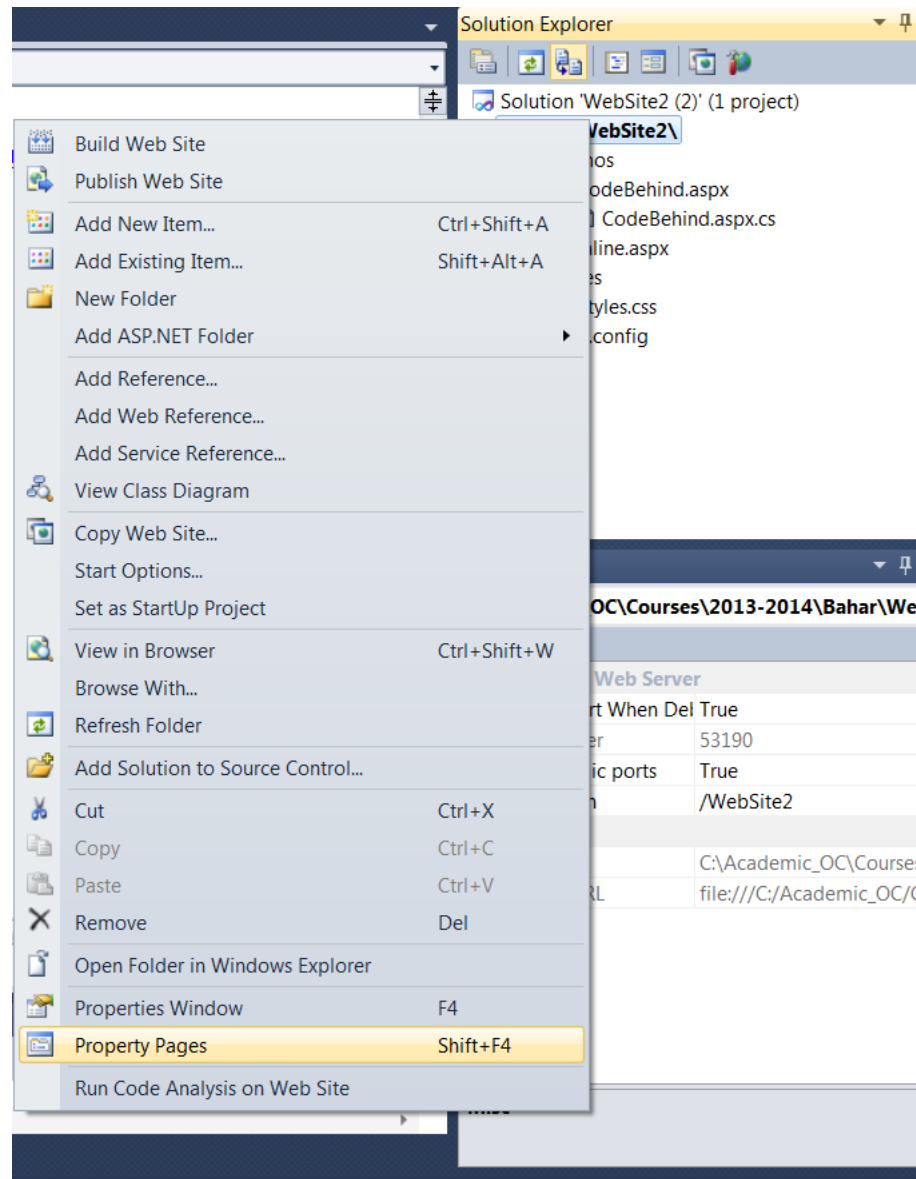
# Adding Web Forms with Inline Code



# Start Page



- To control start page:



# Start Page Options

C:\Academic\_OC\Courses\2013-2014\Bahar\WebTabanlıWindowsProgramlama\Codes\L1\WebSite2\ Property Pages

References  
Build  
Accessibility  
**Start Options**  
MSBuild Options  
Silverlight Applications

Start action

☐ Use current page

☒ Specific page: Demos/CodeBehind.aspx

☐ Start external program:

Command line arguments:

Working directory:

☐ Start URL:

☐ Don't open a page. Wait for a request from an external application.

