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WEB-TECHNOLOGIES

# BACKEND – SERVER SIDE PROGRAMMING



Webforms

[www.asp.net.by](http://www.asp.net.by)

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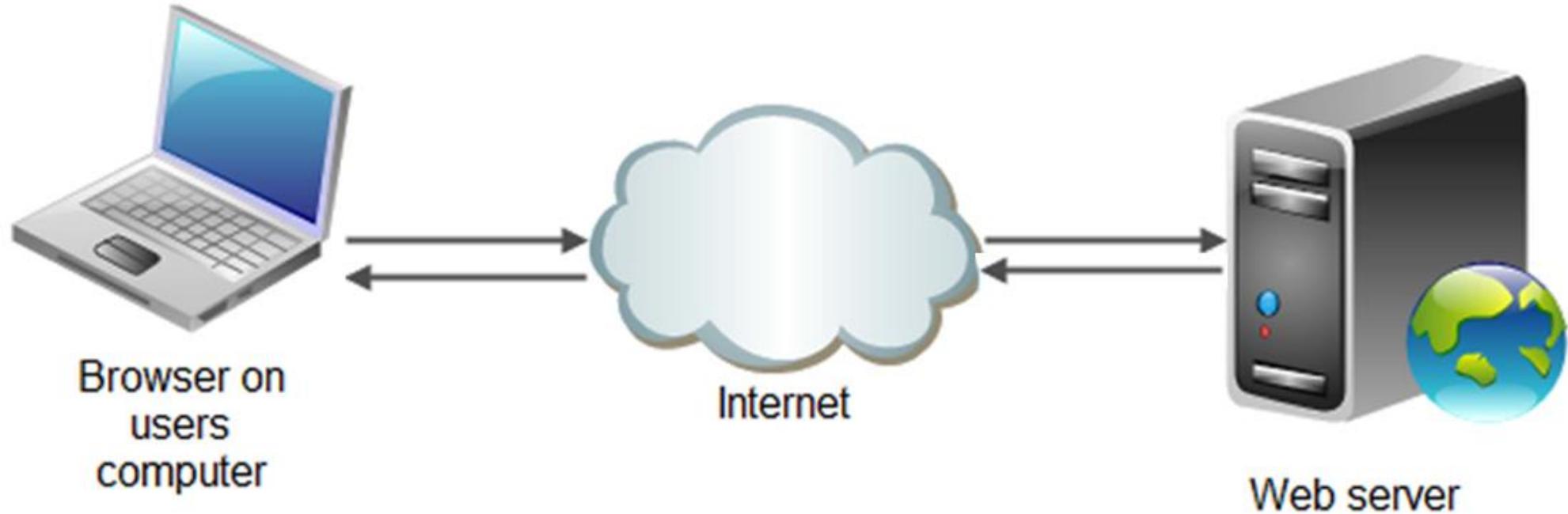
[ao@dot.net.by](mailto:ao@dot.net.by)

**+375 29 254-07-92**



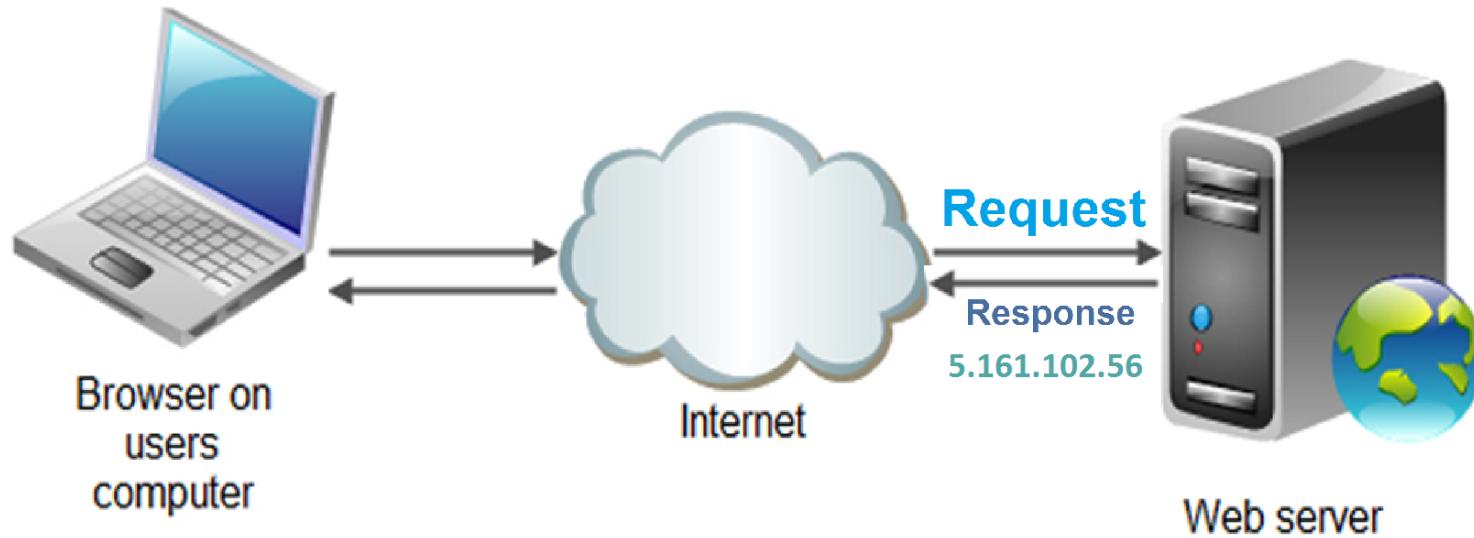
1. The browser forms a request to the server using the HTTP protocol.

