

Работа с базами данных в ASP.NET 2.0

(основы ADO.NET)



Start Page Test List Editor

 Microsoft
Visual Studio 2008

Recent Projects

- GuestBookFile
- TestProject1
- ConsoleApplicationCluster2
- svchost.exe

Open: Project...
Create: Project...

Getting Started

- What's new in Visual C#?
- Create Your First Application
- How Do I ... ?
- Learn Visual C#
- Download Additional Content
- MSDN Forums
- Visual C# Developer Center
- Extend Visual Studio

Visual Studio Headlines

MSDN: U.S. Local Highlights

Explore the Windows Azure SDK

Thu, 07 May 2009 16:00:00 GMT - Download the Windows Azure SDK that includes APIs, tools, documentation, and samples needed to develop Internet-scale applications to run on Windows Azure.

Download the Security Development Lifecycle Threat Modeling Tool

Thu, 07 May 2009 16:00:00 GMT - Reduce your cost of development by identifying and mitigating potential security vulnerabilities in the design phase of the SDL, when they are relatively easy and **ServerQuest II Has Arrived... Are You Geek Enough to Play?**

Thu, 07 May 2009 16:00:00 GMT - Play this new game and experience a day in a geek's life. Only the **Windows 7 Release Candidate Now Available**

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Video: How to Create a User Control in WPF

Mon, 04 May 2009 16:00:00 GMT - Learn how to create a timer User Control in WPF and see how to

Download the Free !exploitable Crash Analyzer

Mon, 04 May 2009 16:00:00 GMT - !exploitable Crash Analyzer is a Windows debugger extension that provides automated crash analysis and security risk assessment in a tool that every developer and

MSDN Webcast: Windows Embedded CE and Handheld Solutions (Level 100)

Mon, 04 May 2009 16:00:00 GMT - Dion Hutchings discusses Windows Embedded CE, the ideal handheld platform with hardware support and software components to satisfy the requirements of connected,

Download the Security Development Lifecycle Optimization Model

Thu, 30 Apr 2009 16:00:00 GMT - Self-assess your current state of security development and create a strategy and roadmap to progressively attain measurable security improvements with the Security

Mark Your Calendar for July 1, 2009 - Windows 7 Beta Expiration

Thu, 30 Apr 2009 16:00:00 GMT - Heads up! The Windows 7 Beta will expire on August 1, 2009, so be prepared and plan to rebuild your PC with either the Release Candidate (RC) or another valid version of Windows before July 1, 2009. You will receive a warning two weeks prior to July 1; after this date, your

Download the Microsoft SQL Data Services SDK

Thu, 30 Apr 2009 16:00:00 GMT - The SQL Data Services SDK provides APIs, tools, documentation, and code samples to help you quickly get started with SOL Data Services.

File Edit View Test Tools Window Help

- New
- Open
- Close
- Close Project
- Save Selected Items Ctrl+S
- Save Selected Items As...
- Save All Ctrl+Shift+S
- Page Setup...
- Print... Ctrl+P
- Recent Files
- Recent Projects
- Exit

Project... Ctrl+Shift+N
Web Site... Shift+Alt+N
File... Ctrl+N

New Web Site

Templates: .NET Framework 3.5

Visual Studio installed templates

- ASP.NET Web Site
- WCF Service
- ASP.NET Web Service
- ASP.NET Reports Web Site
- Empty Web Site
- ASP.NET Crystal Reports Web Site

My Templates

- Search Online Templates...

A blank ASP.NET Web site (.NET Framework 3.5)

Location: File System D:\ALEK\PAPERS\REITING\Internet\DOTNET\GBDataBase Browse...

Language: Visual C#

OK Cancel

Getting Started

What's new in Visual C#?

- Create Your First Application
- How Do I ... ?
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- MSDN Forums
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Visual Studio Headlines

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Thu, 30 Apr 2009 16:00:00 GMT - The SQL Data Services SDK provides APIs, tools, documentation, and code samples to help you quickly get started with SOL Data Services.

Client Objects & Events (No Events)

```

<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx.cs" Inherits="_Default" %>

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

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

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

```

Solution Explorer

- D:\...\GBDataBase\
 - App_Data
 - Default.aspx
 - web.config

Properties

Default.aspx Web File Properties

Misc	
File Name	Default.aspx
Full Path	D:\ALEK\PAPERS\REIT

Default.aspx Start Page Test List Editor

ФИО:

Возраст:

Адрес:

Телефон:

E-mail:

Знаю язык: C++
 Pascal
 C#
 Java
 PHP

Основная сфера деятельности: Программирование
 Образование
 Промышленность
 Торговля
 Банковское дело

Оценка сайта:

Комментарий:

OK Очистить форму

Посмотреть гостевую книгу

Design Split Source <html> <body> <form#form1> <div>

Solution Explorer

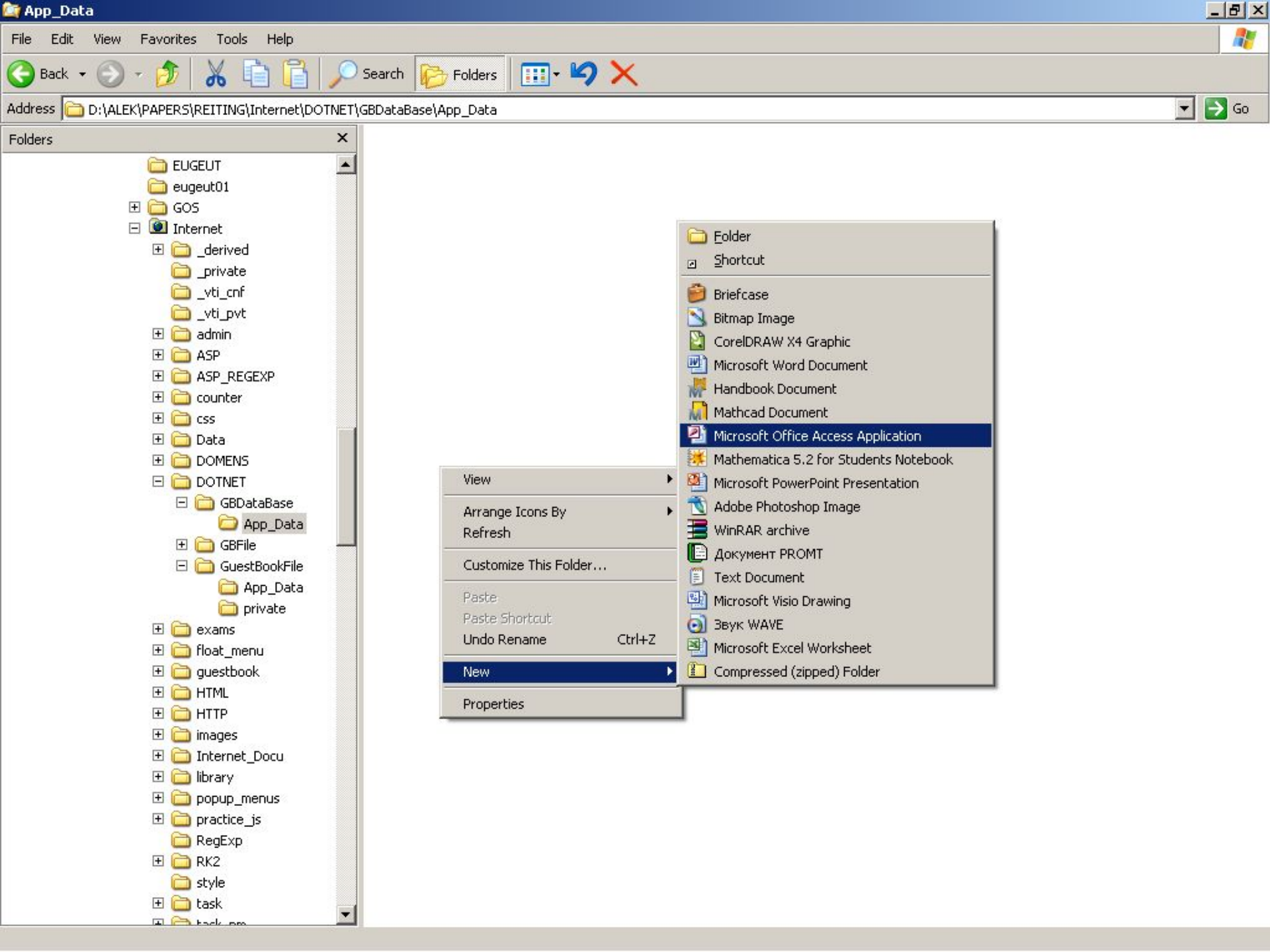
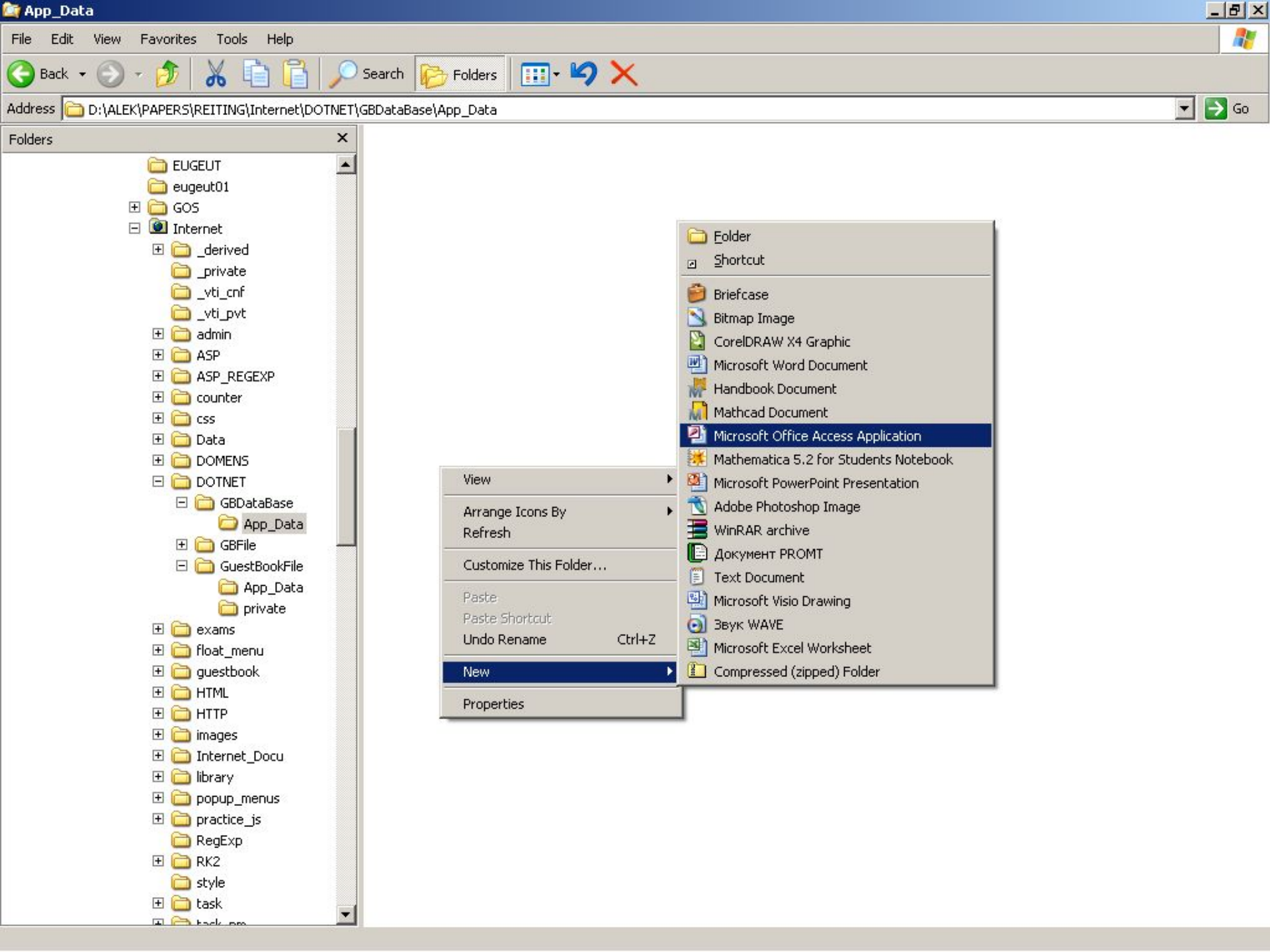
- D:\...\GBDataBase\
 - App_Data
 - Default.aspx
 - Default.aspx.cs
 - web.config