Server

☒ Use default Web server ☐ NTLM Authentication

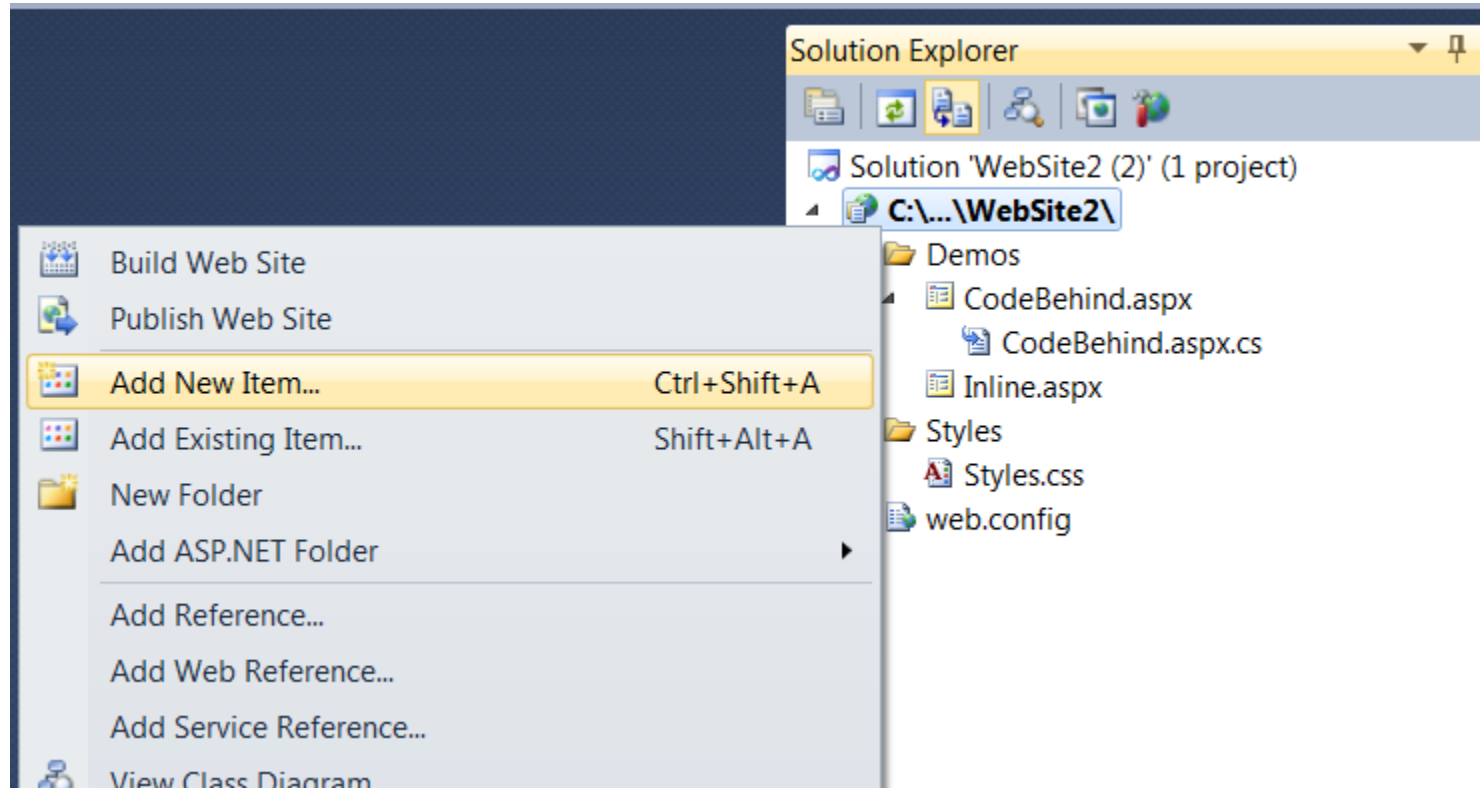
☐ Use custom server Base URL:

Debuggers

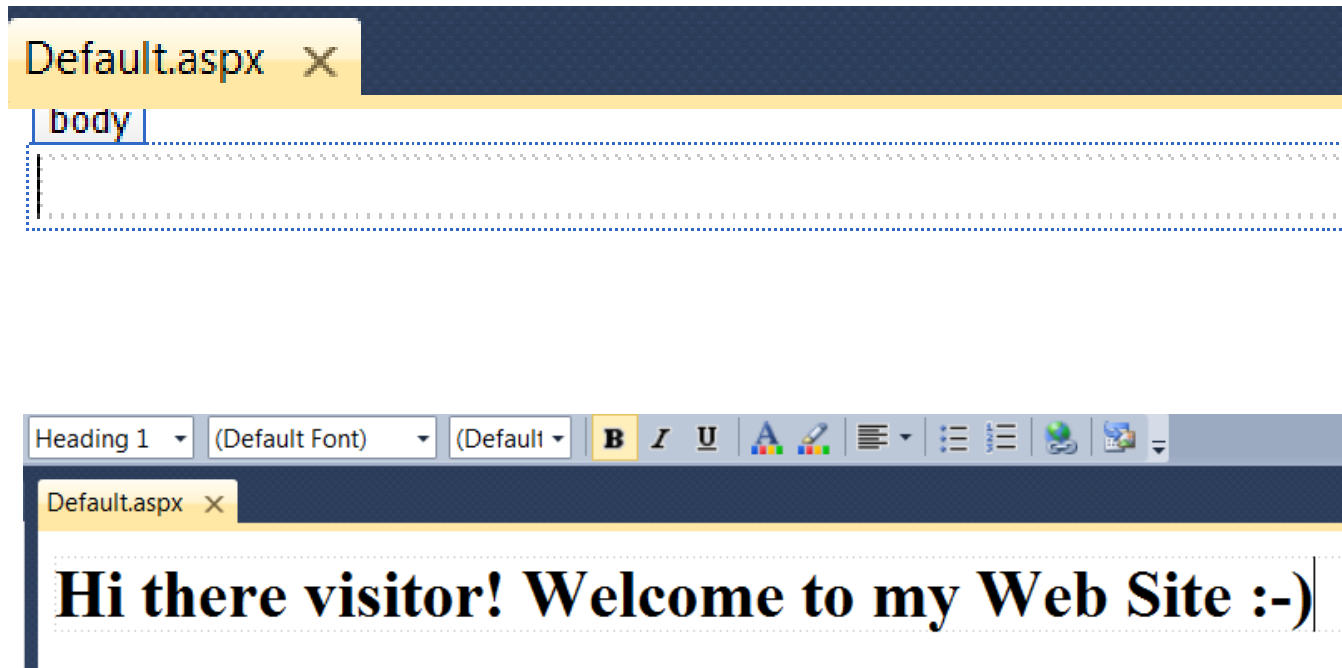
☒ ASP.NET ☐ Native code ☐ SQL Server ☐ Silverlight

