Unit 1

Getting started with visual studio 2008

Introduction

Visual Studio 2008 is an Integrated Development Environment (IDE) of Microsoft Corporation. It was released in the year of 2008. It is used to create and develop console based and graphical user interface (GUI) applications along with Windows Forms applications, web sites, web applications, web services, and also mobile based applications for .NET framework. It is used for all platforms supported by Microsoft Windows, Windows Mobile, Windows CE, .NET Framework, .NET Compact Framework and Microsoft Silverlight. It includes a code editor supporting IntelliSense as well as code refactoring. Visual Studio 2008 supports different programming languages such as visual basic (VB) or visual basic dot net (VB.NET), visual C #(C sharp), visual C++, ASP .NET. It also supports XML/XSLT, HTML/XHTML, JavaScript and CSS. Visual Studio's role is to improve the process of development and make the work of achieving breakthroughs easier and more satisfying. Visual Studio 2008 can improve the process of development in such ways which are productive, integrated, comprehensive and reliable. It supports running multiple instances of the environment. It includes a debugger that works both as a source-level debugger and as a machine-level debugger. It works with both managed code as well as native code and can be used for debugging applications written in any language supported by Visual Studio.

Lesson 1.1

Introduction to visual studio 2008

Outcomes

Upon completion of this unit you will be able to

- *Explain* benefits of using visual studio 2008.
- *State* precious features of visual studio 2008.
- *Describe* benefits of .NET Framework.

Benefits of using visual studio 2008

Visual studio 2008 is used primarily by Software Developers to build Software products, websites and Utilities. It is a developer tool; it is perfectly safe to run on your systems. However you will need to include it in your software licensing audit.

By using visual studio 2008 we can

- Build Higher-Quality Applications.
- Avoid Memorizing Syntax.
- Write Less Code.
- Handle Data More Productively.
- Program in Multiple Languages.
- Helps in minimizing the development time.
- Simplifies the process of testing application.
- Enhancements in data retrieval and data binding.
- Supports multiple versions of .NET Framework.
- Integrates with .NET Framework 3.5
- Inspects code to find sections of code that need to be refactored.
- Provides supports for Web, mobile, client, Vista and office applications development.
- Collaborate with UI Designers.
- Build Specialized Software.
- Collaborate with Web Designers.
- Easily Deploy and Update Applications.
- Manage and Synchronize Data.

Features of visual studio 2008

Visual studio 2008 is an IDE designed for writing, compiling and debugging the code in much easier way. It contains a complete set of development tools for building ASP.NET web applications, web services, desktop applications and mobile applications. Visual Studio 2008 does not include any source control support built-in but it defines two alternative ways for source control systems to integrate with the IDE. A Source Control Visual studio package (VSPackage) can provide its own customized user interface. In contrast, a source control plug-in using the MSSCCI (Microsoft Source Code Control Interface) provides a set of functions that are used to implement various source control functionality, with a standard Visual Studio user interface.

New features in visual studio 2008 are as follows:

i. Support for multi-targeting

ii. Support for multithreading applications

iii. Supports structured exception handling, using an enhanced version

of the Try…….Catch……..Finally syntax supported by other languages (Such as C++).

iv. Support for Language Integrated Query (LINQ).

v. Improved deployment.

vi. Support for client application services.

vii. Web designer and CSS support.

viii. Reporting application support.

ix. HTML split view designer.

x. Support for JavaScript Intelligence.

xi. Office designer support.

xii. ASP.NET, AJAX and JavaScript Support.

Benefits of .NET Framework

.NET Framework (pronounced *dot net*) is a software framework developed by Microsoft. It is an essential component of the windows operating system. It includes a large library and provides language interoperability across several programming languages such as visual C#, visual basic, visual J# and visual C++. The .NET Framework consists of the common language runtime (CLR) also called virtual executing system and the .NET Framework class library. The CLR is the foundation of the .NET Framework. The .NET Framework class library is a collection of reusable types that tightly integrate with the common language runtime. The .NET Framework can be hosted by unmanaged components that load the common language runtime into their processes and initiate the execution of managed code, thereby creating a software environment that can exploit both managed and unmanaged features. The .NET Framework not only provides several runtime hosts, but also supports the development of third-party runtime hosts. It is used to combine the commerce logic of applications developed in different programming languages and services.

Let's now explore some of the benefits of .NET Framework, which are as follows:

i. Consistent programming model.
ii. Cross-platform support.
iii. Language interoperability.
iv. Automatic management of resources.
v. Ease of deployment.
vi. Code execution environment.

Above benefits of .NET Framework are describe bellow:

Consistent programming model: **.**NET Framework provides a consistent object-oriented programming model across different languages**.** It provides a Consistent object oriented programming environment whether object code is stored and executed locally, executed locally but

internet distributed, or executed remotely. We can use this model to create programs for performing different tasks, such as connecting to and retrieving data from databases and reading from and writing to files.

Cross-platform support: This property is also called portability. Any windows platform that supports CLR and execute a .NET application.

Language interoperability: It is a one kind of feature that enables programs written in different language to interact with each other. It allows reusability of code and improves the efficiency of the development process.

Automatic management of resources: It can automatic manage the resources. In .NET framework need not to manually free the application resources like files, memory, networks and database connections.

Easy of deployment: .NET Framework makes the task of deployment easier. It enables easy deployment of applications by installing new applications or apparatus that do not have adverse effect on the existing applications. In this Framework applications are deployed in the form of assembles.

Code execution environment: This framework works on object-oriented programming. This helps to eliminate the amount of unnecessary codes and involves less coding for the developers. Developers enjoy working on this platform as it increases their productivity.

Components of .NET Framework 3.5

.NET framework 3.5 is the essential component in visual studio 2008. When you installed the visual studio 2008 it is required to installed .NET framework 3.5. The essential components of .NET Framework 3.5 are as follows:

i. .NET Framework Class Library (CL).
ii. Common Language Runtime (CLR).
iii. Common Language Specification (CLS).
iv. Common Type System.
v. Windows Forms.
vi. Metadata and Assembles.
vii. ASP.NET and ASP.NET AJAX.
viii. ADO.NET.
ix. OLEDB.
x. Windows Workflow Foundation (WF).
xi. Windows Presentation Foundation (WPF).
xii. Windows communication Foundation (WCF).
xiii. Windows CardSpace.
xiv. Language Integrated Query (LINQ).

Advantages of Visual Programming

Visual Programming enables

(i) Visual development of graphical user interface which are easy to use and easy to learn.

(ii) Visual programming environment displays a list of available components. The programmer picks up the required component from this list to display it.

(iii) The programmer can create the user interface visually he can align, move or size the component as required without having to resort to writing code.

Lesson 1.2

Installation procedure of visual studio 2008

Introduction

To explore visual studio 2008, you need to first install it. However, before starting installation process, you should take care of several issues in advance to reduce the probability of encountering problems such as editions of visual studio, system requirements.

Upon completion of this unit you will be able to

Outcomes

- *Describe* the various editions of visual studio 2008.
- *State* System requirements for visual studio 2008.
- *Explain* installation process of visual studio 2008.

Editions of visual studio 2008

Visual studio has four (04) editions such as

1. Express Edition
2. Standard Edition
3. Professional and
4. Team System Edition

The languages include with visual studio are visual basic, Visual C++, Visual C# (C sharp) and Visual J#. The above editions details are described below:

Visual Studio Express Edition*:* Visual Studio Express Edition is a set of free lightweight IDEs that are provided as reduced version of the visual studio IDE. It is easy to use and easy to learn. This edition lacks a lot of the project types and lack of remote database support for data designer and class designer. This edition does not use the full Microsoft Developer Network (MSDN) library but use the MSDN express library.

Visual Studio Standard Edition: This edition provides an integrated IDE for all supported products. It also supports the complete MSDN and editing of XML and extensible Style sheet Language Transformation (XSLT).

Visual Studio Professional Edition: This edition includes all the tools

available in visual studio Standard as well as it has integration with Microsoft SQL server and has a remote debugger.

Visual Studio Team System: visual studio team system includes a set of software development and reporting tools, in addition to the features provided by visual studio professional edition. It offers the following toolsets based on the development role, it is being used for:

- Team Explorer
- Architecture Edition
- Database Edition
- Development Edition
- Test Edition

In this book we will be shown the installation procedure of Visual Studio Team System 2008. All examples of this book are shown using Visual Studio Team system IDE and its components. But you can also use any above edition IDE and its component.