Properties

<DIV>

Misc	
(Id)	
Align	
Class	
Dir	ltr
Lang	
RunAt	
Style	
Title	
xml:Lang	

(Id)



guestbook : база данных (формат Access 2000)

gbinfo : таблица

	Имя поля	Тип данных	Описание
	id	Счетчик	
	name	Текстовый	
	age	Числовой	
	address	Текстовый	
	phone	Текстовый	
	email	Текстовый	
	languages	Текстовый	
	mark	Числовой	
	comment	Поле MEMO	
	IPaddress	Текстовый	
	browser	Текстовый	
	dtime	Дата/время	

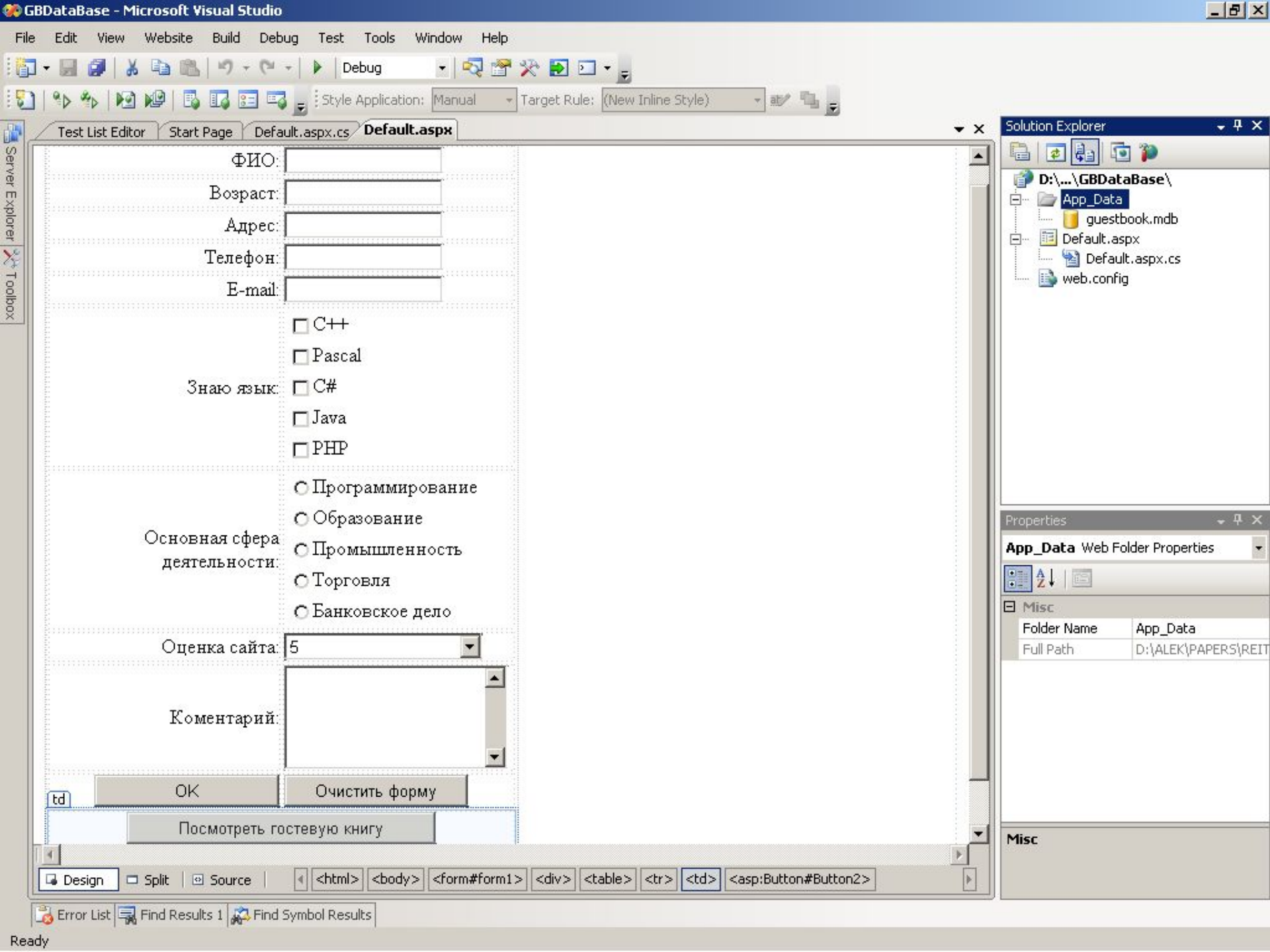
Свойства поля

Общие

Подстановка

Размер поля	Длинное целое
Новые значения	Последовательные
Формат поля	
Подпись	
Индексированное поле	Да (Совпадения не допускаются)
Смарт-теги	

Имя поля может состоять из 64 знаков с учетом пробелов. Для справки по именам полей нажмите клавишу F1.



Server Explorer

- Data Connections
 - guestbook.mdb
- Servers
 - homeathlon

Client Objects & Events (No Events)

```

<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default.aspx" Inherits="Default" %>

<!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>Untitled Page</title>
</head>
<body>
<form id="form1" runat="server">
<div>

<table width="380px">
<tr>
<td align="right" style="width: 50%">
ΦMO:</td>
<td style="width: 50%">
<asp:TextBox ID="tbFIO" runat="server"></asp:TextBox>
</td>
</tr>
<tr>
<td align="right">
Bospact:</td>
<td>
<asp:TextBox ID="tbAge" runat="server"></asp:TextBox>
</td>
</tr>
<tr>
<td align="right">
Ampoc:</td>
<td>
<asp:TextBox ID="tbAddress" runat="server"></asp:TextBox>
</td>
</tr>
</div>
</form>
</body>
</html>

```

Solution Explorer

- D:\...\GBDataBase\
 - App_Data
 - guestbook.mdb
 - Default.aspx
 - Default.aspx.cs
 - web.config