OK Cancel Apply

# Adding Formatted Text

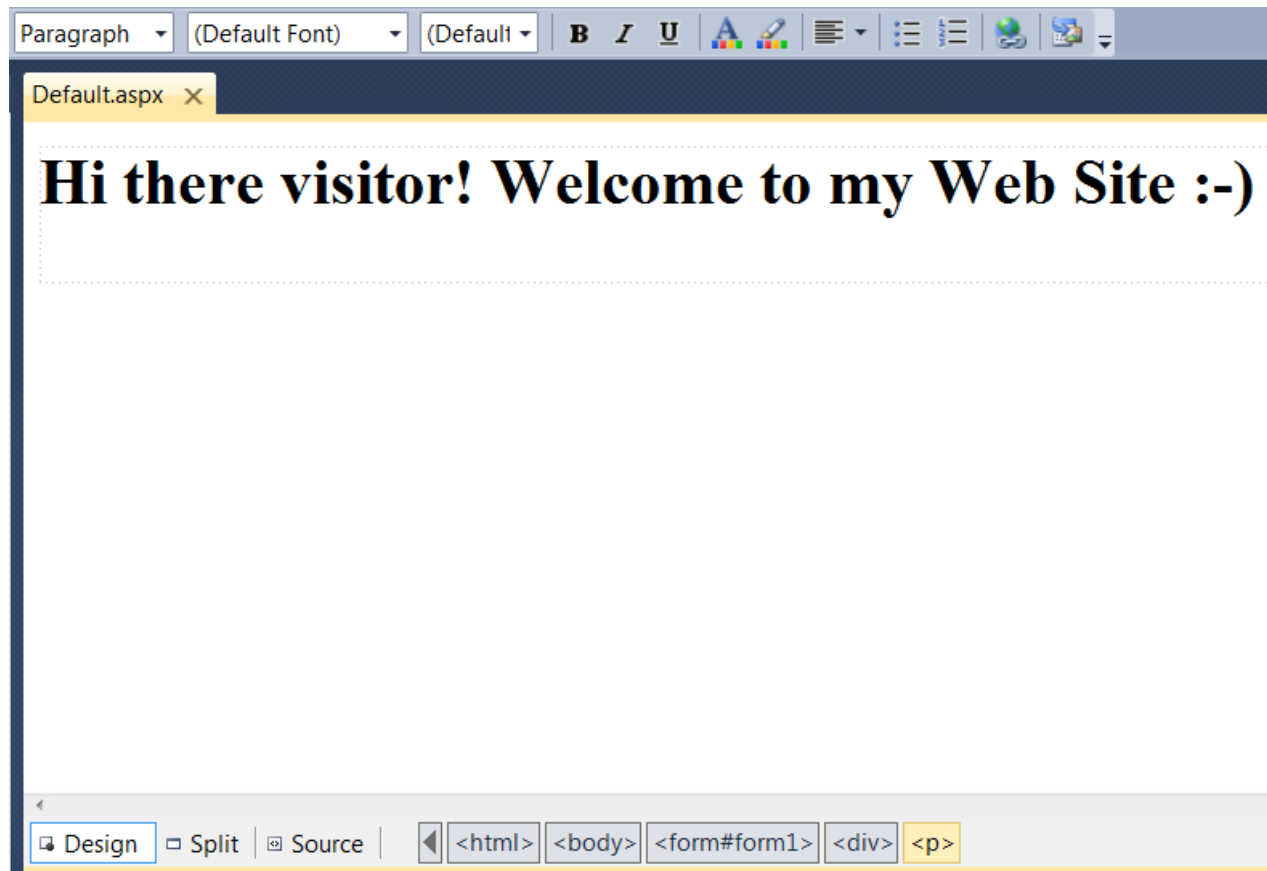


# Adding Formatted Text



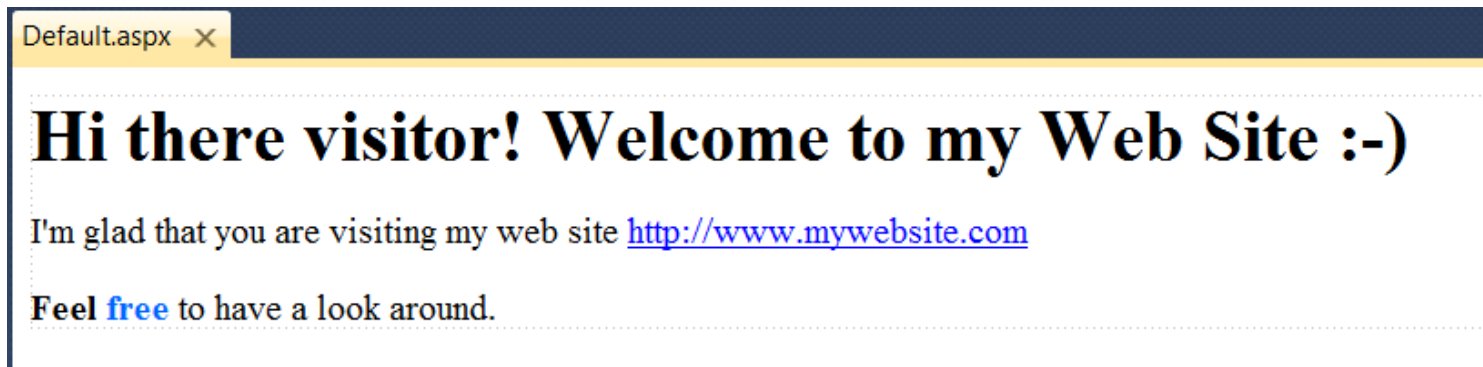
# Adding Formatted Text

- Position your cursor at the end of the heading after the :-)) and press Enter.





# Adding Formatted Text



```
<div>

    <h1>
        Hi there visitor! Welcome to my Web Site :-)</h1>
    <p>
        I'm glad that you are visiting my web site <a href="http://www.mywebsite.com">
        http://www.mywebsite.com</a>
    </p>
    <p>
        <strong>Feel</strong> <span class="style1"><strong>free</strong></span> to have a look around.</p>

</div>
```

