

# Request

# The HttpRequest Class

- The `System.Web.UI.Page.Request` property provides us with the reference for the `HttpRequest` object that represents the request the server has just received.

# The ApplicationPath Property

- This property gets our ASP.NET application root path on the server.
- We can use it to construct a URL relative to the application root.
- Using this property pages and shared controls that exist at different levels of a directory structure can use the same code to link to resources at fixed locations in the application.

# The ApplicationPath Property

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="HttpRequestDemo.WebForm1" %>

<!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>
            Application Path &nbsp;&nbsp;
            <asp:TextBox ID="ApplicationPathTextBox"
                runat="server"></asp:TextBox>
        </div>
        <asp:ImageMap ID="ImageMap1" runat="server">
        </asp:ImageMap>
    </form>
</body>
</html>
```

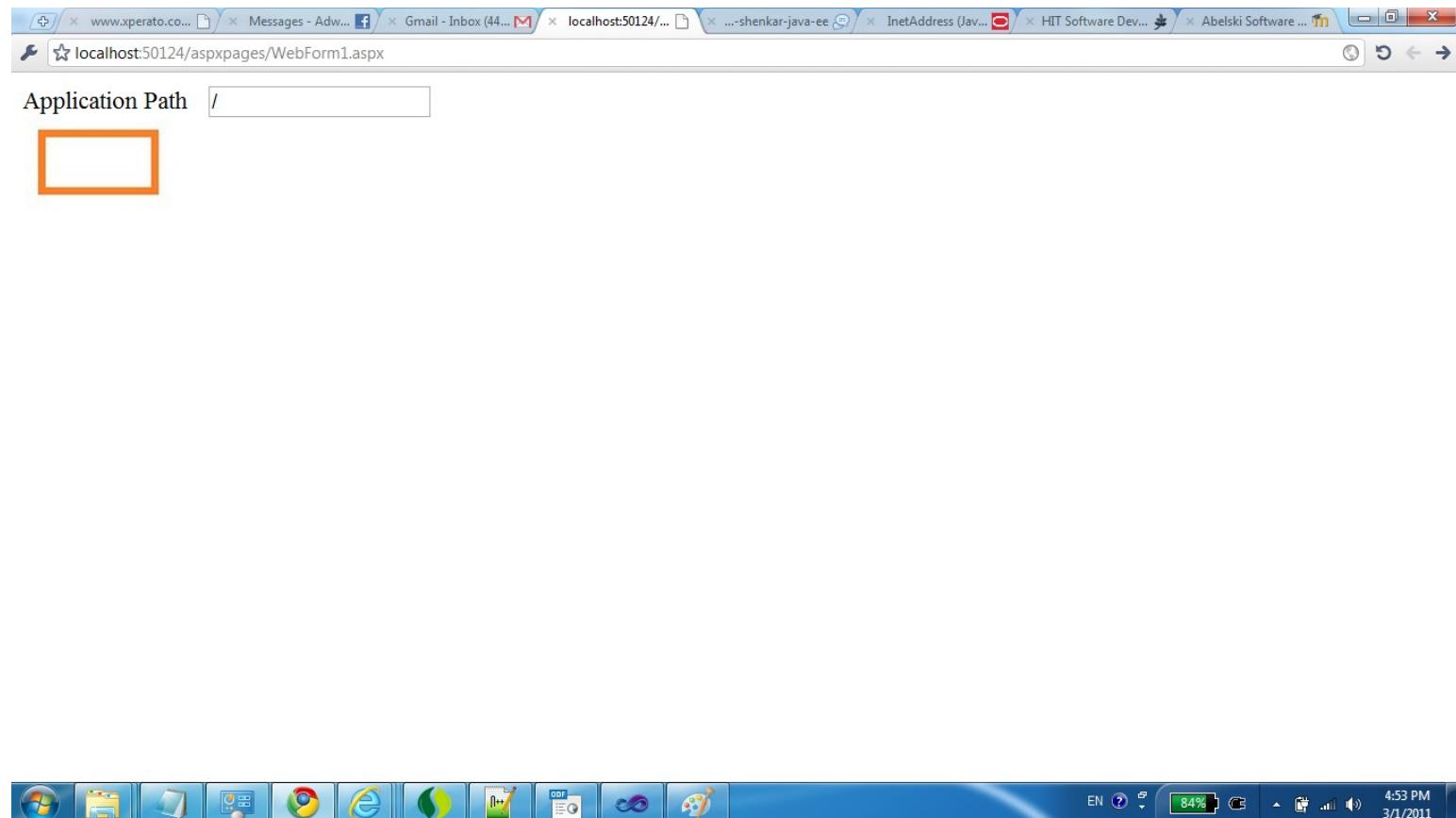


# The ApplicationPath Property

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace HttpRequestDemo
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            this.ApplicationPathTextBox.Text = Request.ApplicationPath;
            this.ImageMap1.ImageUrl = Request.ApplicationPath + "box.jpg";
        }
    }
}
```

# The ApplicationPath Property



# The Browser Property

- The `Request.Browser` property returns a reference for a `HttpBrowserCapabilities` object that provides information about the web browser.