Properties

guestbook.mdb Connection

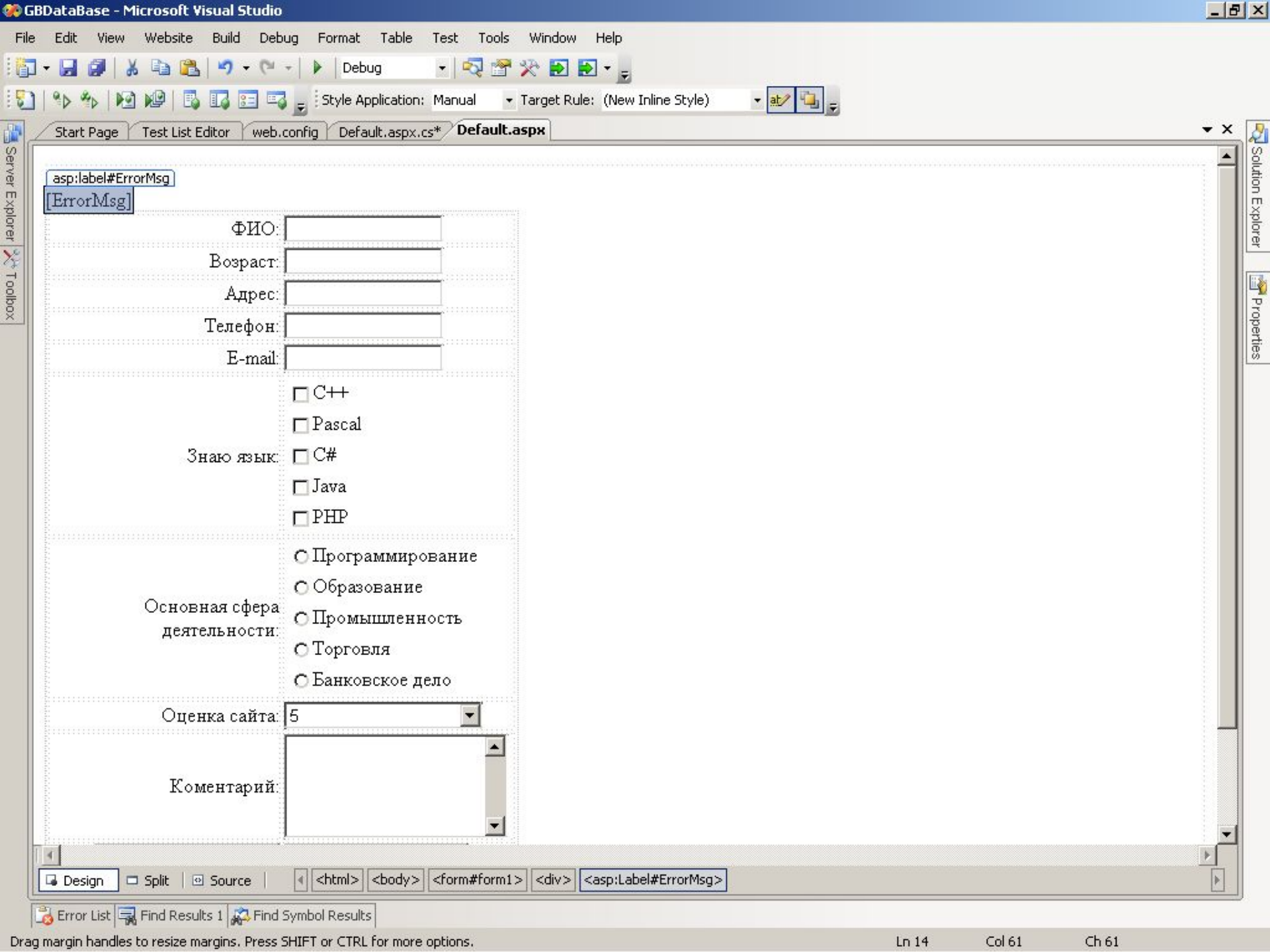
Connection	
Connection String	Provider=Microsoft.Jet.OLEDB.4.0;Data Source=guestbook.mdb
Provider	.NET Framework Data Provider for MS Jet
State	Closed
Type	MS Jet
Version	04.00.0000

Connection String



web.config Test List Editor Start Page Default.aspx.cs Default.aspx

```
<?xml version="1.0"?>
<!--
Note: As an alternative to hand editing this file you can use the
web admin tool to configure settings for your application. Use
the Website->ASP.NET Configuration option in Visual Studio.
A full list of settings and comments can be found in
machine.config.comments usually located in
\Windows\Microsoft.Net\Framework\v2.0.50727\Config
-->
<configuration>
  <configSections>
    <sectionGroup name="system.web.extensions" type="System.Web.Configuration.SystemWebExtensionsSectionGroup,
      <sectionGroup name="scripting" type="System.Web.Configuration.ScriptingSectionGroup, System.Web.Extensi
        <section name="scriptResourceHandler" type="System.Web.Configuration.ScriptingScriptResourceHandler
          <sectionGroup name="webServices" type="System.Web.Configuration.ScriptingWebServicesSectionGroup, S
            <section name="jsonSerialization" type="System.Web.Configuration.ScriptingJsonSerializationSect
              <section name="profileService" type="System.Web.Configuration.ScriptingProfileServiceSection, S
                <section name="authenticationService" type="System.Web.Configuration.ScriptingAuthenticationSer
                  <section name="roleService" type="System.Web.Configuration.ScriptingRoleServiceSection, System.
            </sectionGroup>
          </sectionGroup>
        </sectionGroup>
      </sectionGroup>
    </configSections>
    <appSettings/>
    <connectionStrings>
      <add name="Guestbook"
        connectionString="Provider=Microsoft.Jet.OLEDB.4.0;
        Data Source=D:\ALEK\ PAPERS\ REITING\ Internet\ DOTNET\ GBDataBase\ App_Data\ guestbook.mdb"/>
    </connectionStrings>
    <system.web>
      <!--
Set compilation debug="true" to insert debugging
symbols into the compiled page. Because this
affects performance, set this value to true only
during development
-->
    </system.web>
  </configuration>
</pre>
```



asp:label#ErrorMsg
[ErrorMsg]