2. The server analyzes the browser request and extracts the required file from the local storage.



4. The browser converts the HTML code into an image.

3. The server generates an HTTP response that includes the required information and sends it to the browser via HTTP.



**ASP.NET page**  
Default.aspx  
Context.Request.UserHostAddress;

Context.Request.UserHostAddress;

↓

**Compilators** **CSC**  
**vbc**

**Response**  
5.161.102.56

**.NET CLR**  
**Runtime**

IL

Disk

## ASP.NET Principles:

For the presentation of information on the site, not pages with HTML code are used, but server pages of special syntax (which is often is HTML-like).

```
<form id="form1" runat="server">  
<asp:Label ID="Label1" runat="server"></asp:Label>  
</form>
```

In addition, the asp.net page contains code, for example in the C# programming language

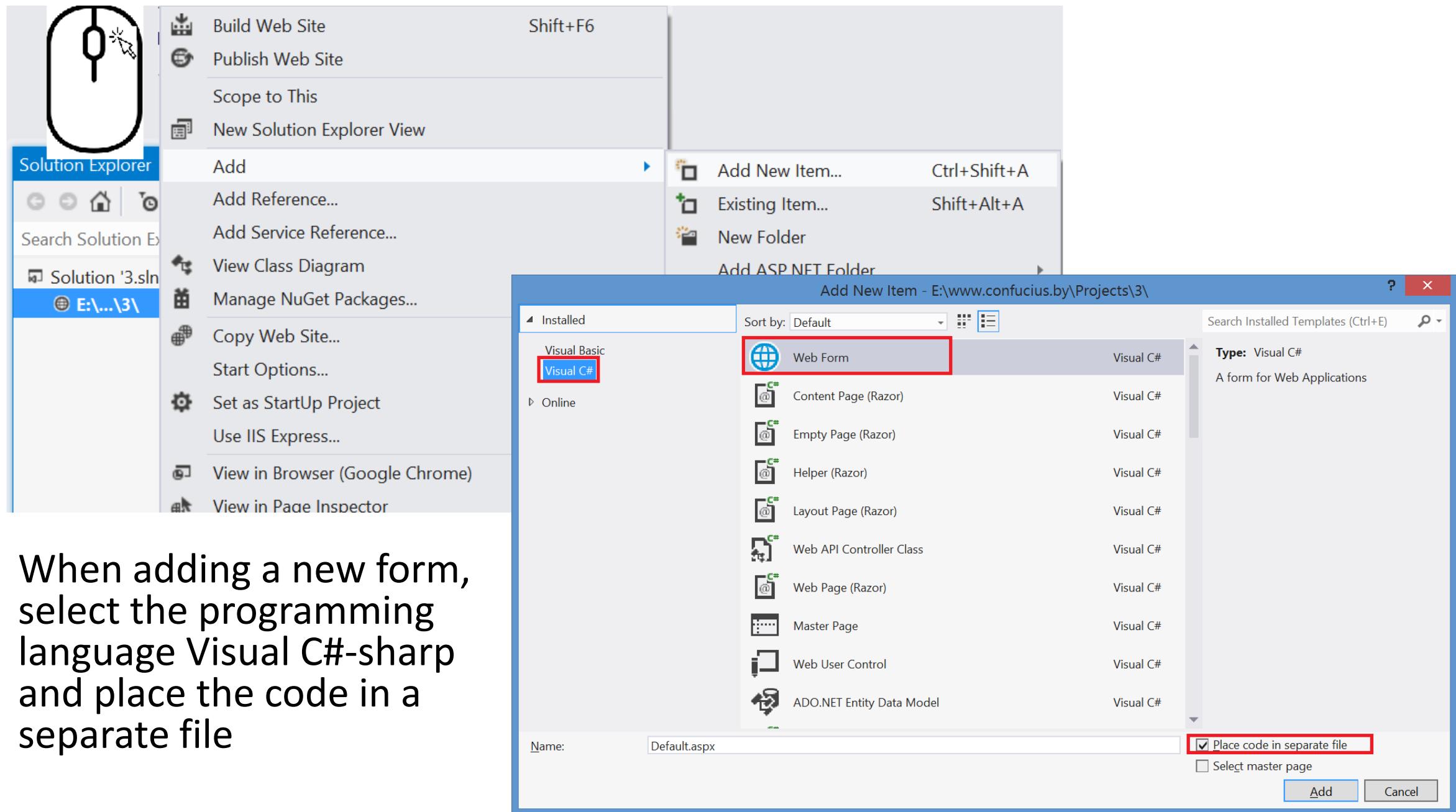
```
string ip;  
ip = Context.Request.UserHostAddress;  
Label1.Text = "IP=" + ip;
```