# The Browser Property

```
<%@ Page Language="C#" AutoEventWireup="true"
CodeBehind="WebForm1.aspx.cs" Inherits="HttpRequestDemo.WebForm1" %>

<!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">
        <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
        <br />
        <asp:Label ID="Label2" runat="server" Text="Label"></asp:Label>
    </form>
</body>
</html>
```



# The Browser Property

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace HttpRequestDemo
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            HttpBrowserCapabilities browser = Request.Browser;
            Label1.Text = "Type = " + browser.Type;
            Label2.Text = "Platform = " + browser.Platform;
        }
    }
}
```

# The Browser Property



Type = Chrome9

Platform = WinNT



# The FilePath Property

- The Request.FilePath property returns the virtual path of the current request.

# The FilePath Property

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication6.WebForm1" %>

<!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>
```

# The FilePath Property

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace WebApplication6
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            this.Label1.Text = Request.FilePath;
        }
    }
}
```

# The FilePath Property



/WebForm1.aspx



# The Cookies Property

- The Request.Cookies property returns a collection of all cookies that were sent from the web browser to the server



# The Cookies Property

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication7.WebForm1" %>

<!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:Button ID="Button1" runat="server" Text="Button"
                onclick="Button1_Click" />
            <br />
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
        </div>
    </form>
</body>
</html>
```

# The Cookies Property

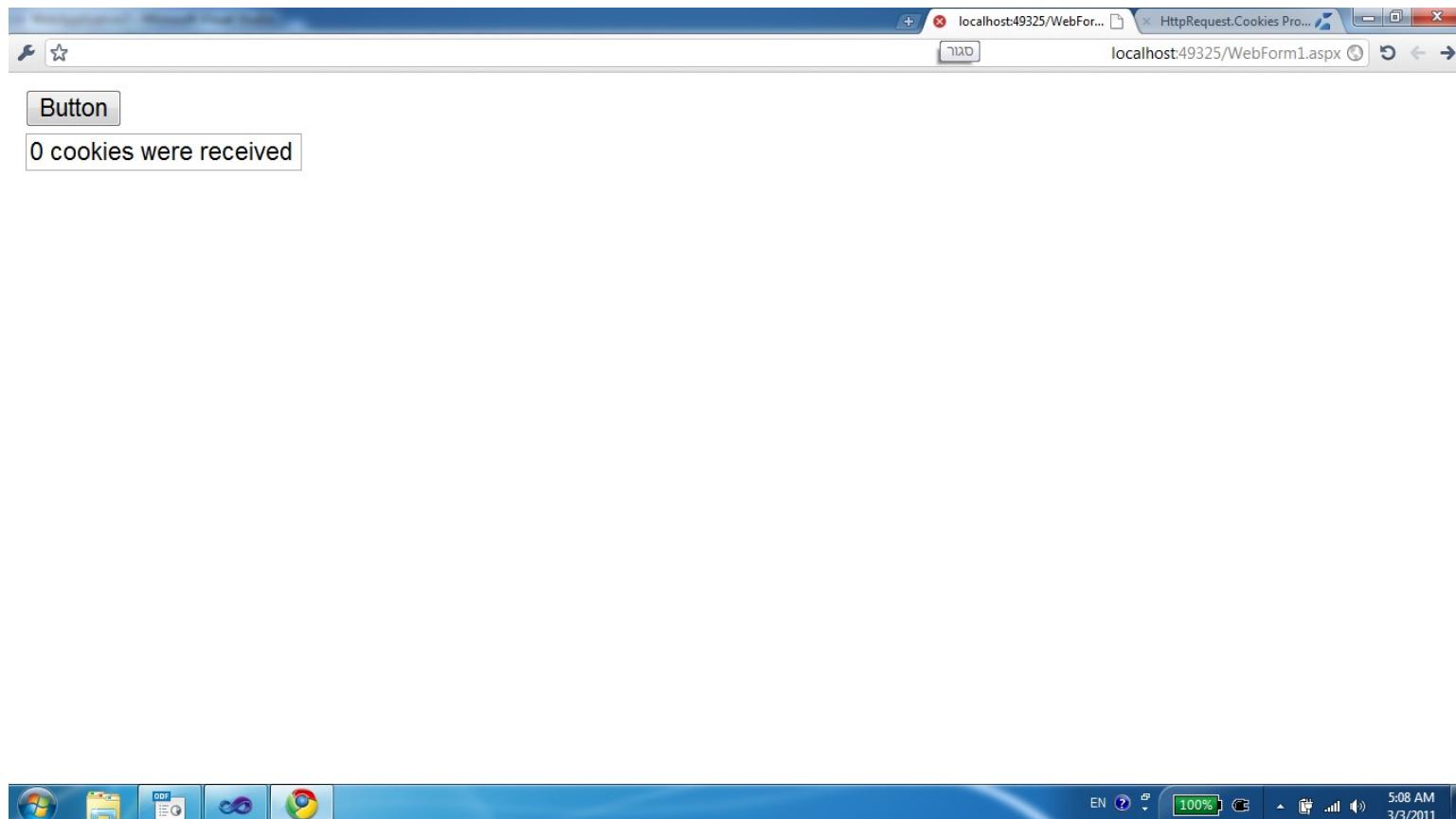
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace WebApplication7
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            this.TextBox1.Text = Request.Cookies.AllKeys.Length
                + " cookies were received";
        }
    }
}
```

# The Cookies Property



# The Form Property

- The `Request.Form` property returns a collection of all the variables that were received from an HTML form.

# The Form Property

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication7.WebForm1" %>

<!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:Button ID="Button1" runat="server" Text="Button"
                onclick="Button1_Click" />
            <br />
            <asp:TextBox ID="TextBox1" runat="server"
                Width="572px"></asp:TextBox>
        </div>
    </form>
</body>
</html>
```



# The Form Property

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Collections.Specialized;

namespace WebApplication7
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }
    }
}
```

# The Form Property