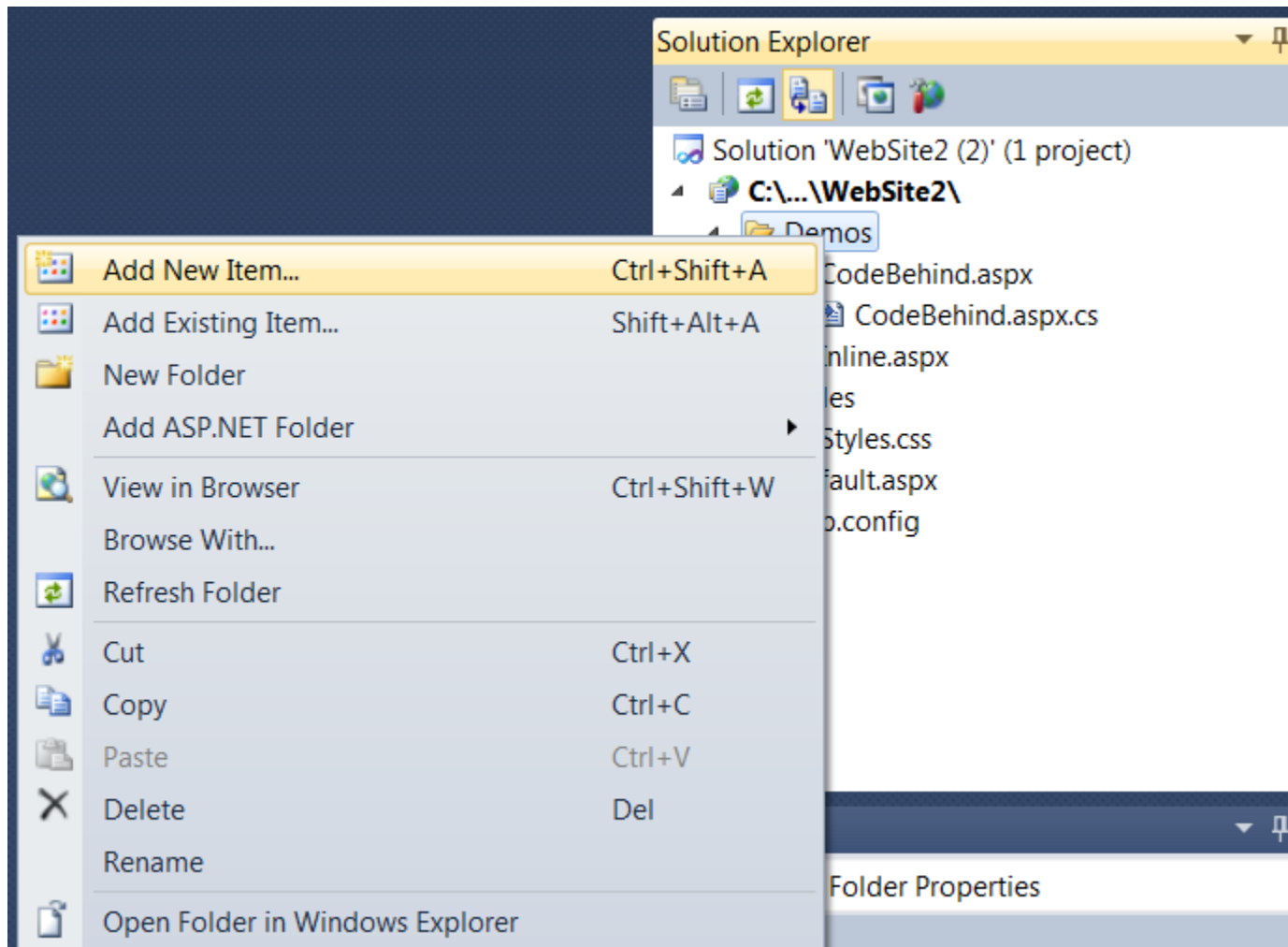
# Adding Formatted Text

**Hi there visitor! Welcome to my Web Site :-)**