IP=5.161.102.56

The calculated value is sent to the user - the result of executing the C Sharp code

<https://confucius.bsite.net/>

<https://confucius.bsite.net/Projects/6/>



The image shows a Microsoft Visual Studio interface. On the left, the Solution Explorer window is open, showing a solution named 'Solution '3.sln' with a file 'E:\...\3\' selected. A context menu is open over this file, with the 'Add' option highlighted. The 'Add' submenu is expanded, showing 'Add New Item...', 'Existing Item...', and 'New Folder'. A sub-submenu, 'Add ASP.NET Folder', is also visible. A mouse cursor is shown clicking on the 'Add New Item...' option.

**Solution Explorer**

Build Web Site Shift+F6

Publish Web Site

Scope to This

New Solution Explorer View

Add

Add Reference...

Add Service Reference...

View Class Diagram

Manage NuGet Packages...

Copy Web Site...

Start Options...

Set as StartUp Project

Use IIS Express...

View in Browser (Google Chrome)

View in Page Inspector

Add New Item... Ctrl+Shift+A

Existing Item... Shift+Alt+A

New Folder

Add ASP.NET Folder

Add New Item - E:\www.confucius.by\Projects\3\

?

x

Search Installed Templates (Ctrl+E)

Type: Visual C#

A form for Web Applications

Installed

Sort by: Default

Visual Basic

Visual C# (highlighted)

Online

Web Form (highlighted)

Content Page (Razor)

Empty Page (Razor)

Helper (Razor)

Layout Page (Razor)

Web API Controller Class

Web Page (Razor)