System Requirements

The various hardware and software requirements that are needed to install the visual studio 2008 are given below:

SL. No	Hardware and software	Requirements
1.	Processor	Minimum 1.6 GHz Pentium processor Recommended : 2.2 GHz or higher Pentium processor or core I or dual core processor
2.	Supported architecture	X86(32 bit) and x64(64 bit)
3.	Operating System(OS)	Windows XP service pack 2, Windows 7, Windows 8 or above, Windows Server 2003 Service pack 1 or above, Windows Server 2003 R2 or above, Windows Vista, Windows Server 2008
4.	Random Access Memory(RAM)	Minimum: 384 MB, Recommended : 1 GB or more On windows Vista : 768 MB
5.	Hard Disk	Minimum:5400 Revolutions Per Minute(RPM), 40 GB Recommended: 7200 RPM or 80 GB or Higher.
6.	Hard Disk space	For minimum installation: 1.22 GB of available hard disk space. For full installation: 5 GB of available hard disk space.
7.	DVD-ROM Drive	Latest DVD-ROM drive.
8.	Display	Minimum: 1024 X 768 display Recommended : 1280 X 1024 display

Installation process

The following are the steps to be taken to install visual studio 2008:

Step 1: insert the DVD of visual studio 2008 in the DVD-ROM drive. The visual studio 2008 setup wizard appears as follows:

Figure 1: The visual studio 2008 Setup Dialog Box

Step 2: Now click on the Install Visual Studio 2008 link, as shown in Figure 1. The setup wizard will start copying needed files into temporary folder. Here you should just wait few times. The Visual Studio 2008 installation starts as follows:

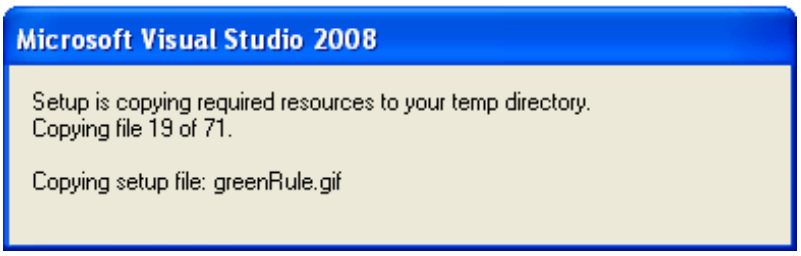


Figure 2: Page showing loading installation components

Step 3: After few seconds a welcome setup wizard will appear look like the following:

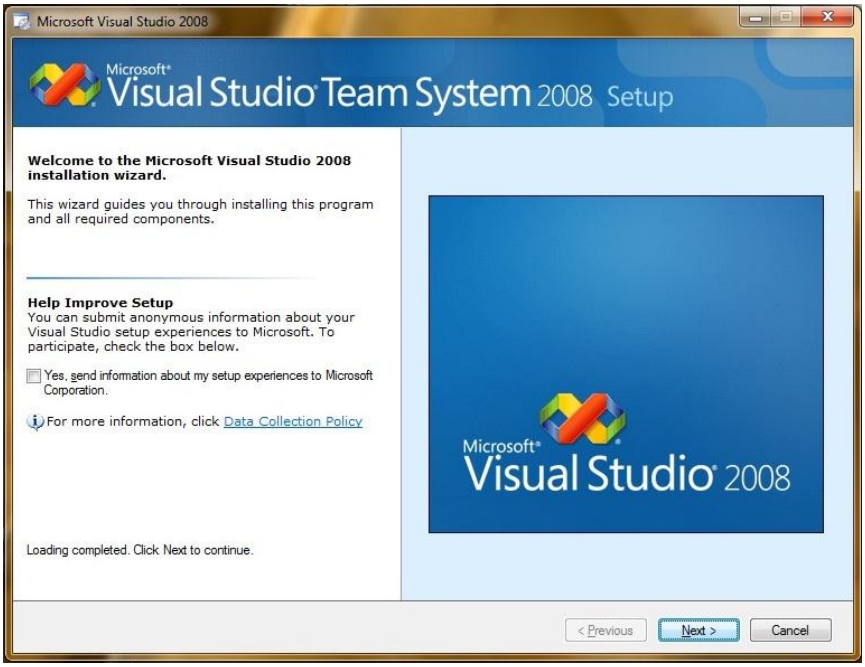


Figure 3: Visual studio 2008 welcome setup wizard

Step 4: Now just click the Next button to go to the next step. Now you will look like the following screen:

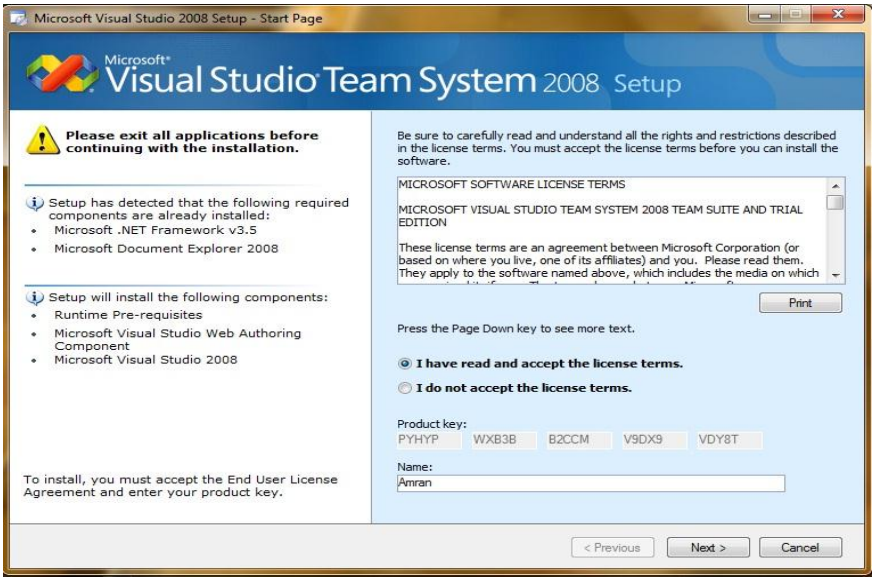


Figure 4: Visual studio 2008 setup screen

Step 5: Now Select the radio button beside the I have read and accept the license terms option, as shown in Figure 4 and then click next button to continue. A new option page appears as shown in Figure 5:

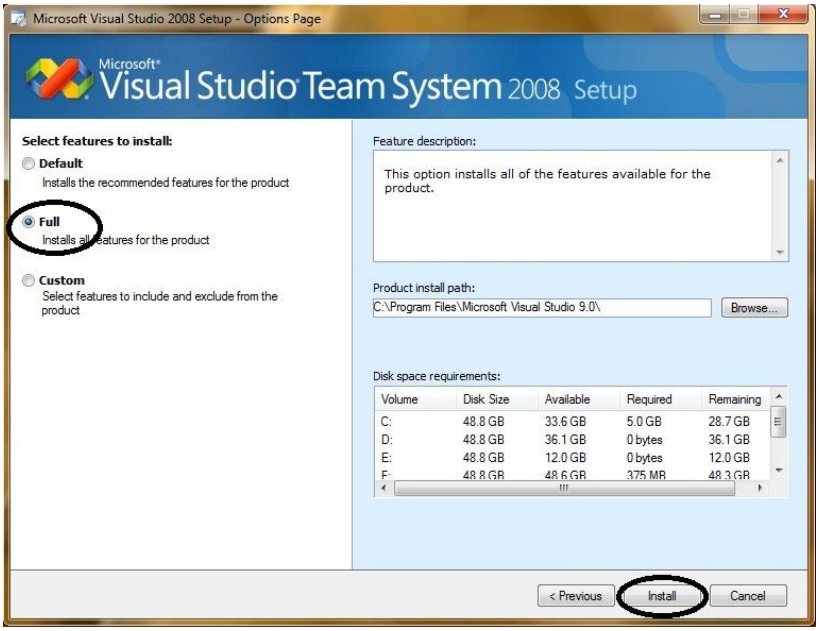


Figure 5: Visual studio setup option page dialog

Step 6: Now select the Full radio button as shown in Figure 5, because we are going to install full features of visual studio 2008. If you want you can select any one of the radio buttons. Now just click Install button as shown in Figure 5. After clicking install button the visual studio 2008 stats installation and following screen will appear:

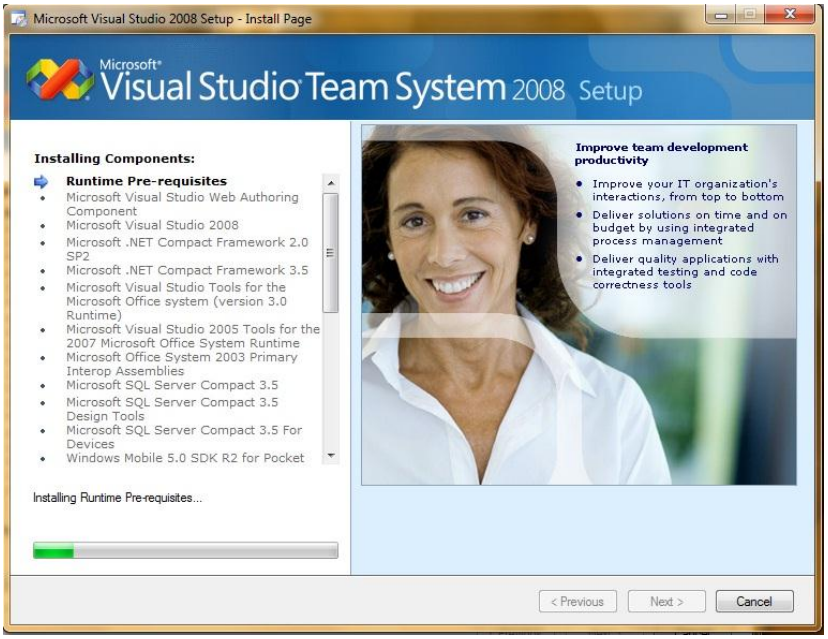


Figure 6: Visual Studio 2008 installation components dialog**.**

Step 7: Now just wait and see the step-by-step, Visual Studio 2008 components being installed.