```
protected void Button1_Click(object sender, EventArgs e)
{
    int index;
    NameValueCollection collection;
    string str = "Form variables are: ";
    collection=Request.Form;
    String[] vec = collection.AllKeys;
    for (index = 0; index < vec.Length; index++)
    {
        str += vec[index];
        if (!(index + 1 == vec.Length))
        {
            str += " , ";
        }
    }
    this.TextBox1.Text = str;
}
```

# The Form Property



# The Headers Property

- The `Request.Headers` property returns a collection of all the headers that were received from the web browser.

# The Headers Property

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication7.WebForm1" %>

<!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:Button ID="Button1" runat="server" Text="Button"
                onclick="Button1_Click" />
            <br />
            <asp:TextBox ID="TextBox1" runat="server"
                Width="944px"></asp:TextBox>
        </div>
    </form>
</body>
</html>
```



# The Headers Property

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Collections.Specialized;

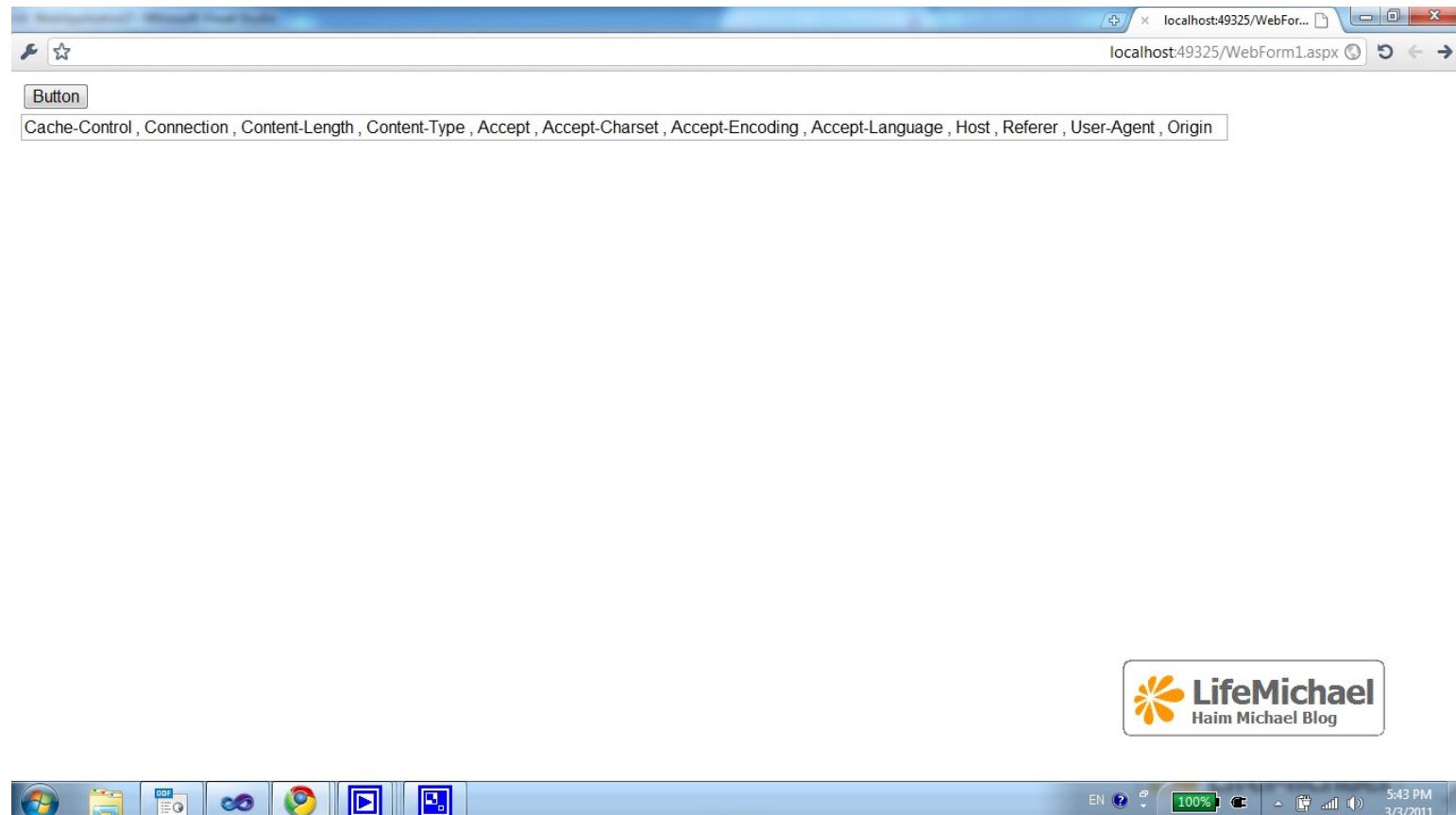
namespace WebApplication7
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

    }
```

# The Headers Property

```
protected void Button1_Click(object sender, EventArgs e)
{
    int index;
    NameValueCollection collection;
    string str = "";
    collection=Request.Headers;
    String[] vec = collection.AllKeys;
    for (index = 0; index < vec.Length; index++)
    {
        str += vec[index];
        if (!(index + 1 == vec.Length))
        {
            str += " , ";
        }
    }
    this.TextBox1.Text = str;
}
}
```

# The Headers Property



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# The HttpMethod Property

- The `Request.HttpMethod` property provides us with the name of the HTTP method the client was using when sending the request.

# The HttpMethod Property

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication7.WebForm1" %>

<!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:Button ID="Button1" runat="server" Text="Button"
                onclick="Button1_Click" />
            <br />
            <asp:TextBox ID="TextBox1" runat="server" Width="191px"></asp:TextBox>
        </div>
    </form>
</body>
</html>
```