Master Page

Web User Control

ADO.NET Entity Data Model

Name: Default.aspx

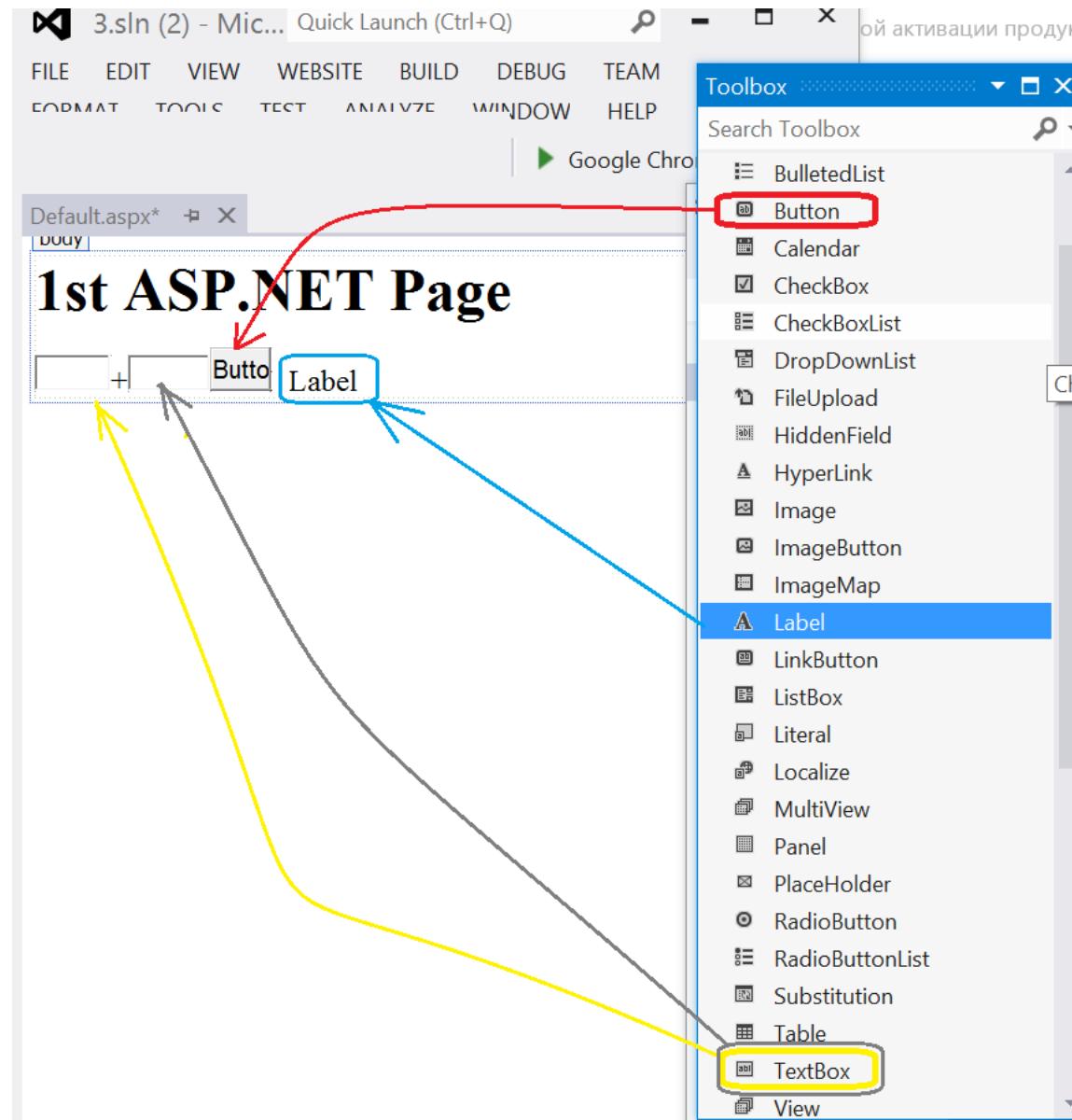
Place code in separate file

Select master page

Add Cancel

When adding a new form, select the programming language Visual C#-sharp and place the code in a separate file

- Added 2 new text box fields,
- One Key,
- and 1 tag
- in WEB form
- In design mode.



# 1st ASP.NET Page

Properties

TextBox1 System.Web.UI.WebControls.TextBox

(Expressions)	
(ID)	TextBox1
AccessKey	tbxA
AutoCompleteType	None
AutoPostBack	False
BackColor	
BorderColor	
BorderStyle	NotSet
BorderWidth	
CausesValidation	False
ClientIDMode	Inherit
Columns	0
CssClass	
Enabled	True
EnableTheming	True

asp:TextBox#TextBox1

Button Label

Cut

Copy

Paste

Paste Alternate

Delete

View Code

View in Browser (Goo

Show Smart Tag

Refresh

Properties Alt+Enter

Rename the names of elements  
(TextBox'es, Label and Button)  
according to [Hungarian notation](#)