Step 8: After a few minutes, if the installation is completed successfully the following screen will appear:

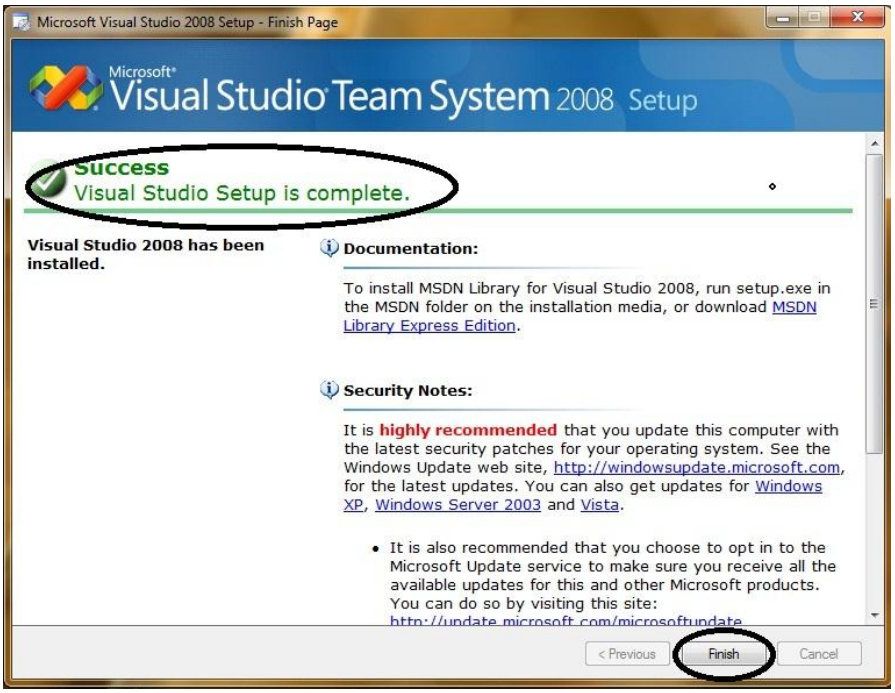


Figure 7: Visual Studio 2008 Finish page dialog

Step 9: Now just click the Finish button to complete installation as shown in Figure 7.

Lesson 1.3-1.5

Exploring Integrated Development Environment

Introduction

An Integrated Development Environment (IDE) or interactive development environment is a software application that provides comprehensive facilities to computer programmers for software development. Integrated development environments are designed to maximize programmer productivity by providing tight-knit components with similar user interfaces. Visual Studio 2008 IDE provides tools for developing different kinds of applications, such as Windows forms applications, Web Application, WPF applications mobile applications and so on. The IDE can also be used for detecting and correcting errors in the application.

Upon completion of this unit you will be able to:

Outcomes

- *Run* visual studio 2008.
- *Familiar* basic windows of visual studio 2008 IDE.
- *Define* design time, run time, and debug time.

How to run Visual Studio 2008

Visual Studio is a powerful and customizable programming workshop that contains all the tools you need to build robust programs for Windows and the Web quickly and efficiently. Most of the features in the Visual Studio IDE apply equally to Visual Basic, Microsoft Visual C++, and Microsoft Visual C#. When you run Visual Studio 2008 for the first time, you will be prompted to select the type of projects you plan to build with Visual Studio, so that the environment can be optimized for that specific type of development.

Now for start the visual studio 2008 follow the following steps:
Step 1: On the Windows taskbar, click Start, click All Programs, and then click the Microsoft Visual Studio 2008 folder. The folders and icons in the Microsoft Visual Studio 2008 folder appear in a list. Click the Microsoft Visual Studio 2008 icon.
Start→All programs→Microsoft Visual Studio 2008→Microsoft Visual Studio 2008 icon

When you run Visual Studio 2008 for the first time you will look the following window:

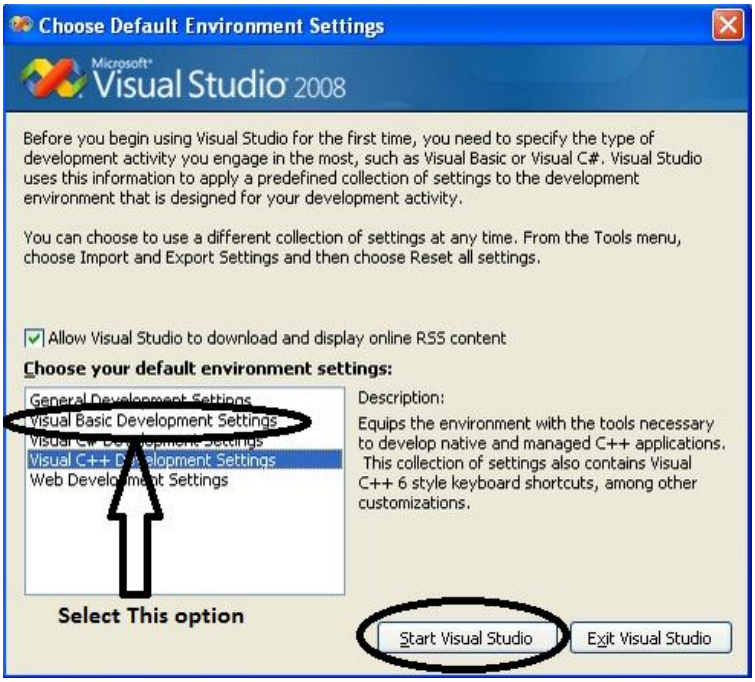
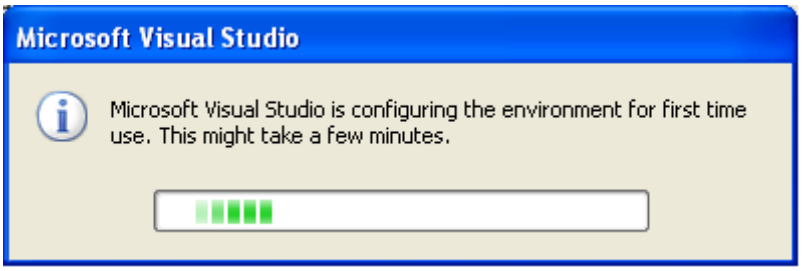


Figure 1: Default Environment setting window

Step 2: Now select visual basic development setting from the choice option and then click Start Visual Studio button as shown in Figure 3.1. After clicking, the following window will appear:



Step 3: After a few minutes you will look the following window:

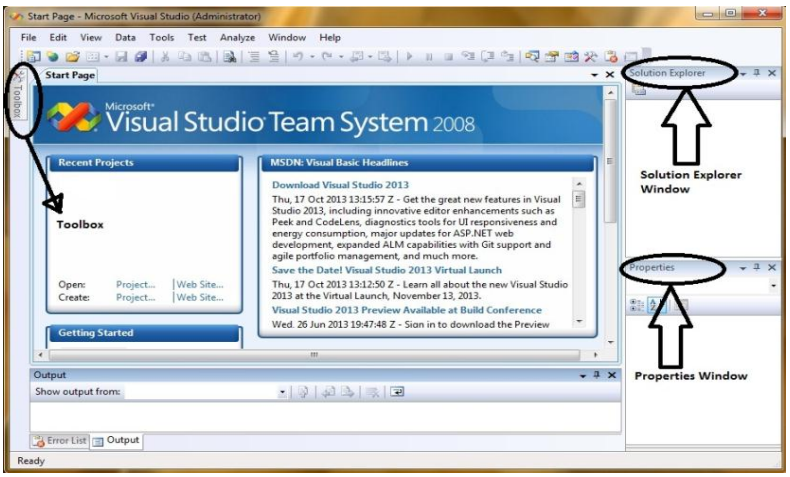


Figure 2: Visual Studio Start Page

Step 4: On the Start Page of Visual Studio, you will see the following panes:

i. Recent project.
ii. MSDN: Visual Studio.
iii. Getting started.
iv. Visual Studio Headlines.