ФИО:
Возраст:
Адрес:
Телефон:
E-mail:

Знаю язык: C++
 Pascal
 C#
 Java
 PHP

Основная сфера деятельности: Программирование
 Образование
 Промышленность
 Торговля
 Банковское дело

Оценка сайта:

Комментарий:

ФИО:

Возраст:

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 PHP

Основная сфера деятельности: Программирование
 Образование
 Промышленность
 Торговля
 Банковское дело

Оценка сайта:

Комментарий:

asp:Button#Button1

Solution Explorer

- D:\...\GBDataBase\
 - App_Data
 - guestbook.mdb
 - Default.aspx
 - Default.aspx.cs
 - web.config

Properties

Button1 System.Web.UI.WebControls.Button

Action

- Click

Data

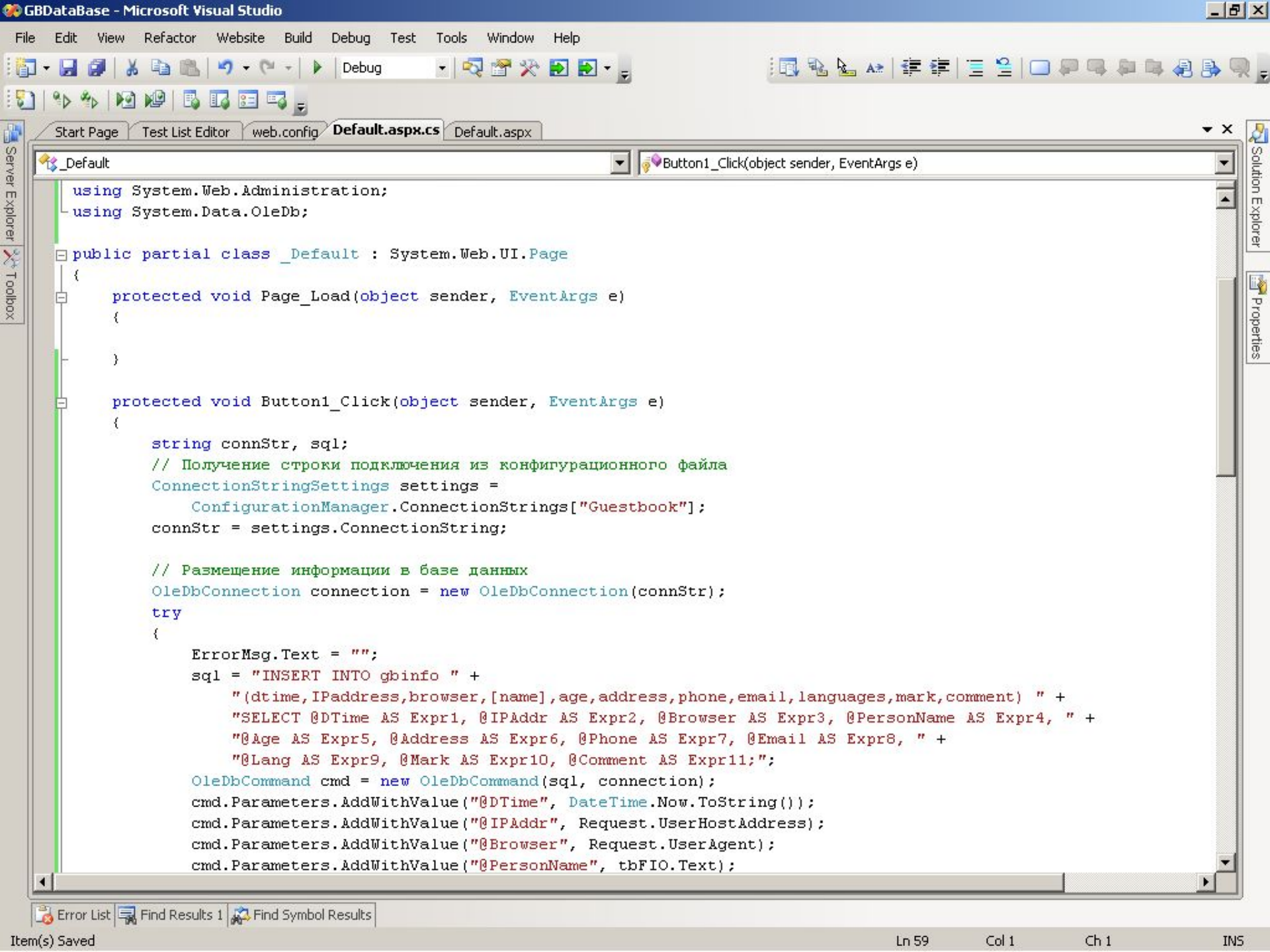
- DataBinding

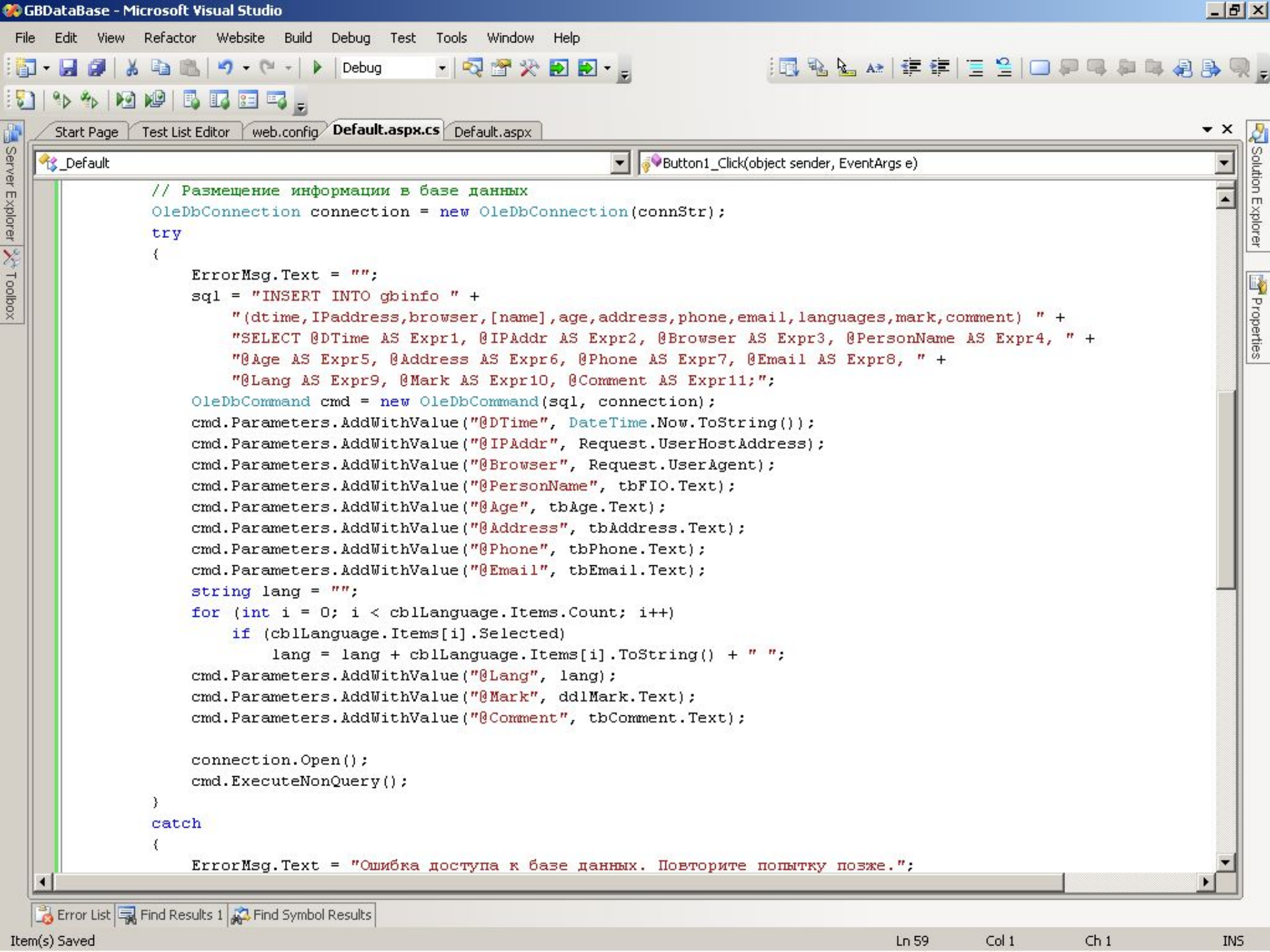
Misc

- Disposed
- Init
- Load
- PreRender
- Unload

Click

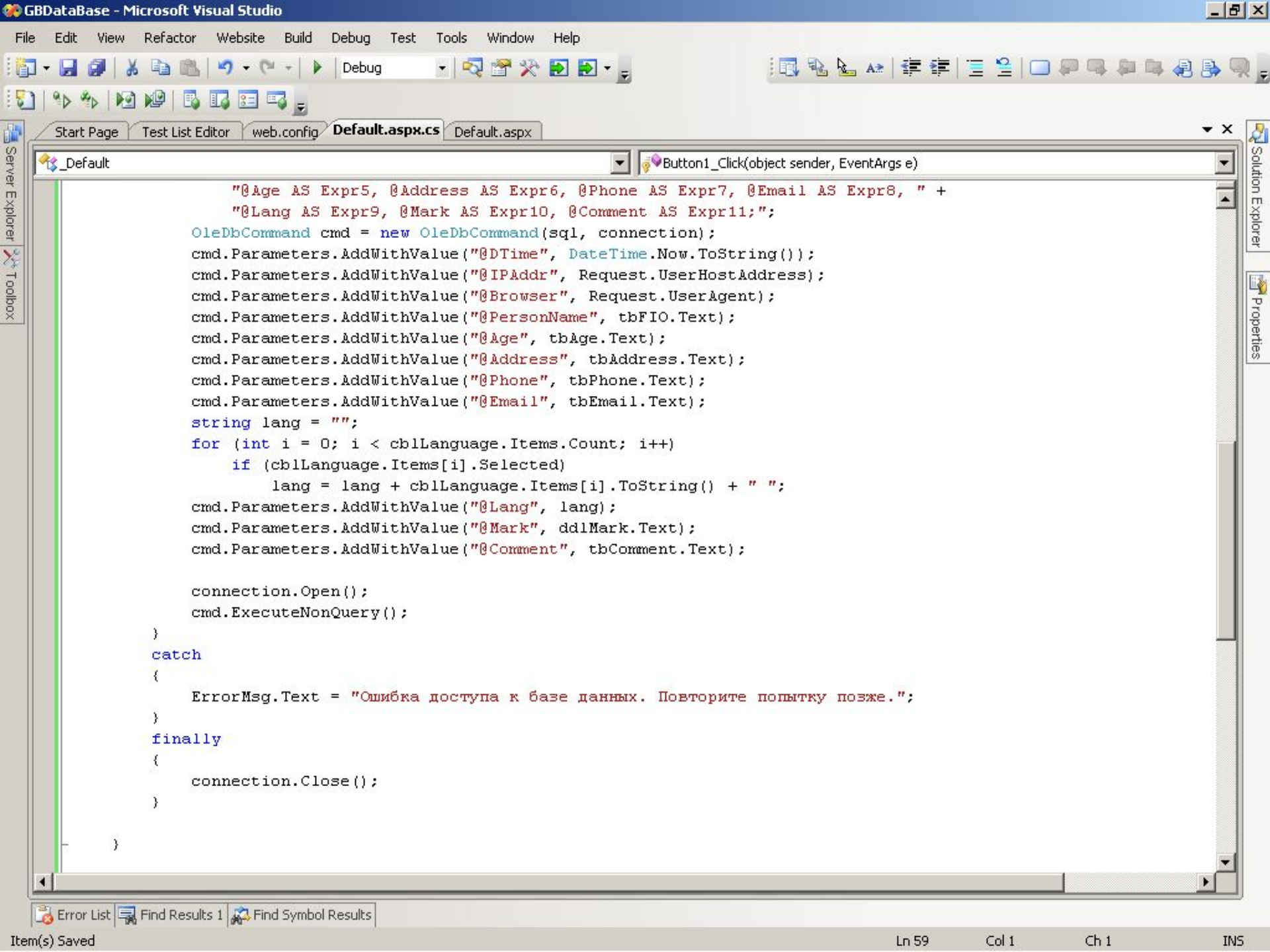
Fires when the button is clicked.





```
// Размещение информации в базе данных
OleDbConnection connection = new OleDbConnection(connStr);
try
{
    ErrorMessage.Text = "";
    sql = "INSERT INTO gbinfo " +
        "(dtime, IPaddress, browser, [name], age, address, phone, email, languages, mark, comment) " +
        "SELECT @DTime AS Expr1, @IPAddr AS Expr2, @Browser AS Expr3, @PersonName AS Expr4, " +
        "@Age AS Expr5, @Address AS Expr6, @Phone AS Expr7, @Email AS Expr8, " +
        "@Lang AS Expr9, @Mark AS Expr10, @Comment AS Expr11;";
    OleDbCommand cmd = new OleDbCommand(sql, connection);
    cmd.Parameters.AddWithValue("@DTime", DateTime.Now.ToString());
    cmd.Parameters.AddWithValue("@IPAddr", Request.UserHostAddress);
    cmd.Parameters.AddWithValue("@Browser", Request.UserAgent);
    cmd.Parameters.AddWithValue("@PersonName", tbFIO.Text);
    cmd.Parameters.AddWithValue("@Age", tbAge.Text);