Prefix – information about  
variable - that this variable is  
TextBox

Look like they were written in some inscrutable foreign language



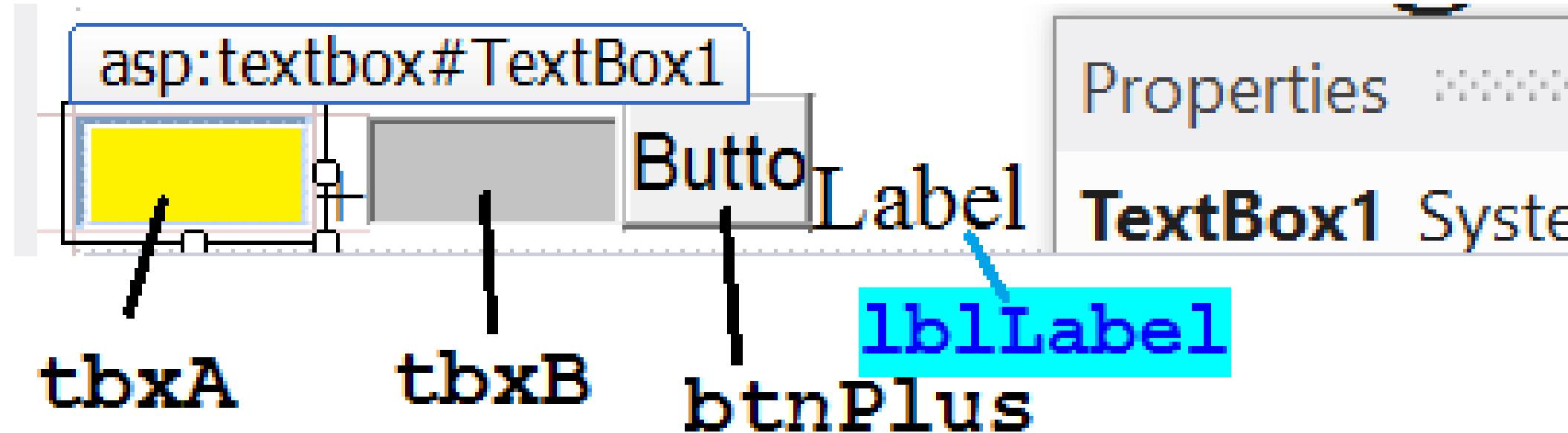
He introduced the graphical user interface to Bill Gates for the first time who later described it as the first of two revolutionary things he felt in his life