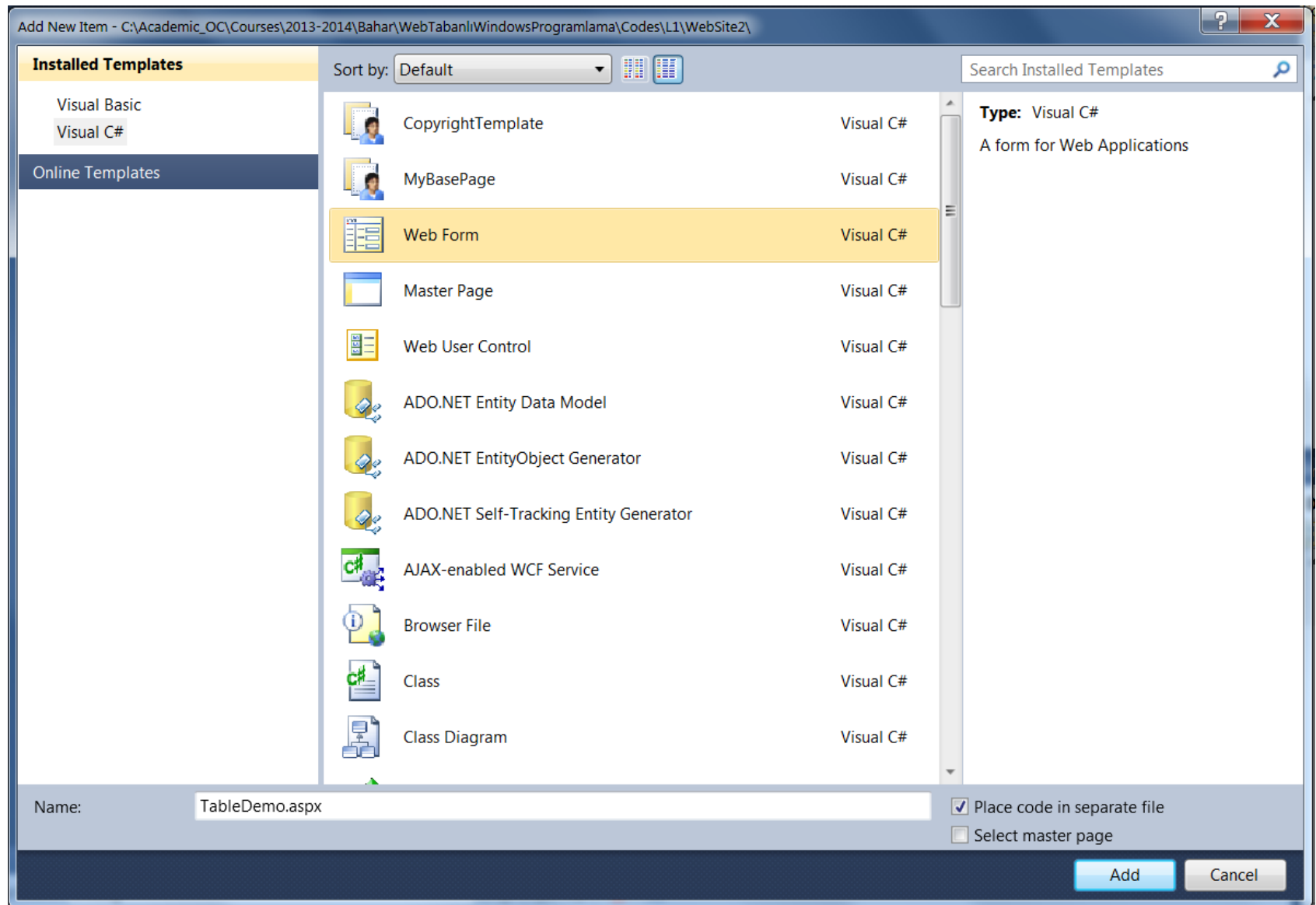
I'm glad that you are visiting my web site <http://www.mywebsite.com>