    cmd.Parameters.AddWithValue("@Address", tbAddress.Text);
    cmd.Parameters.AddWithValue("@Phone", tbPhone.Text);
    cmd.Parameters.AddWithValue("@Email", tbEmail.Text);
    string lang = "";
    for (int i = 0; i < cbLanguage.Items.Count; i++)
        if (cbLanguage.Items[i].Selected)
            lang = lang + cbLanguage.Items[i].ToString() + " ";
    cmd.Parameters.AddWithValue("@Lang", lang);
    cmd.Parameters.AddWithValue("@Mark", ddlMark.Text);
    cmd.Parameters.AddWithValue("@Comment", tbComment.Text);

    connection.Open();
    cmd.ExecuteNonQuery();
}
catch
{
    ErrorMessage.Text = "Ошибка доступа к базе данных. Повторите попытку позже.";
}
```



```
Microsoft Visual Studio
File Edit View Refactor Website Build Debug Test Tools Window Help
Debug
Default.aspx.cs
Default.aspx
Default.aspx
Button1_Click(object sender, EventArgs e)
"@Age AS Expr5, @Address AS Expr6, @Phone AS Expr7, @Email AS Expr8, " +
"@Lang AS Expr9, @Mark AS Expr10, @Comment AS Expr11;";
OleDbCommand cmd = new OleDbCommand(sql, connection);
cmd.Parameters.AddWithValue("@DTime", DateTime.Now.ToString());
cmd.Parameters.AddWithValue("@IPAddr", Request.UserHostAddress);
cmd.Parameters.AddWithValue("@Browser", Request.UserAgent);
cmd.Parameters.AddWithValue("@PersonName", tbFIO.Text);
cmd.Parameters.AddWithValue("@Age", tbAge.Text);
cmd.Parameters.AddWithValue("@Address", tbAddress.Text);
cmd.Parameters.AddWithValue("@Phone", tbPhone.Text);
cmd.Parameters.AddWithValue("@Email", tbEmail.Text);
string lang = "";
for (int i = 0; i < cbLanguage.Items.Count; i++)
    if (cbLanguage.Items[i].Selected)
        lang = lang + cbLanguage.Items[i].ToString() + " ";
cmd.Parameters.AddWithValue("@Lang", lang);
cmd.Parameters.AddWithValue("@Mark", ddlMark.Text);