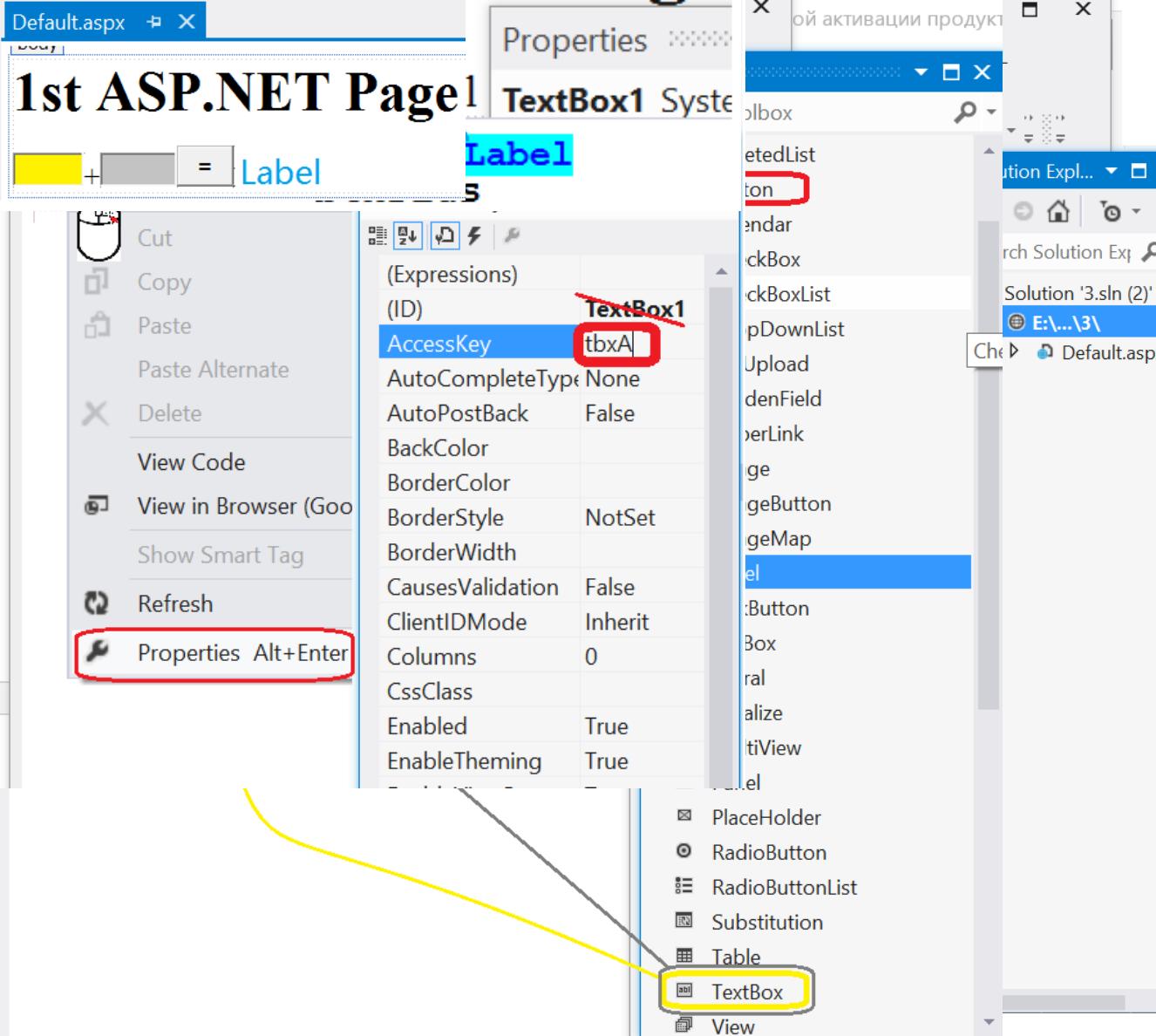
simonyiKároly



Charles Simonyi

/sɪ'moʊni/; Hungarian: *Simonyi Károly*, ['simoni 'ka:roj]





The resulting file  
**Default.aspx**  
should look like this

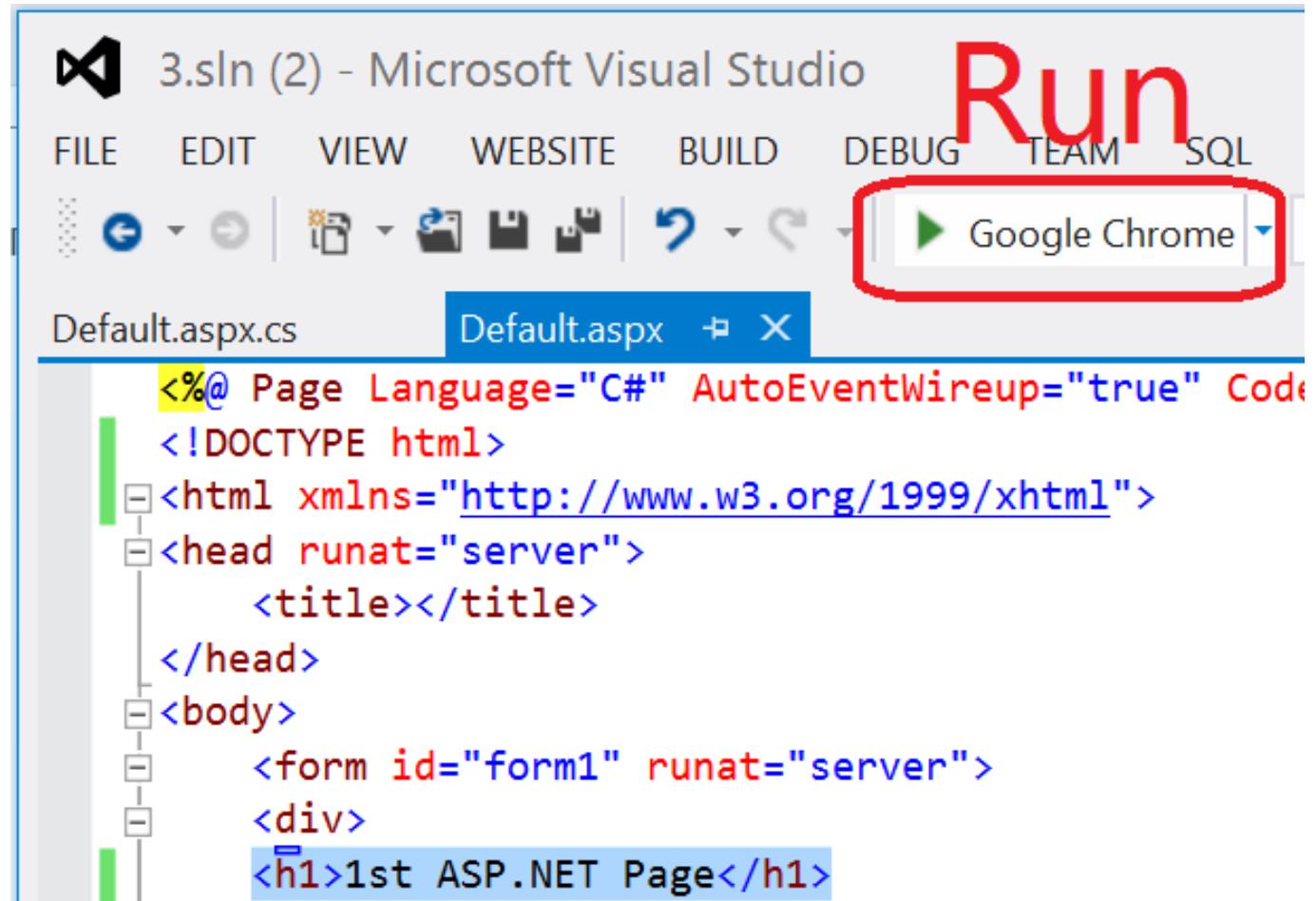


```
<script language="C#" runat=server>

protected void Sum(Object sender, EventArgs e )
{
    int x = Convert.ToInt32(tbxA.Text);
    int y = Convert.ToInt32(tbxB.Text);
    lblLabel.Text = (x + y).ToString();
}

</script>|
```