**Feel free** to have a look around.

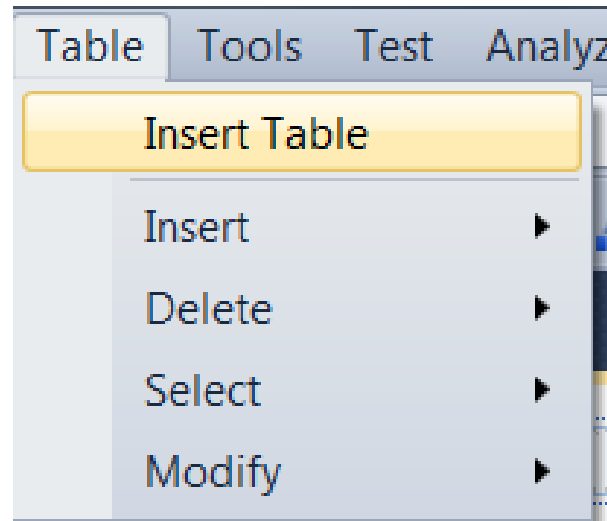
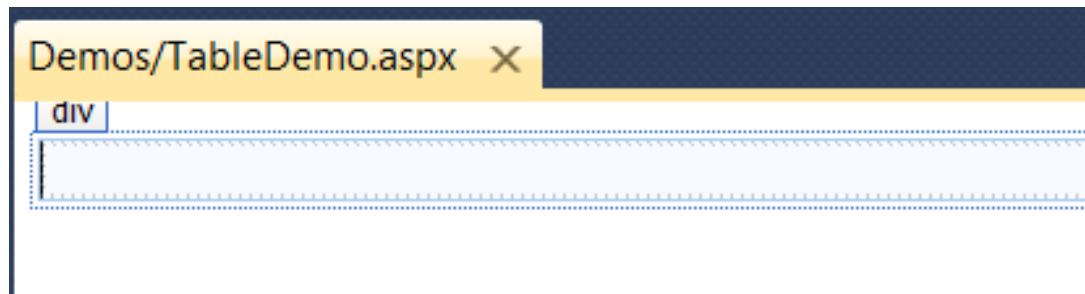
# Adding Tables



# Adding Tables



# Adding Tables



# Insert Table



## Size

Rows:  Columns:

## Layout

Alignment:  ☒ Specify width:

Float:   ☐ In pixels  
☒ In percent

Cell padding:  ☐ Specify height:

Cell spacing:   ☐ In pixels  
☐ In percent

## Borders

Size:

Color:

☐ Collapse table border

## Background

Color:

☐ Use background picture

Browse...

Properties...

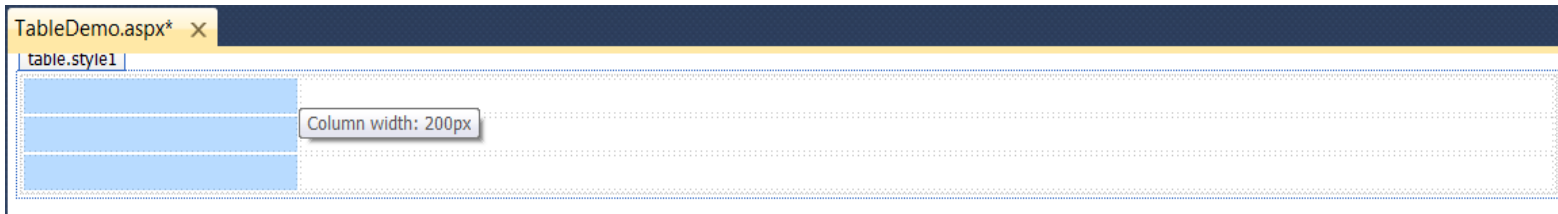
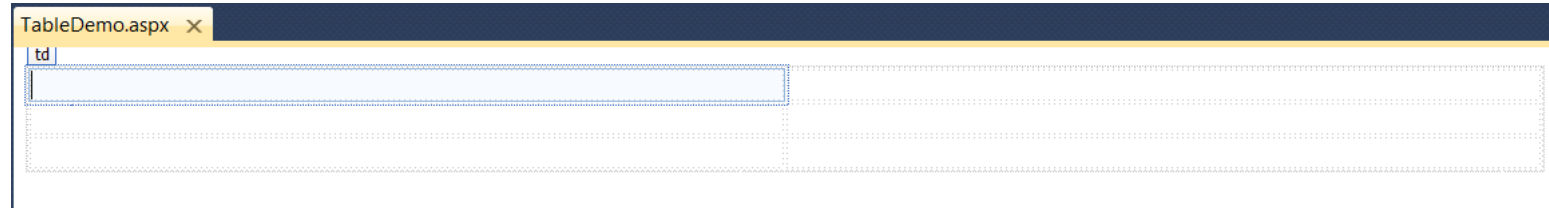
## Set