cmd.Parameters.AddWithValue("@Comment", tbComment.Text);

connection.Open();
cmd.ExecuteNonQuery();
}
catch
{
    ErrorMessage.Text = "Ошибка доступа к базе данных. Повторите попытку позже.";
}
finally
{
    connection.Close();
}
}
Error List Find Results 1 Find Symbol Results
Item(s) Saved Ln 59 Col 1 Ch 1 INS
```



```
File Edit View Project Build Deb  
web.config Default.aspx.cs Default.  
_Default  
"@Age AS  
"@Lang i  
OleDbCommand  
cmd.Parameters  
cmd.Parameters  
cmd.Parameters  
cmd.Parameters  
cmd.Parameters  
cmd.Parameters  
cmd.Parameters  
cmd.Parameters  
cmd.Parameters  
string lang  
for (int i =  
if (cblI  
lang  
cmd.Parameters  
cmd.Parameters  
cmd.Parameters
```

Autos
Name

ФИО:

Возраст:

Адрес:

Телефон:

E-mail:

C++
 Pascal

Знаю язык: C#
 Java
 PHP

Основная сфера деятельности:
 Программирование
 Образование
 Промышленность
 Торговля
 Банковское дело

Оценка сайта:

Комментарий:



guestbook : база данных (формат Access 2000)

gbinfo : таблица

	id	name	age	address	phone	email	languages	mark	comment	IPaddress	browser	dtime
	29	Ivanov P.S.	23	Kondryaev, 17	1234567890	ivanov@abcd.ru	C++ C# Java	3	:~))	127.0.0.1	Mozilla/4.0 (compatibl	09.05.2009 20:33:01
▶	чик)											

Запись: 2 из 2

File Edit View Project Build Deb

web.config Default.aspx.cs Default.

```
"@Age As
"@Lang i
OleDbCommand
cmd.Parameters
cmd.Parameters
cmd.Parameters
cmd.Parameters
cmd.Parameters
cmd.Parameters
cmd.Parameters
cmd.Parameters
string lang
for (int i =
    if (cblI
        lang
cmd.Parameters
cmd.Parameters
cmd.Parameters
```

Autos

Name

Autos Locals Watch 1

Ready

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Mail Print Stop Go Links

Address http://localhost:1416/GBDataBase/Default.aspx

Ошибка доступа к базе данных. Повторите попытку позже.