# The HttpMethod Property

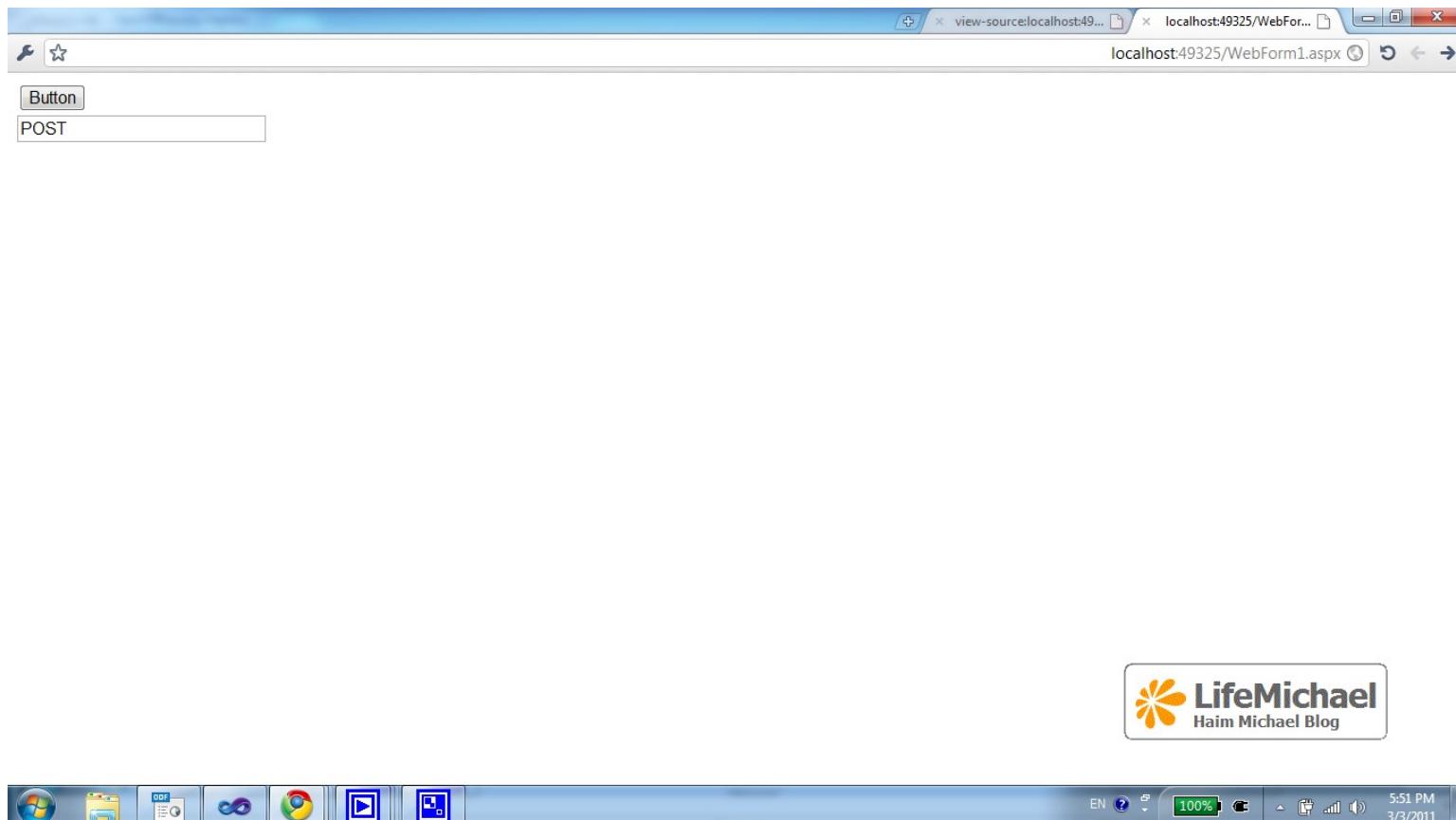
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Collections.Specialized;

namespace WebApplication7
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            this.TextBox1.Text = Request.HttpMethod;
        }
    }
}
```

# The HttpMethod Property



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# The QueryString Property

- The `Request.QueryString` property provides us with a collection of all parameters the query string includes.

# The QueryString Property

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication7.WebForm1" %>

<!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:Button ID="Button1" runat="server" Text="Button"
                onclick="Button1_Click" />
            <br />
            <asp:TextBox ID="TextBox1" runat="server"
                Width="461px"></asp:TextBox>
        </div>
    </form>
</body>
</html>
```



# The QueryString Property

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Collections.Specialized;