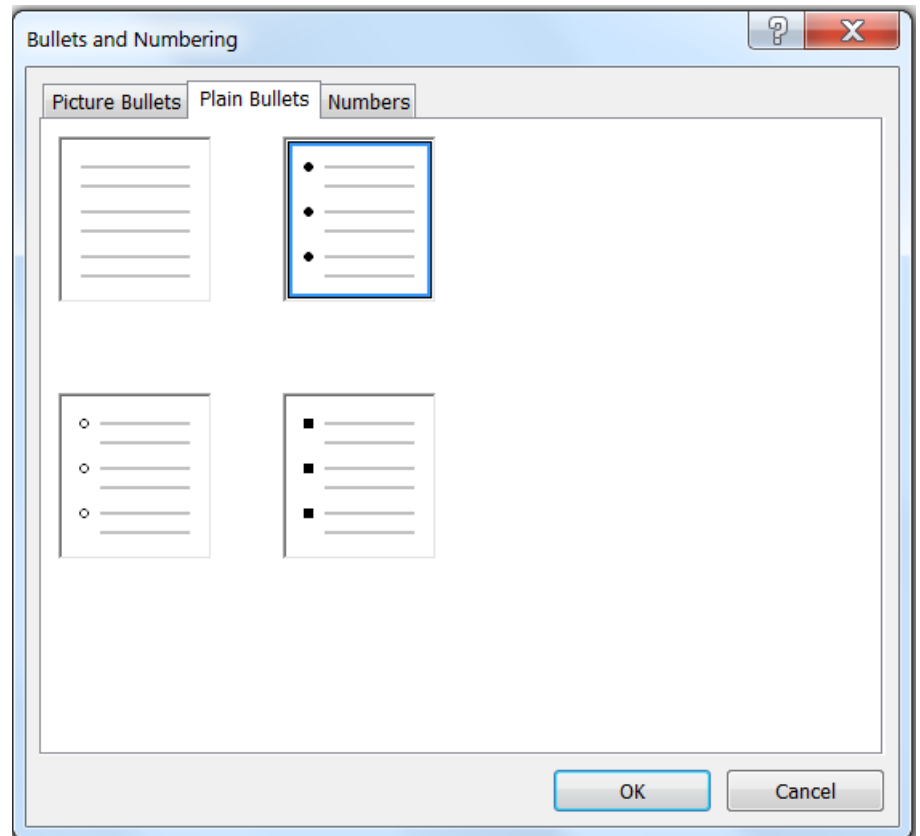
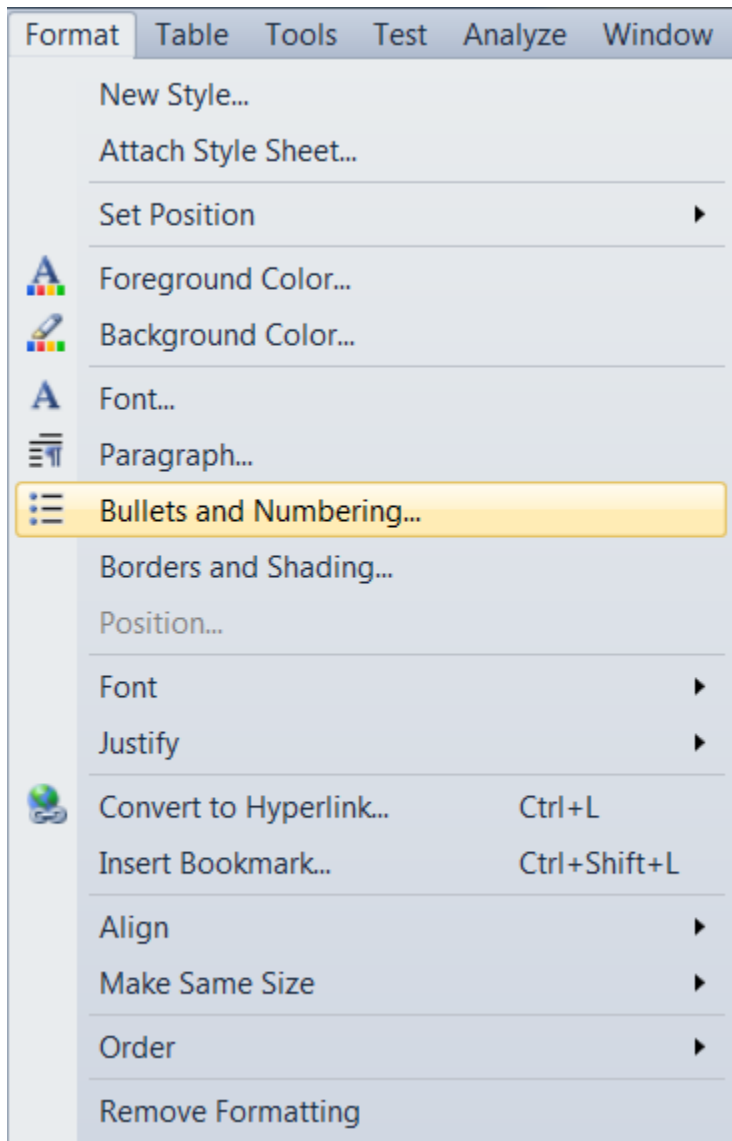
☐ Set as default for new tables