# Run site (page Default.aspx) and test result



# Try catch

```
try      {      } catch

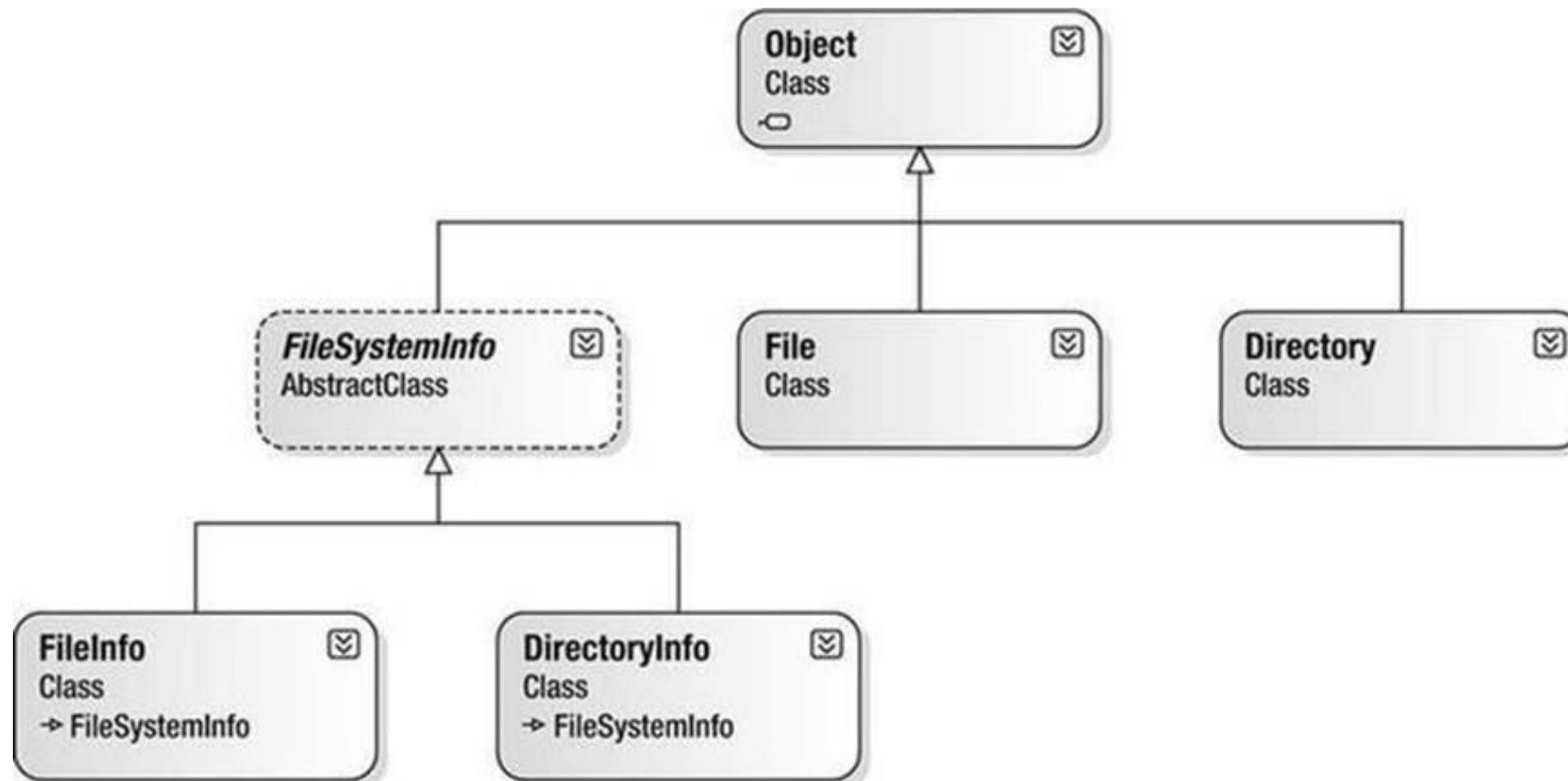
protected void
Sum(Object sender, EventArgs e ) {
    try
    {
]
    int x = Convert.ToInt32(tbxA.Text);
    int y = Convert.ToInt32(tbxB.Text);
    lblLabel.Text = (x + y).ToString();
}

catch (FormatException)
{
    lblLabel.Text = "<font color=red>Error</font>"; }
```