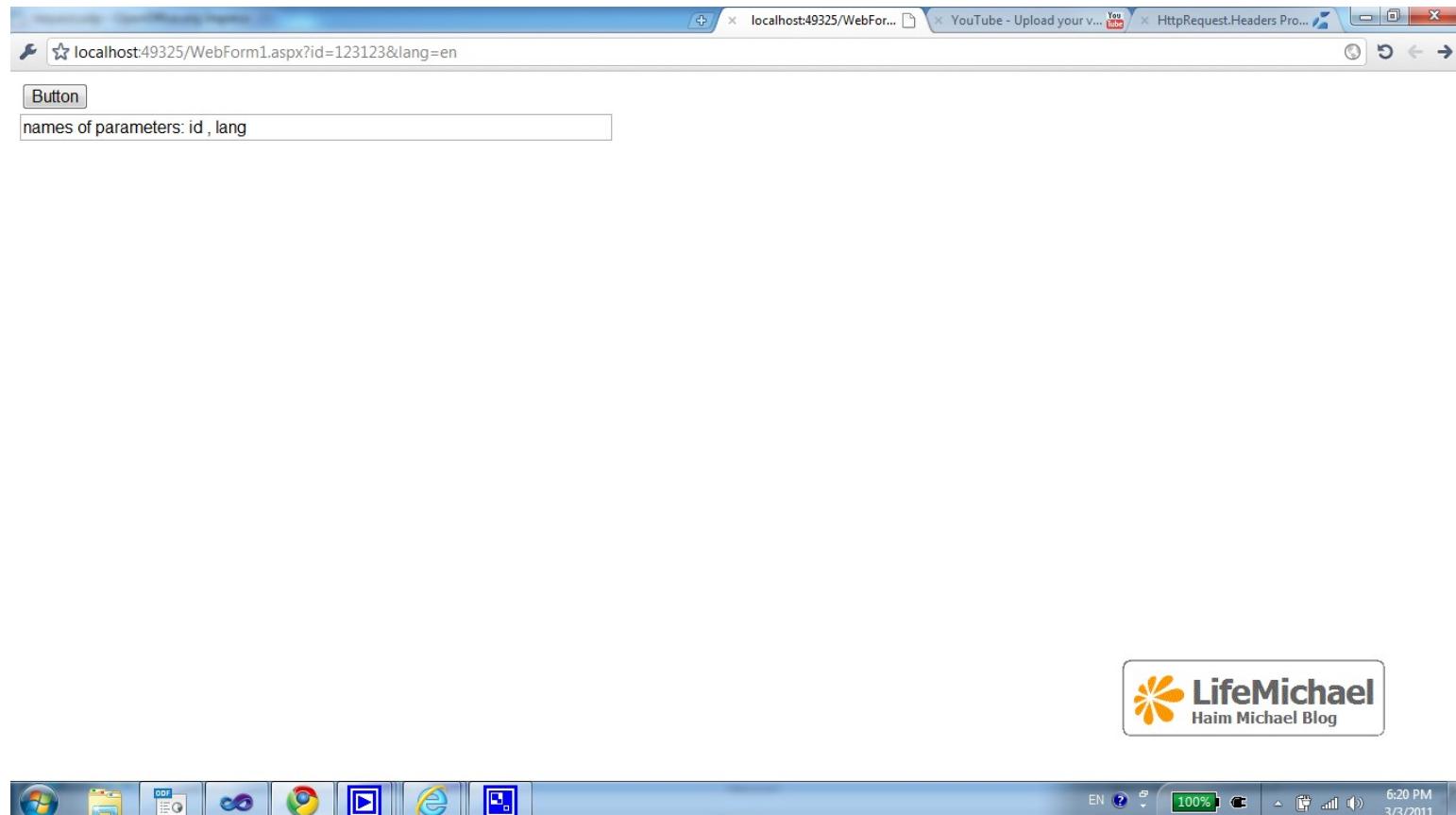
namespace WebApplication7
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

    }
```

# The QueryString Property

```
protected void Button1_Click(object sender, EventArgs e)
{
    int index;
    NameValueCollection collection;
    string str = "names of parameters: ";
    collection=Request.QueryString;
    String[] vec = collection.AllKeys;
    for (index = 0; index < vec.Length; index++)
    {
        str += vec[index];
        if (!(index + 1 == vec.Length))
        {
            str += " , ";
        }
    }
    this.TextBox1.Text = str;
}
}
```

# The QueryString Property



# The UserHostAddress Property

- The `Request.UserHostAddress` property provides us with the client IP address.

# The UserHostAddress Property

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication7.WebForm1" %>

<!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:Button ID="Button1" runat="server" Text="Button"
                onclick="Button1_Click" />
            <br />
            <asp:TextBox ID="TextBox1" runat="server"
                Width="221px"></asp:TextBox>
        </div>
    </form>
</body>
</html>
```



# The UserHostAddress Property

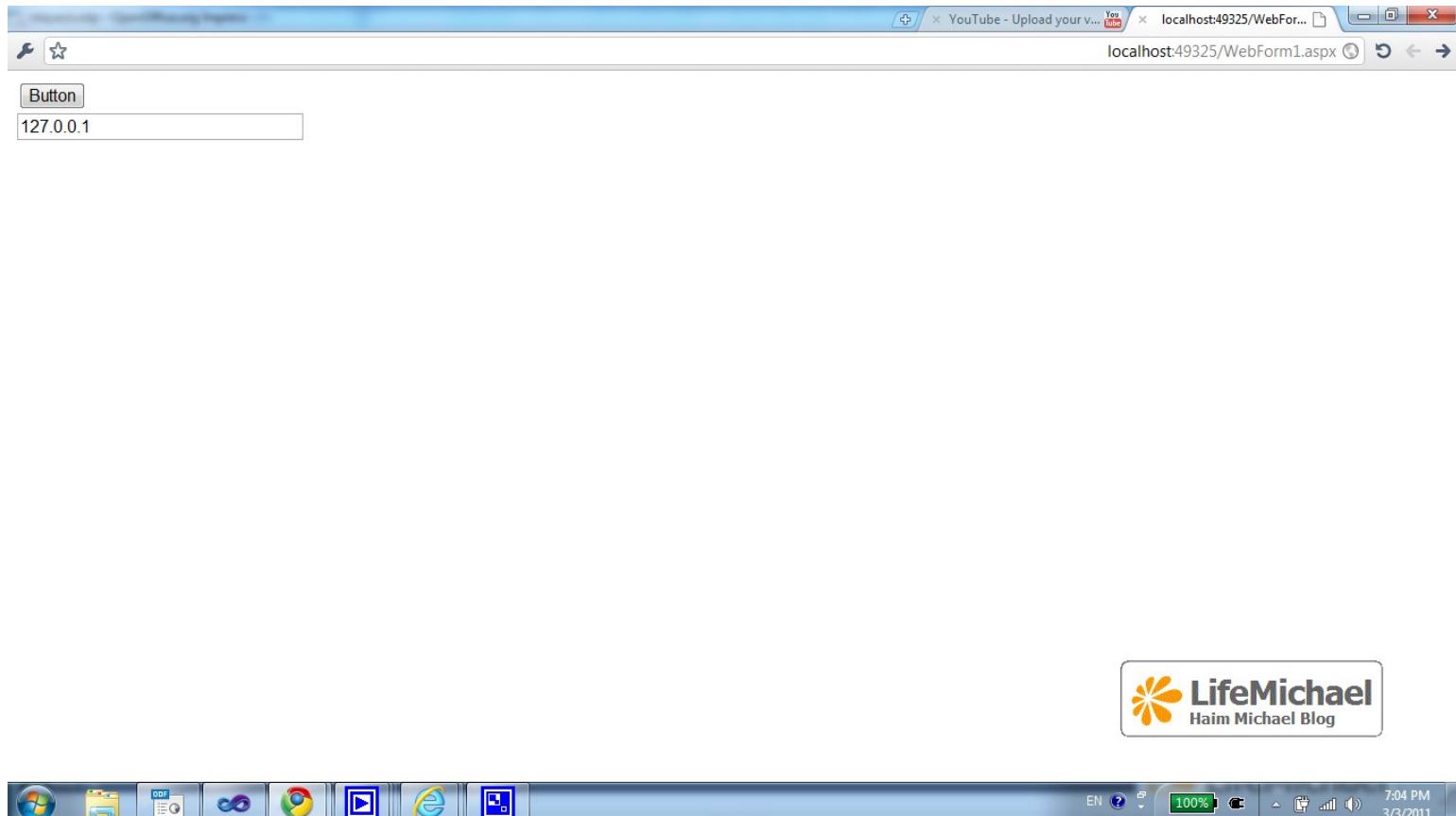
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Collections.Specialized;