OK

Cancel

# Adding Tables







# Adding Tables

TableDemo.aspx ✕	
body	
My Favorite Musicians	<ul style="list-style-type: none"><li>• Madonna</li><li>• U2</li><li>• Marcus Miller</li></ul>
My Favorite Actors	<ol style="list-style-type: none"><li>1. Jeremy Irons</li><li>2. Al Pacino</li><li>3. Tom Hardy</li></ol>
My Favorite Films	<ul style="list-style-type: none"><li>▪ Snatch</li><li>▪ A Good Year</li><li>▪ Bronson</li></ul>

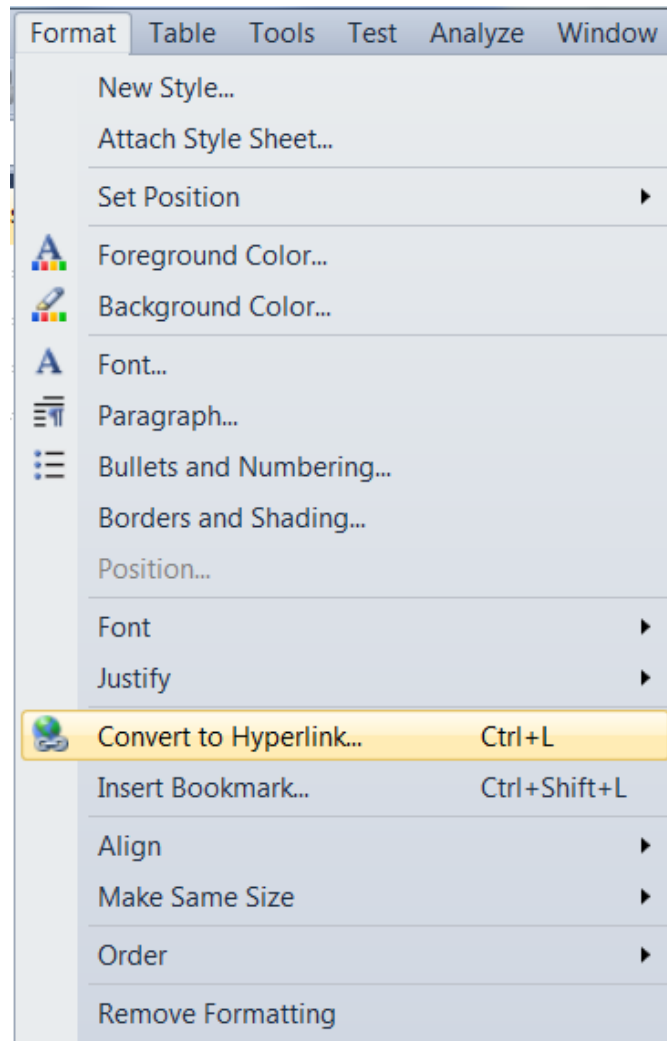
# Connecting Pages

- There are a few ways to create links between pages, including:
  - The HTML `<a>` element
  - Using the `<asp:HyperLink>` control.
  - Programmatically through code.

# Linking Pages

- Add 4th row to the table.
  - In the first cell type **Link**
  - In the second cell type **Go to the Homepage**
    - Highlight **Go to the Homepage**

# Linking Pages



Hyperlink

Type: (other) ▼

URL:

Browse...

OK Cancel

Select Project Item

Project folders:

- ▲ C:\...\WebSite2\
  - ▶ Demos
  - ▶ Styles

Contents of folder:

- Default.aspx
- web.config

Files of type: All Files (\*.\*) ▼

OK Cancel

# Linking Pages

- In Source View:

```
<a href="Default.aspx">Go to Homepage</a></td>
```

# Linking Pages

- Add 5th row to the table.
  - In the first cell type **Link to IMDB**
  - In the second cell type **IMDB**
    - Highlight **IMDB**

```
<a href="http://www.imdb.com">IMDB</a></td>
```

# Linking Pages

My Favorite Musicians

- Madonna
- U2
- Marcus Miller

My Favorite Actors

1. Jeremy Irons
2. Al Pacino
3. Tom Hardy

My Favorite Films

- Snatch
- A Good Year
- Bronson

Link

[Go to Homepage](#)

Link to IMDB

[IMDB](#)