## 1st ASP.NET Page

hi +asp = Error

# WORKING WITH FILES IN ASP.NET



```
protected void btnFileCopy_Click(object sender, EventArgs e)
{
    string siteLocation =
        Request.PhysicalApplicationPath;

    string fileToCopy =
        Path.Combine(siteLocation, "Default.aspx");

    string folderLocation =
        Path.Combine(siteLocation, "copiedFiles");
    string newLocation =
        Path.Combine(folderLocation, "Default.aspx");
```



```
if (Directory.Exists(folderLocation))
{
    if (File.Exists(fileToCopy))
    {
        File.Copy(fileToCopy, newLocation, true);
        Label1.Text = "<font color='green'>File copied</font>";
    }
    else
    {
        Label1.Text = "<font color='red'>No such file</font>";
    }
}
else
{
    Label1.Text = " <font color='red'>No such directory</font>";
}
```

The above code checks if the directory exists:

**if (Directory.Exists(folderLocation))**



copiedFiles



Default.aspx



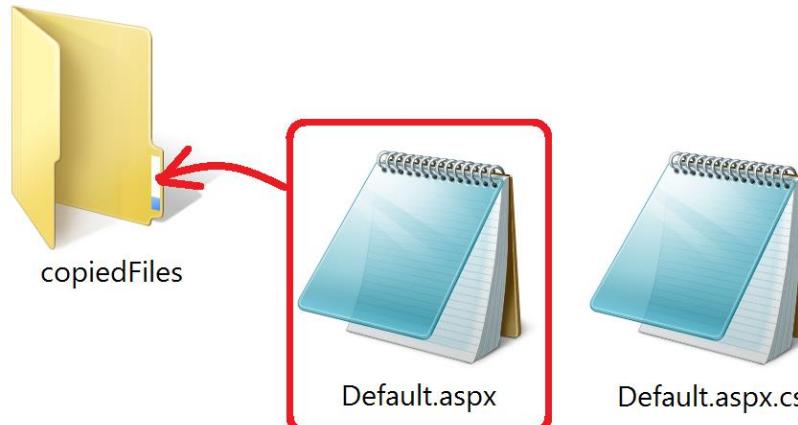
Default.aspx.cs

If so, then we check if the file we are going to copy exists

**if (File.Exists(fileToCopy))**



If everything is in order,  
then we go ahead and  
copy the file



**File.Copy(fileToCopy, newLocation, true);**

If the file to be copied is already in the folder, set the override value to **true** will  
replace him. Default value – **false**

You will get an error if the file you are copying already  
exists.

To move a file to a new location, you must use the **Move** method of the **File** class:

```
File.Move(fileToMove, newLocation);
```

Everything else is the same:

In the **.Move** method, enter the file you want to move **fileToMove** preceded by a comma.

Then, after the comma, add the new location **newLocation**.

To delete a file from your computer, you can use the **Delete** method of the **File** class:

**File.Delete(fileToDelete);**

Between the parentheses of **Delete**, you need to specify **fileToDelete** - which consists of the name and path to the file that you are trying to get rid of.

Care must be taken when trying this because **File.Delete** really deletes the file.

And the deleted file cannot be found in the recycle bin.

[https://www.homeandlearn.co.uk/csharp/csharp\\_s11p4.html](https://www.homeandlearn.co.uk/csharp/csharp_s11p4.html)