namespace WebApplication7
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            this.TextBox1.Text = Request.UserHostAddress;
        }
    }
}
```

# The UserHostAddress Property



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# The UserHostName Property

- The `Request.UserHostName` property provides us with the client DNS name.

# The UserHostName Property

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication7.WebForm1" %>

<!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:Button ID="Button1" runat="server" Text="Button"
                onclick="Button1_Click" />
            <br />
            <asp:TextBox ID="TextBox1" runat="server"
                Width="221px"></asp:TextBox>
        </div>
    </form>
</body>
</html>
```

# The UserHostName Property

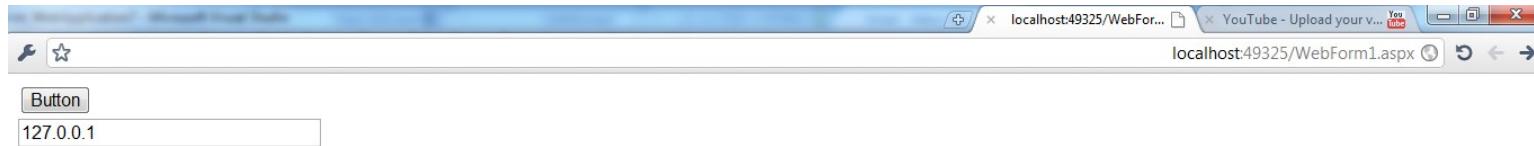
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Collections.Specialized;

namespace WebApplication7
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            this.TextBox1.Text = Request.UserHostName;
        }
    }
}
```

# The UserHostName Property



# The UserAgent Property

- This property returns the value of the user-agent header the client sent.
- We can use this property for identifying the web browser from which the request arrives.
- When the request arrives from a mobile telephone we can use this property for getting the name of the mobile telephone model.

# The UserAgent Property

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication7.WebForm1" %>

<!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:Button ID="Button1" runat="server" Text="Button"
                onclick="Button1_Click" />
            <br />
            <asp:TextBox ID="TextBox1" runat="server" Width="221px">
            </asp:TextBox>
        </div>
    </form>
</body>
</html>
```