ФИО:

Возраст:

Адрес:

Телефон:

E-mail:

C++
 Pascal

Знаю язык: C#
 Java
 PHP

Программирование
 Образование
 Промышленность
 Торговля
 Банковское дело

Основная сфера деятельности:

Оценка сайта:

Комментарий:

OK Очистить форму

Посмотреть гостевую книгу

Done Local intranet

```
[ Literal "guestBookContent" ]
```

- D:\...\GBDataBase\
 - App_Data
 - guestbook.mdb
 - guestbook.ldb
 - Default.aspx
 - Default.aspx.cs
 - gbcontent.aspx
 - web.config

Server Explorer

- Data Connections
 - guestbook.mdb
 - Tables
 - gbinfo
 - id
 - name
 - age
 - address
 - phone
 - email
 - languages
 - mark
 - comment
 - IPAddress
 - browser
 - dttime
 - Views
 - Stored Procedures
 - Functions
 - Servers
 - homeathlon

```

using System.Web.Administration;
using System.Data.OleDb;
using System.Text;

public partial class gbcontent : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        string connStr, sql;
        // Получение строки подключения из конфигурационного файла
        ConnectionStringSettings settings =
            ConfigurationManager.ConnectionStrings["Guestbook"];
        connStr = settings.ConnectionString;

        // Получение информации из базы данных и вывод на страницу
        OleDbConnection connection = new OleDbConnection(connStr);
        using (connection)
        {
            sql = "SELECT * FROM gbinfo ORDER BY dttime DESC;";
            OleDbCommand cmd = new OleDbCommand(sql, connection);
            connection.Open();
            OleDbDataReader reader = cmd.ExecuteReader();
            StringBuilder htmlStr = new StringBuilder("");
            while (reader.Read())
            {
                htmlStr.Append(reader["dttime"]);
                htmlStr.Append("<br>IP-address: ");
                htmlStr.Append(reader["IPAddress"]);
                htmlStr.Append("<br>Browser type: ");
                htmlStr.Append(reader["browser"]);
                htmlStr.Append("<br>");
                htmlStr.Append(reader["name"]);
                htmlStr.Append(", ");
                htmlStr.Append(reader["age"]);
            }
        }
    }
}

```


Server Explorer

- Data Connections
 - guestbook.mdb
 - Tables
 - gbinfo
 - id
 - name
 - age
 - address
 - phone
 - email
 - languages
 - mark
 - comment
 - IPaddress
 - browser
 - dtype
 - Views
 - Stored Procedures
 - Functions
- Servers
 - homeathlon

```

Page_Load(object sender, EventArgs e)
{
    OleDbCommand cmd = new OleDbCommand(sql, connection);
    connection.Open();
    OleDbDataReader reader = cmd.ExecuteReader();
    StringBuilder htmlStr = new StringBuilder("");
    while (reader.Read())
    {
        htmlStr.Append(reader["dtype"]);
        htmlStr.Append("<br>IP-address: ");
        htmlStr.Append(reader["IPaddress"]);
        htmlStr.Append("<br>Browser type: ");
        htmlStr.Append(reader["browser"]);
        htmlStr.Append("<br>");
        htmlStr.Append(reader["name"]);
        htmlStr.Append(", ");
        htmlStr.Append(reader["age"]);
        htmlStr.Append("<br>");
        htmlStr.Append(reader["address"]);
        htmlStr.Append("<br>");
        htmlStr.Append(reader["phone"]);
        htmlStr.Append("<br>");
        htmlStr.Append(reader["email"]);
        htmlStr.Append("<br>Язык: ");
        htmlStr.Append(reader["languages"]);
        htmlStr.Append("<br>Оценка: ");
        htmlStr.Append(reader["mark"]);
        htmlStr.Append("<br>Сообщение: ");
        htmlStr.Append(reader["comment"]);
        htmlStr.Append("<br>-----<br>");
    }
    reader.Close();
    guestBookContent.Text = htmlStr.ToString();
}
}
}

```

Server Explorer

Toolbox

Адрес:

Телефон:

E-mail:

Знаю язык:

Основная сфера деятельности:

Оценка сайта:

Комментарий:

OK

asp:Button#Button2

Очистить форму

Посмотреть гостевую книгу

Design Split Source <html> <body> <form#form1> <div> <table> <tr> <td> <asp:Button#Button2>

Solution Explorer

D:\...\GBDataBase\

- App_Data
 - guestbook.mdb
 - guestbook.ldb
- Default.aspx
- Default.aspx.cs
- gbcontent.aspx
- gbcontent.aspx.cs
- web.config

Properties

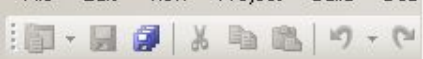
Button2 System.Web.UI.WebControls.Button

Enabled	True
EnableTheming	True
EnableViewState	True
OnClick	
PostBackUrl	
SkinID	
ToolTip	
UseSubmitBehavior	True
ValidationGroup	
Visible	True

Data

PostBackUrl

The URL to post to when the button is clicked.



gbcontent.aspx.cs gbcontent.aspx

Address <http://localhost:1416/GBDataBase/Default.aspx> Go Links

Возраст:

Адрес:

Телефон:

E-mail:

Знаю язык:

Основная сфера деятельности:

Design Split Source

Ф.И.О:

Возраст:

Адрес:

Телефон:

E-mail:

C++

Pascal

Знаю язык: C#

Java

PHP

Программирование

Образование

Промышленность

Торговля

Банковское дело

Основная сфера деятельности:

Оценка сайта:

Комментарий:

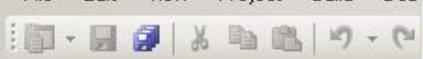
OK Очистить форму

Посмотреть гостевую книгу

Autos

Name

Autos Locals Watch 1



Address http://localhost:1416/GBDataBase/gbcontent.aspx Go Links >>

gbcontent.aspx.cs gbcontent.aspx

Возраст:

Адрес:

Телефон:

E-mail:

Знаю язык:

Основная сфера деятельности:

Design Split Source

09.05.2009 20:33:01
IP-address: 127.0.0.1
Browser type: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; MRA 5.4 (build 02647); .NET CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR 3.5.30729; .NET CLR 1.1.4322)
Ivanov P.S., 23
Kondryaev, 17
 1234567890
 ivanov@abcd.ru
Язык: C++ C# Java
Оценка: 3
Сообщение: :-)))

Autos

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