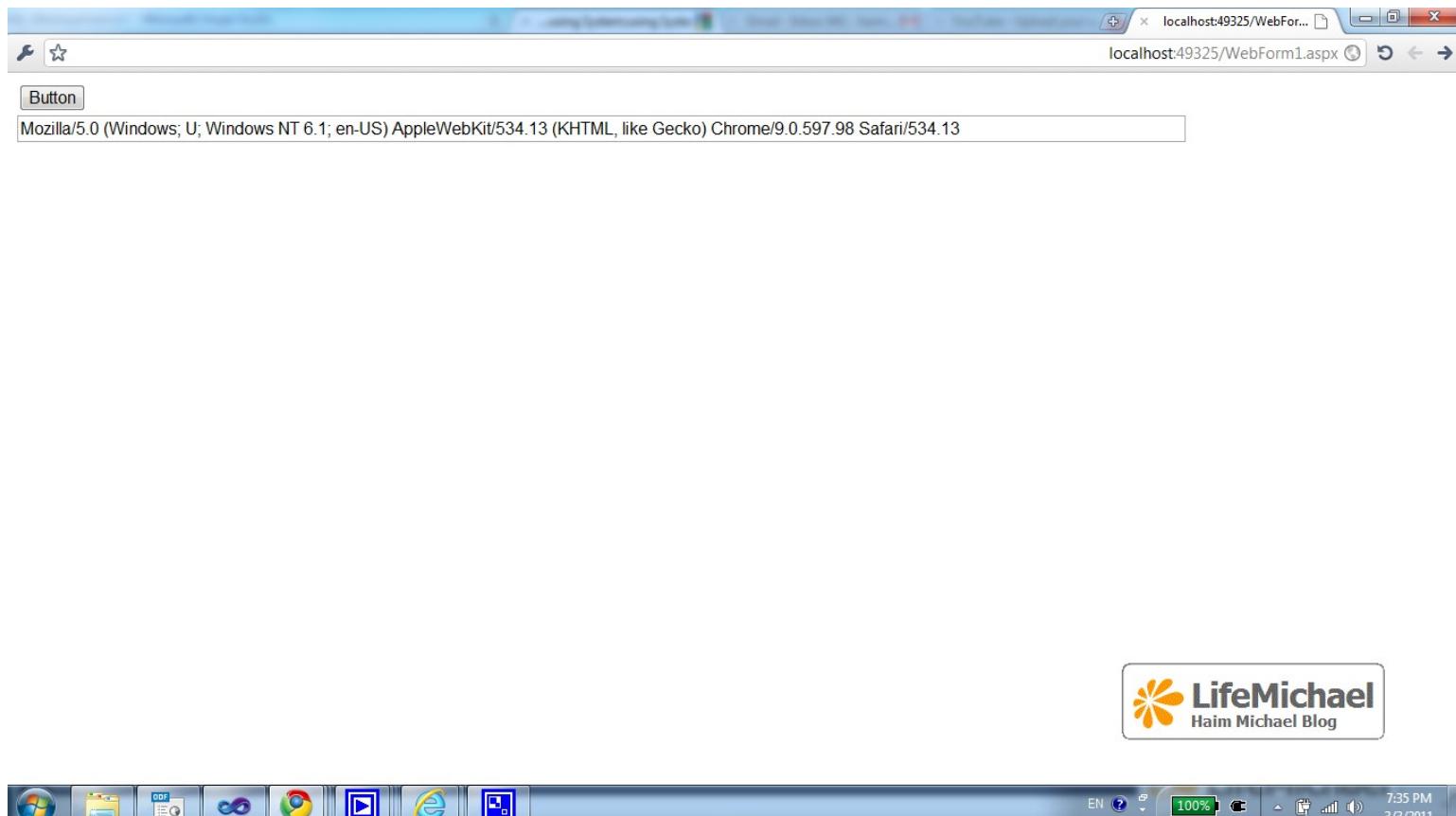
# The UserAgent Property

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Collections.Specialized;

namespace WebApplication7
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            this.TextBox1.Text = Request.UserAgent;
        }
    }
}
```

# The UserAgent Property



# The MapPath Method

- This method returns the physical path that match the virtual one it receives.
- This method is very useful for accessing resources on the server side.

# The MapPath Method

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"  
Inherits="WebApplication7.WebForm1" %>  
  
<!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:Button ID="Button1" runat="server" Text="Button"  
          onclick="Button1_Click" />  
        <br />  
        <asp:TextBox ID="TextBox1" runat="server" Width="911px">  
        </asp:TextBox>  
      </div>  
    </form>  
  </body>  
</html>
```



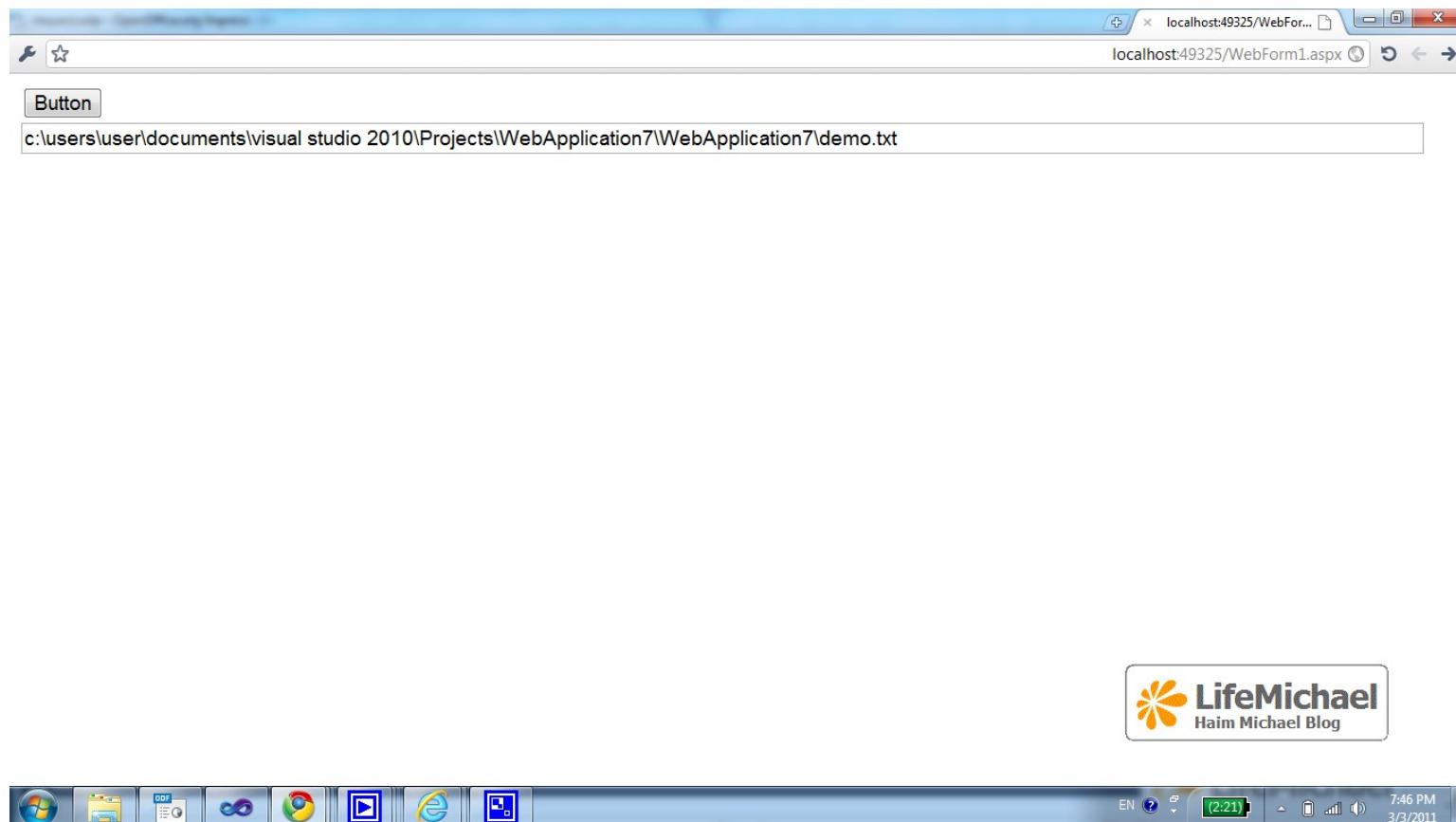
# The MapPath Method

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Collections.Specialized;

namespace WebApplication7
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            this.TextBox1.Text = Request.MapPath("demo.txt");
        }
    }
}
```

# The MapPath Method



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# The SaveAs Method

- The SaveAs method is defined within the `HttpRequest` class.
- It saves the details of the current HTTP request to a file.

# The SaveAs Method

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication7.WebForm1" %>

<!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:Button ID="Button1" runat="server" Text="Button"
                onclick="Button1_Click" />
            <br />
            <asp:TextBox ID="TextBox1" runat="server" Width="275px">
            </asp:TextBox>
        </div>
    </form>
</body>
</html>
```



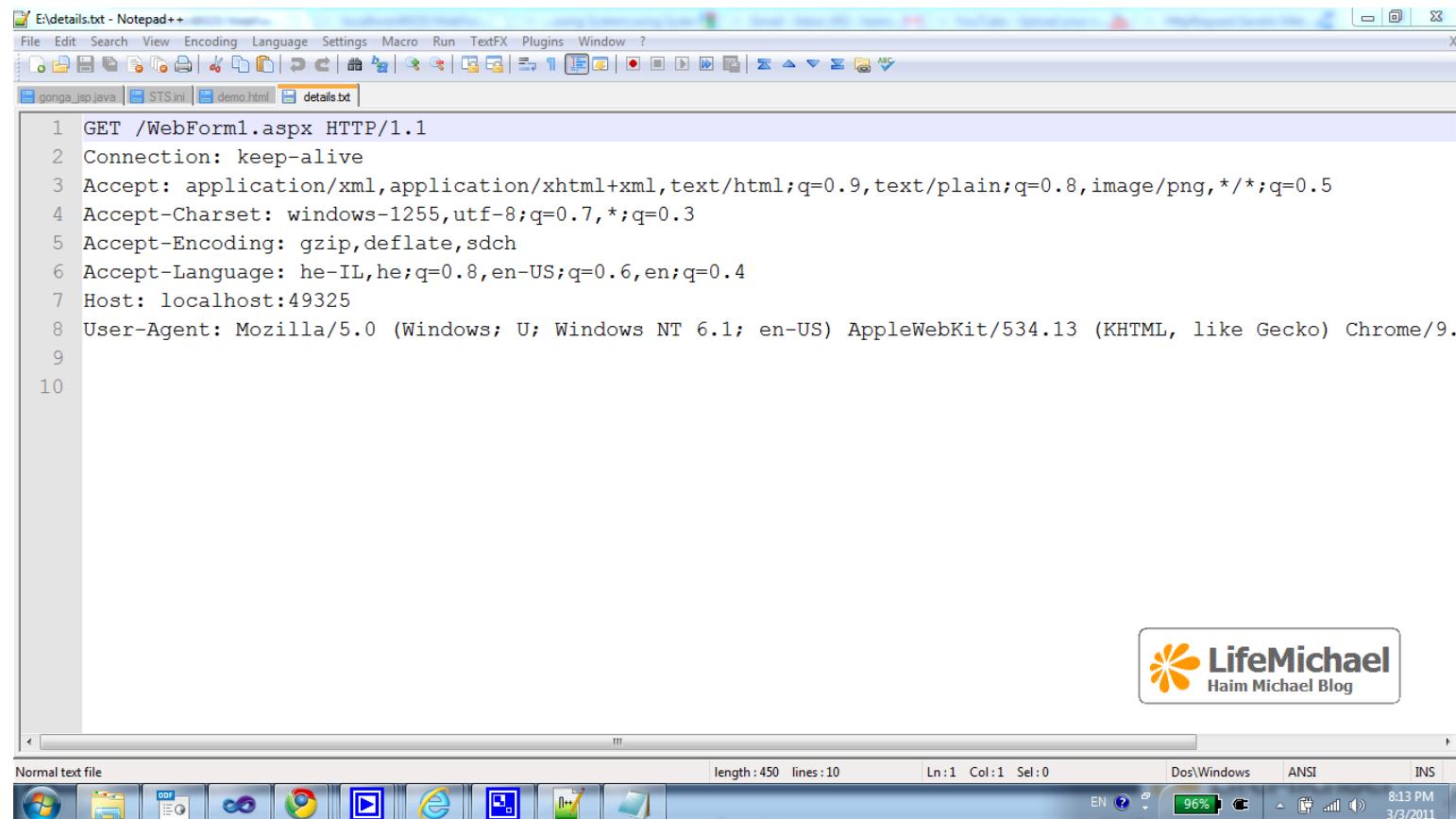
# The SaveAs Method

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Collections.Specialized;

namespace WebApplication7
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            Request.SaveAs("e:\\details.txt", true);
        }

        protected void Button1_Click(object sender, EventArgs e)
        {
        }
    }
}
```

# The SaveAs Method



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