Recent project: Here you see a list of the projects you opened most recently with Visual Studio, and you can select the one you want to open again— chances are that you will continue working on the same project as the last time. Each project's name is a hyperlink, and you can open it by clicking its name. At the bottom of the Recent Projects section are two hyperlinks, for opening or creating another project.

MSDN: Visual Studio: This section is a browser window that displays an MSDN (the Microsoft Developer Network, which is the definitive resource for all Microsoft technologies and products) page when the computer is connected to the Internet. In this section, you will see news about Visual Studio, the supported languages, articles, and other interesting bits of information.

Getting Started: This section contains links to basic programming tasks in the product's documentation.

Visual Studio Headlines: This section contains links to announcements and other news of interest to VB developers.

Basic windows of visual studio 2008 IDE

Visual Studio 2008 IDE has the following different parts:
1. Menu Bar
2. Toolbars
3. Toolbox
4. Code Editor
5. Designers
6. Solution Explorer
7. Properties Window
8. Server Explorer
9. Output Window
10. Error Window

Menu Bar: The menu bar of the visual studio IDE provides different menus for different Visual Studio commands as shown in figure:

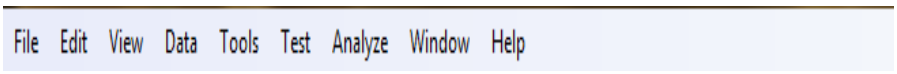


Figure 3: Menu Bar

Toolbars: A toolbar is a GUI widget on which on-screen buttons, icons,

menus, or other input or output elements are placed. Toolbars are shortcut to the most frequently performed actions. You will find several common toolbars on the visual studio IDE such as Standard, Layout, Formatting, Debug etc. as shown in following Figure:

Figure 4: Toolbars

Toolbox: The toolbox contains a number of tabs and each tab contains a list of controls and components that can be placed on a form. The toolbox is docked on the left side of the IDE. If it is not visible, you can bring toolbox from the View menu or press the CTRL+ALT+X keys together to open it. The Toolbox is shown in following Figure:

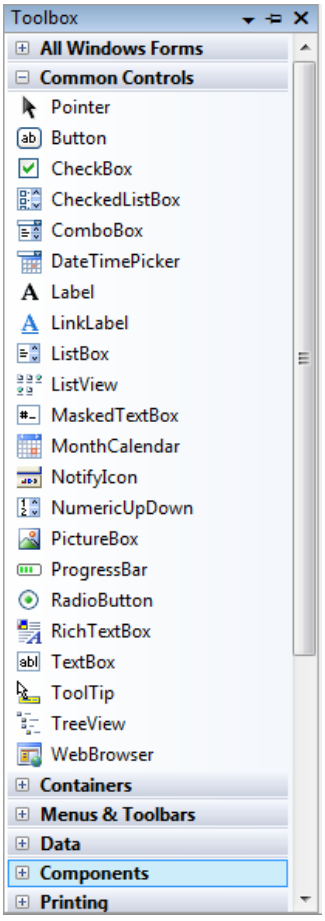


Figure 5: The Toolbox

From the Toolbox, it is seen that the Toolbox uses tabs, such as all windows Forms, Common Controls, Containers, Menus & Toolbars, Data, Components, Printing, Dialogs, WPF interoperability, Reporting, Visual Basic PowerPacks and General to categorize different controls and components.

Descriptions of all tabs are given below:

SL No.	Tab Name	Description
1.	All Windows Forms	This Tab contains all standard windows forms controls.
2.	Common Controls	This tab contains all common controls typically used in windows forms project.
3.	Containers	This tab contains controls such as GroupBox and Panel controls that include other controls.
4.	Menus & Toolbars	This tab contains control that are used to creating menus and toolbars for your applications.
5.	Data	This tab contains controls that help in working with database.
6.	Components	This tab contains components that do not have a user interface.
7.	Printing	This tab contains controls that help in providing printing capabilities to your Windows Forms projects.
8.	Dialogs	This tab contains controls that help you in using common dialog boxes in your application.
9.	WPF interoperability	This tab contains a control that can be used to host a WPF component.
10.	Reporting	This tab contains controls for proving reporting services such as crystal report.
11.	Visual Basic PowerPacks	This tab contains a component that allows you to print a duplicate copy of a form as it appears on the screen.
12.	General	This tab is initially empty.

Code Editor: If you select Code View within the Project Window, or if you double-click on a control icon within the Form Design Window, the Code Editor Window will open, displaying the Visual Basic code associated with a particular object. You use the Code Editor Window to write, display, and edit Visual Basic code**.** You can press F7 key to switch from windows Forms Designer to the code editor. On the other hand you can switch Code editor by selecting View →Code. You must write the Code between Class. Code editor is shown in following Figure:

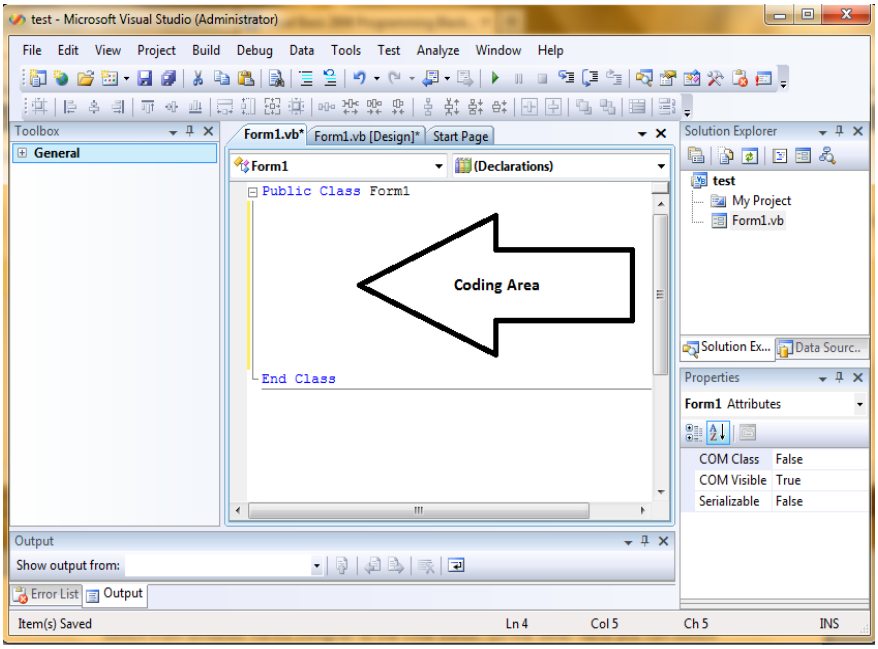


Figure 6: The coding editor

Designers: Designer is used to design windows application as well as web applications or WPF. It can be used to define the behavior or appearance of the components and controls in the design view. When you create a windows forms application in visual studio, a form is automatically added to the project which is described later chapter. You can resize the Form window to make the windows you create in your applications as large or small as needed. The windows forms designer enables you to add controls to the form, arrange them and write code for essential events of the control. The simple windows form application shown in below:

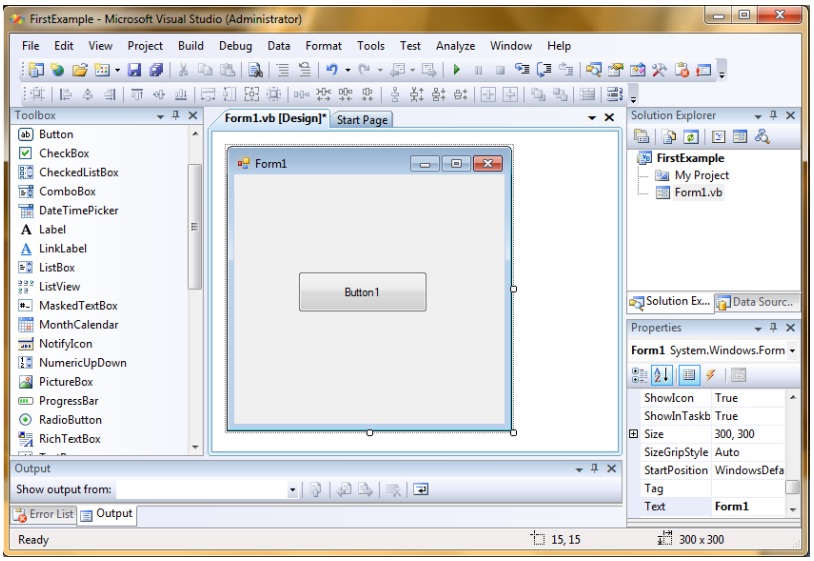


Figure 7: The windows forms designer

Solution Explorer: Solution explorer window holds each project, project reference and components. By default it shows the right side of visual

studio IDE. If it is hidden, you can active solution explorer in the IDE, click on View→ Solution Explorer or press CTRL+ALT+L keys together. The solution explorer gives you a graphical representation of all the files that make up your project. When you double click on any file in your project from the solution explorer, it opens quickly. The Solution Explorer window and the Window's title bar hold the name of your solution (.sln) file, which is WindowsApplication1 by default unless you give it a new value in the *New Project* dialog box. The following Figure shows a solution explorer window:

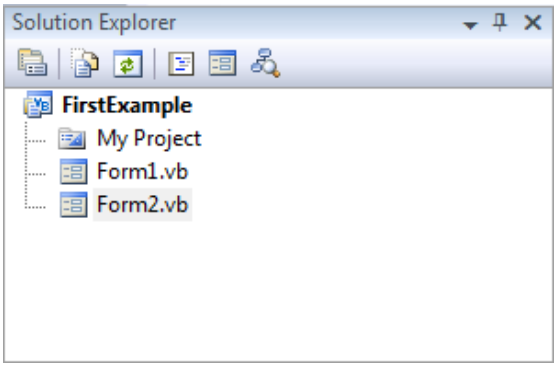


Figure 8: Solution Explorer window

Properties Window: The Properties Window is docked under the Project Explorer window. Each object in Visual Basic has characteristics such as color and size etc. All the characteristics of an object are called its properties. Properties window in visual studio is used to set properties for various objects at design time. When you select a component or object in the solution explorer window or designer, the properties associated within the selected component are displayed in the properties window. By default it shows right bottom corner on visual studio IDE. If it is hidden, you can active it. To view the properties window you click on the View→Properties window from the menu bar or press F4 key. When you want to change the properties of a control or component, just click on that control on windows forms, then change the property as you want from properties window. This window also enables you to edit the properties of the controls that you add to forms. The properties window is shown in below:

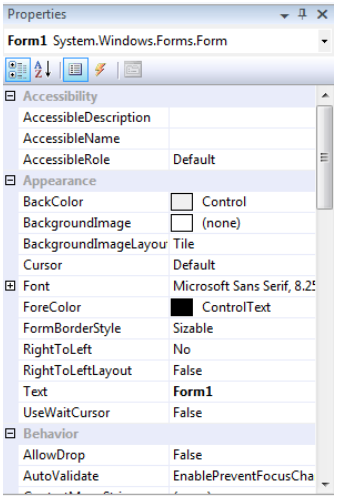


Figure 9: The properties window

Tip

You can sort the properties in the window either *alphabetically* or *by categories*. Use the buttons on the Properties window.

Server Explorer: The server explorer window allows you to view the various services that are available on a specific server. It is a powerful tool that provides drags and drop feature. Server explorer helps you to work with database in easy way. It is a sever management console for visual studio. You can use the server explorer to list database tables, views, stored procedures, and functions. If Crystal Reports is installed on your computer, you can create a report directly from server explorer. Using server explorer, you can view and manipulate data link, database connections, and system resources on any server, which is connected to the network. By default server explorer contains two nodes such as i) Data Connections and ii) Servers. To view the server explorer, click on the View→Server Explorer or press CTRL+ALT+S keys together. The server explorer window is shown in following Figure:

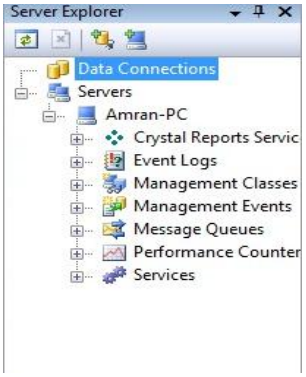


Figure 10: Server Explorer Window

Output Window: The output window displays the result of building and executing applications. By default the output window shows at the bottom of the visual studio IDE. If it is hidden, to view the output window, click View→ Output or by pressing CTRL+ALT+O keys together. The output window is shown in following window:

Figure 11: The Output Window

Error window: The error window displays the various types of error such as syntax error, typing error, variable declaration error etc automatically. When you type the code on editor, if it is an error, it will display automatically on Error window as error list. The error list displays error with details that is its description, file number, line number, column number and project name. To view the error list, click View→Error List or by pressing CTRL+E keys together. the error window is shown in following Figure:

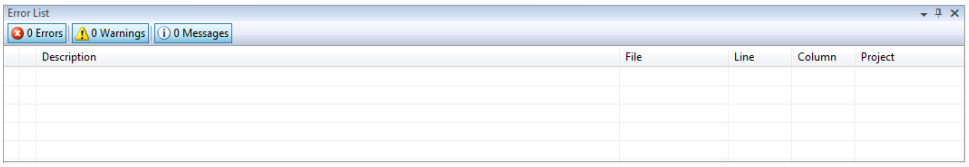


Figure 12: The Error Window.

The error list toolbar consists of the following options:

Errors: This option displays the number of errors in the list. Click this option to see whether errors are displayed

Warnings: This option displays the number of warnings in the list.

Messages: This option displays the number of messages in the list. Click this option to see whether messages are displayed.

Design Time, Run Time, and Debug Time

Visual Basic has three distinct modes. While you are designing the user interface and writing code, you are in **design time**. When you are testing and running your project, you are in **run time**. If you get a run-time error or pause program execution, you are in **debug time**. The IDE window title bar indicates running or debugging to indicate that a project is no longer in design time.

Lesson 1.6-1.8

Creating, saving and running windows application

Introduction

Although the programming language you'll be learning in this book is Visual Basic, the development environment you'll be using to write programs is called the Microsoft Visual Studio Integrated Development Environment or IDE for short. Visual Studio is a powerful and customizable programming workshop that contains all the tools you need to build robust programs for Windows and the Web quickly and efficiently.

Upon completion of this unit you will be able to:

Outcomes

- *Create* a simple visual basic project.
- *Save* a simple visual basic project.
- *Run* a simple visual basic project.
- *Change* the Form's background color.

Open/ Start visual studio 2008

To open or start visual studio 2008 follow the following steps:

Step1: On the Windows taskbar, click Start, click All Programs, and then click the Microsoft Visual Studio 2008 Folder then Click the Microsoft Visual Studio 2008 icon for windows 7.

For windows 7:

Start→All Programs→Microsoft Visual Studio 2008 Folder→ Microsoft Visual Studio 2008 icon.

For windows XP:

Start →Microsoft Visual Studio 2008→Microsoft Visual Studio 2008 icon

You will see the following figure:

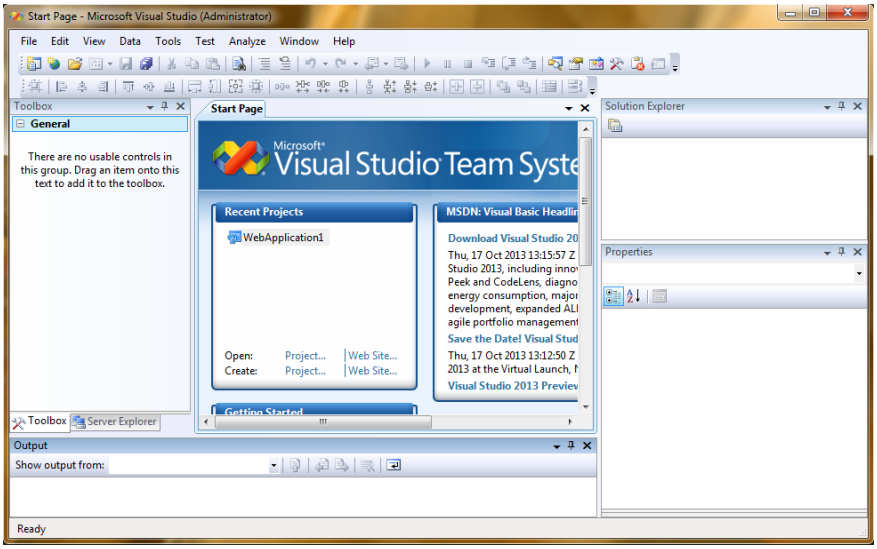


Figure 1: Visual studio 2008 start page

Creating a simple visual basic project

At this point, you can create a new project and start working with Visual Studio. To create a simple visual basic project follows the following steps:

Step 1: Start visual studio according to above step, you will look like following figure:

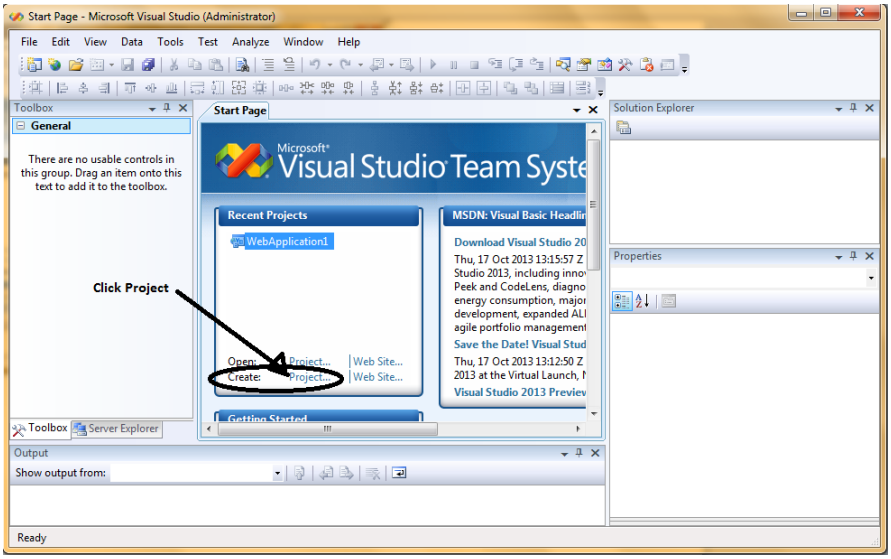


Figure 2: Visual Studio Start page

Step 2: Click project of create option which is shown in above figure 1. Or click File from the menu bar and the click New Project which is shown in following Figure:

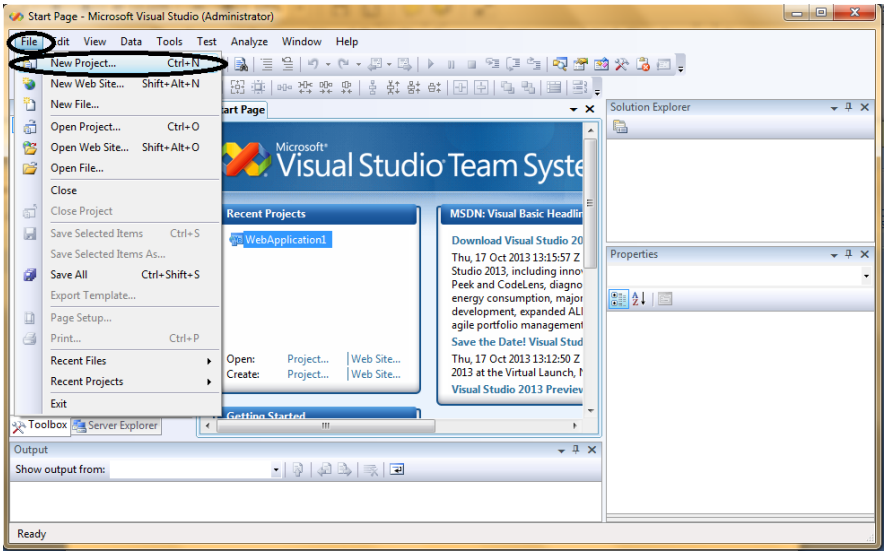


Figure 3: New project Option page

Step 3: After Clicking Project or New Project option you will look like following window:

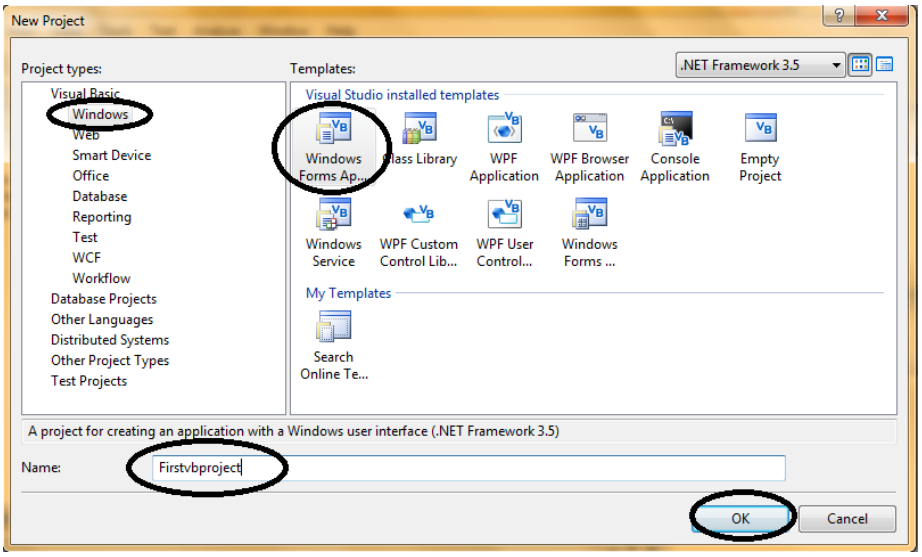


Figure 4: New Project dialog box

Step 4: Now select Windows option under Visual Basic as project Types from the left pan of the window. Then select Windows Forms Application template. Now give project name on the name text field as Firstvbproject then click ok button, which is shown in figure 4. Now you will look like the following Figure:

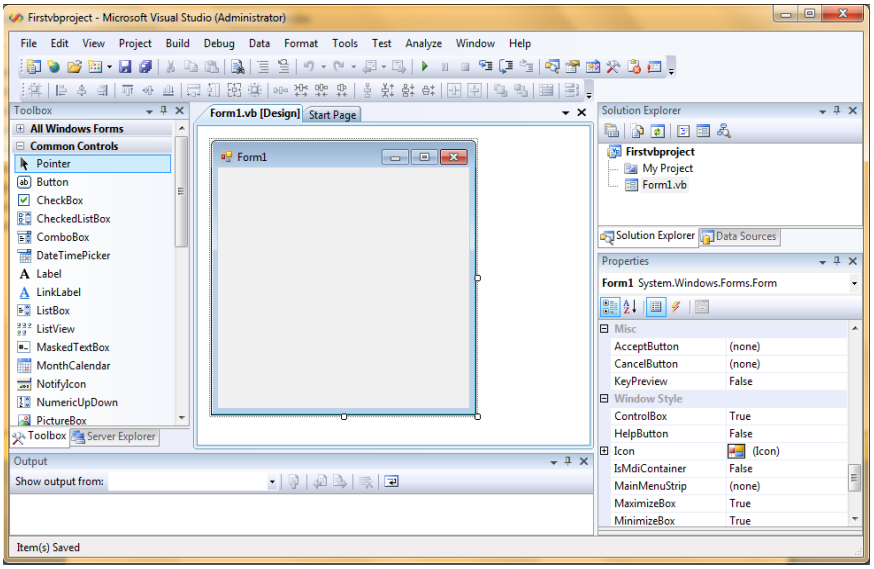


Figure 5: The integrated development environment of Visual Studio 2008 for a new project

Step 5: By default Form1 is created. When you click on form1 window you will look corresponding toolbox component, properties window and solution explorer window on visual studio IDE.

Step 6: Now drag a TextBox control from the Toolbox and drop it on Form1, which is shown in following figure:

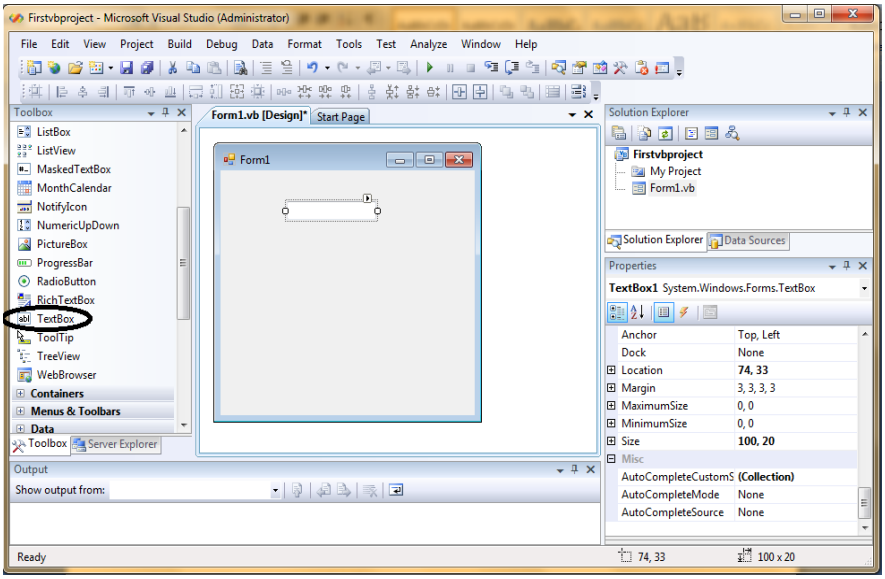


Figure 6: Visual Studio IDE with a TextBox Control

Step 7: Now drag a Button control from the Toolbox and drop it on Form1, which is shown in following Figure:

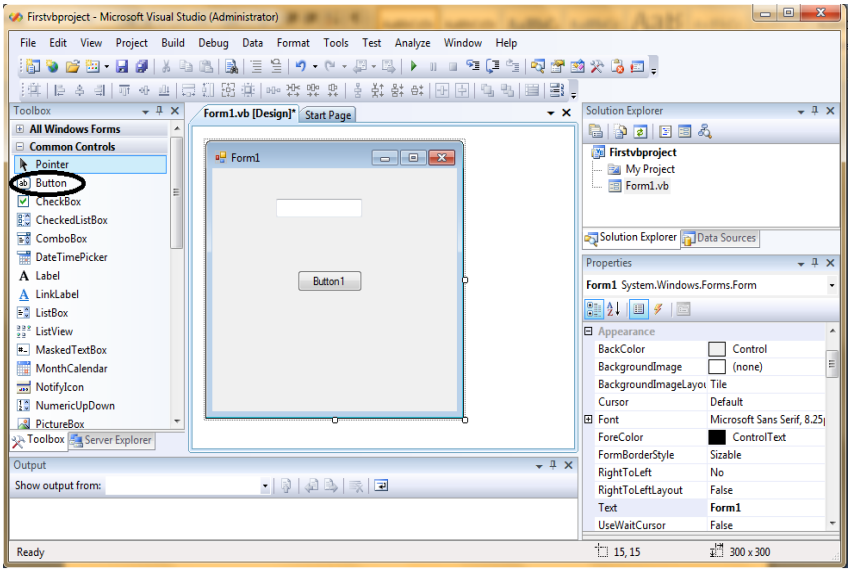


Figure7: Visual Studio IDE with a TextBox and Button control

Step 8: Now single click on TextBox of the Form1 and increase it either left or right using cursor, which is shown in following figure:

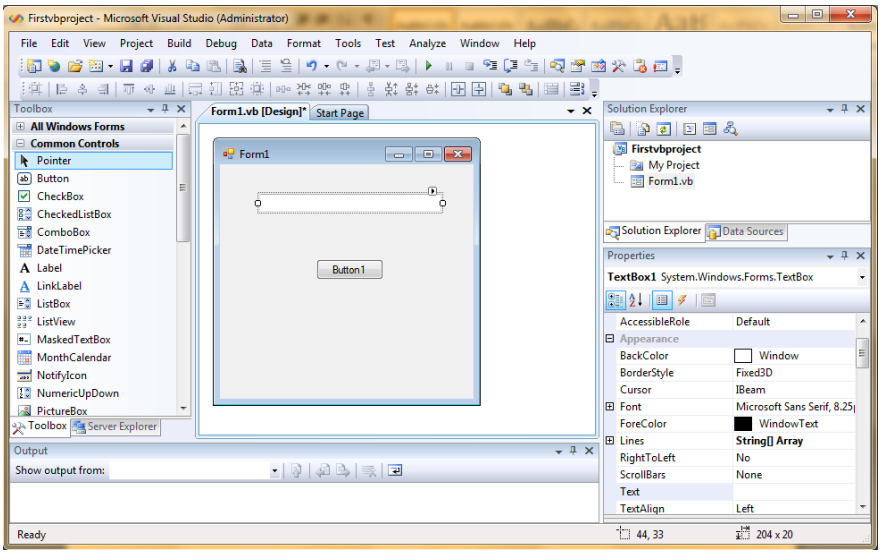


Figure 8: Visual Studio IDE with a TextBox and Button control after increasing TextBox

Step 9: Now double click on Button1 control of the Form1, you will see the following window:

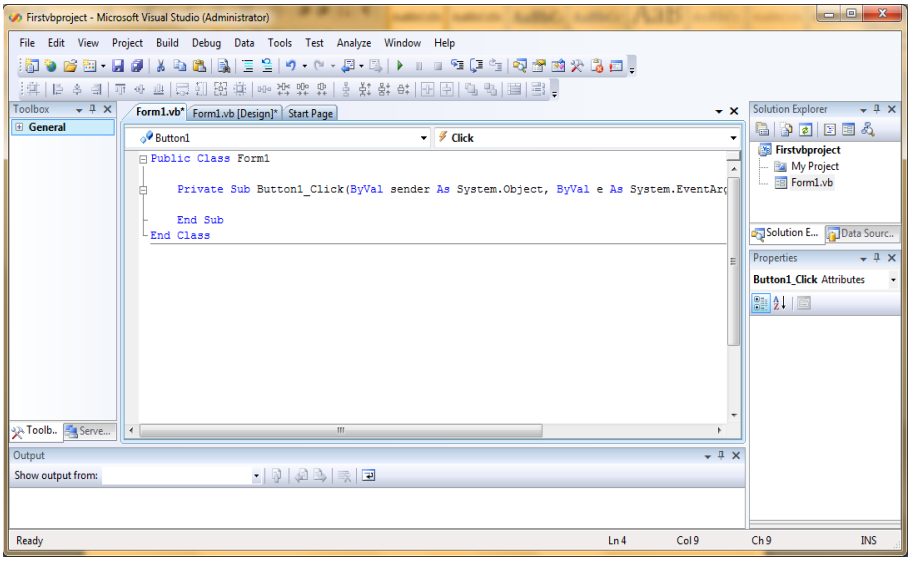


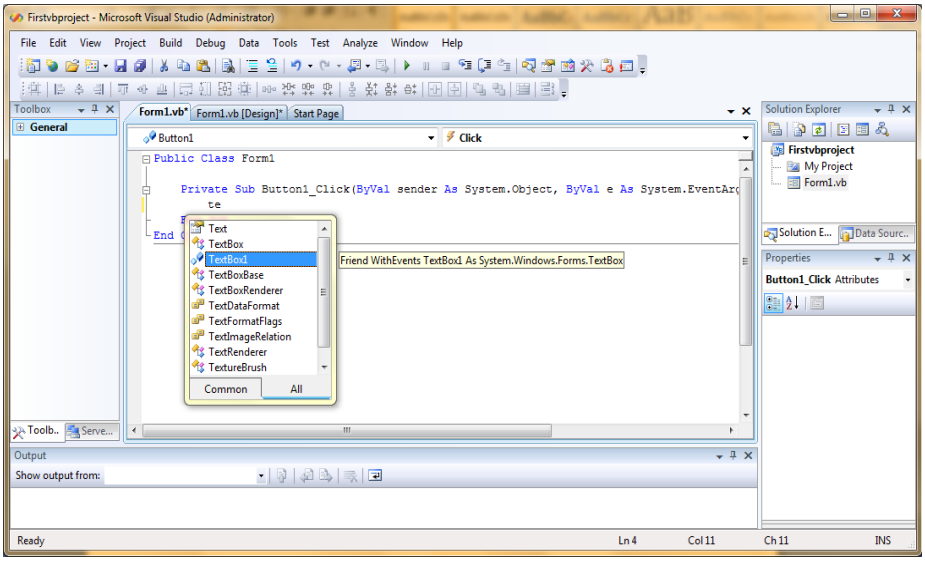
Figure 9: Button1 Coding window

Here you will look the following code under Button1:

Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button1.Click

End Sub

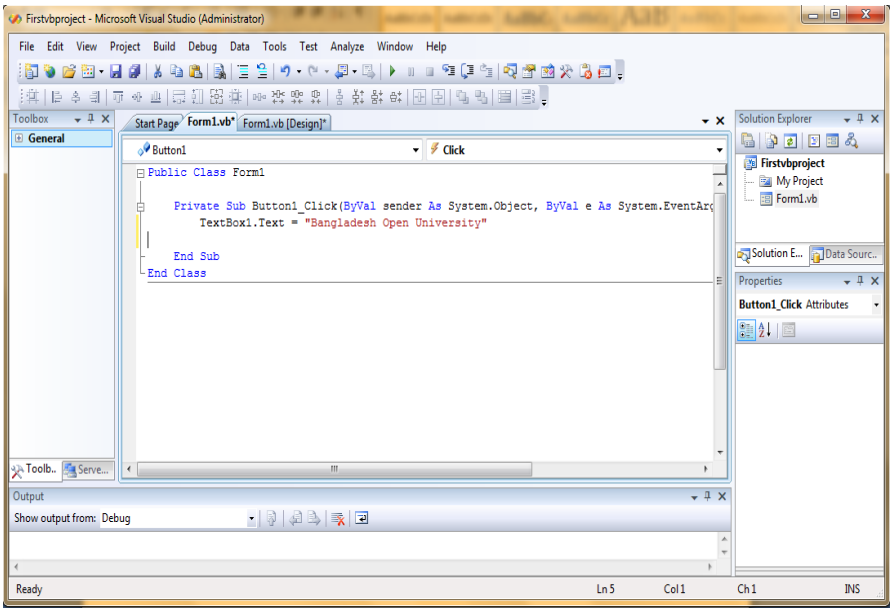
Step 10: Now type the following code before End Sub. When you start type code a dropdown window will be appeared as like following figure:



Now type the following code before End Sub:

```
TextBox1.Text = "Bangladesh Open University"
```

Now you will look like following figure:



Step 10: Now for saving project, click File, then click Save All or press

CTRL+Shift+S keys together or click  icon from toolbar, then you will look like the following save project dialog window:

File→Save All

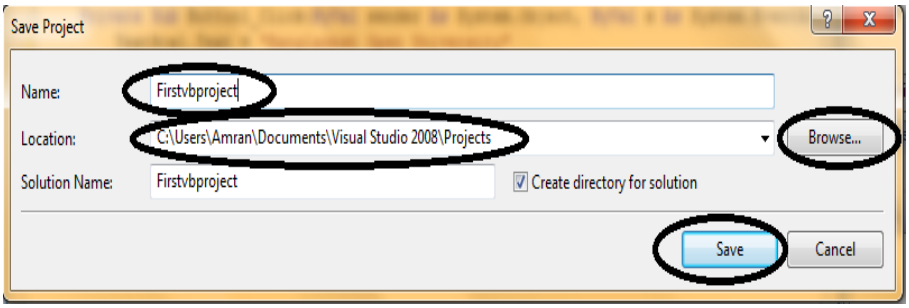
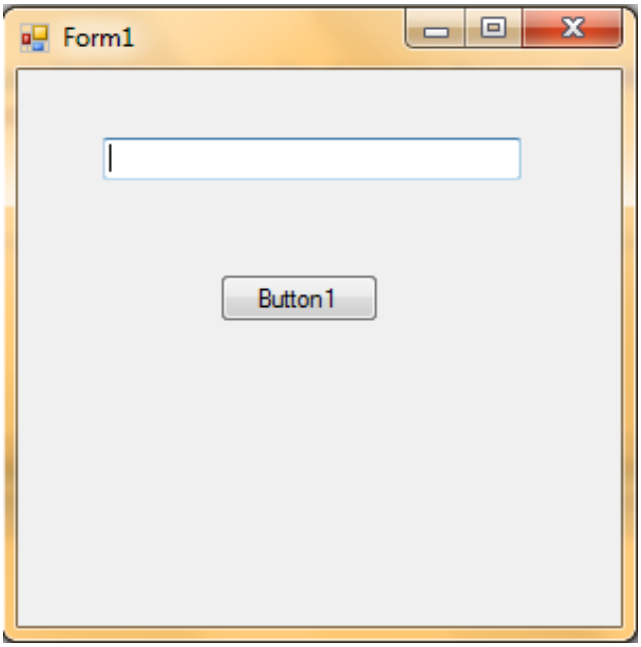


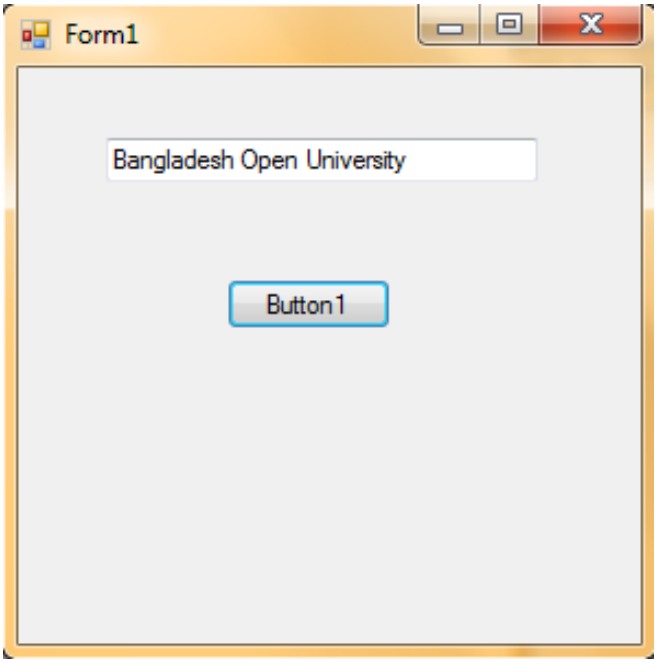
Figure 10: Save Project dialog box

Here, you can change your project name, location etc. By default your project will save on C drive. If you want to change your location just click on browse button and select location from your computer. Now, just click on save button. The project will save your selected location.

Step 11: Now for running your project, click on Debug→ Start Debugging from Menu bar or press F5 key or click on  icon from toolbar. Now you will look like following figure:



Step 12: After running the program just click on Button1 then you will look the text 'Bangladesh Open University' on textbox of Form1, which is shown in following figure:



Lesson 1.9

Customizing windows forms

Introduction

Windows Forms controls are reusable components that encapsulate user interface functionality and are used in client-side Windows-based applications. Not only does Windows Forms provide many ready-to-use controls, it also provides the infrastructure for developing your own controls. Windows Forms controls are objects that users can interact with to enter or manipulate data.

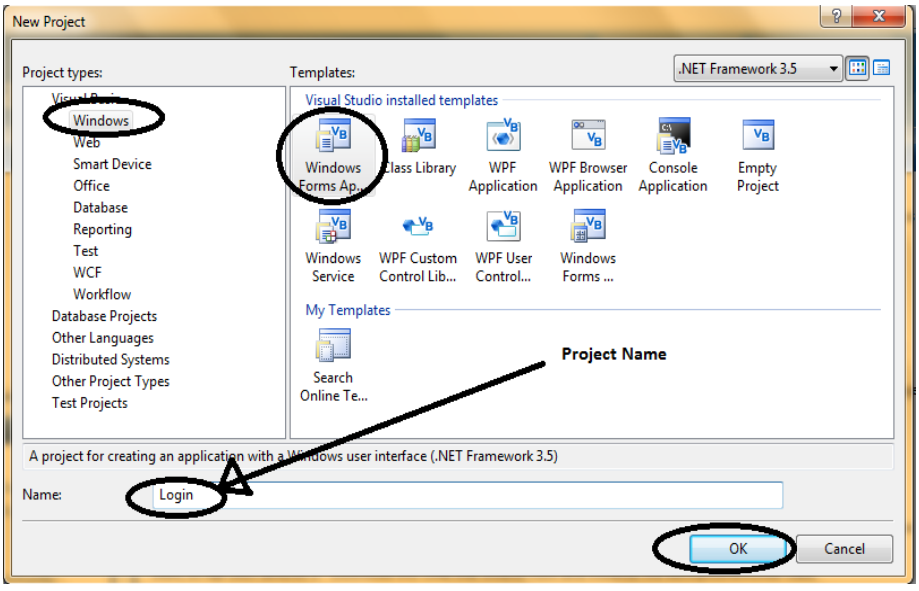
Upon completion of this unit you will be able to:

Outcomes

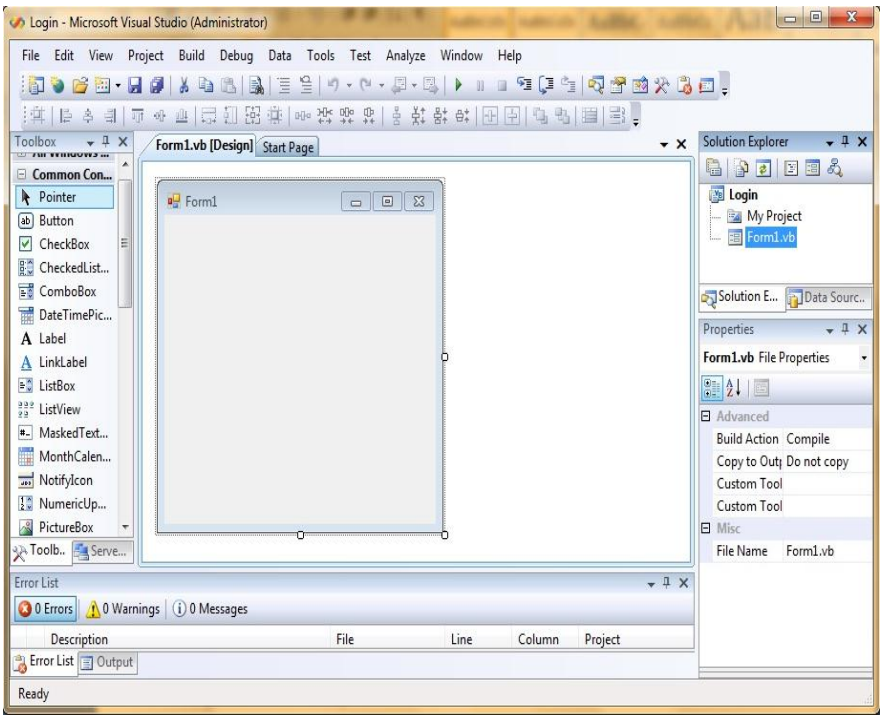
- *Customized* appearance of a windows form.

Changing the appearance of a windows form

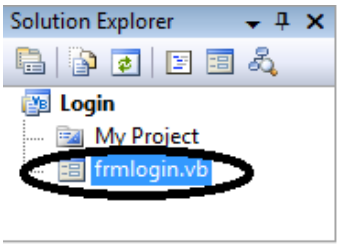
Step 1: Start visual studio 2008 and create a windows based project, and give the name of project is 'Login'. The window will look like the following:



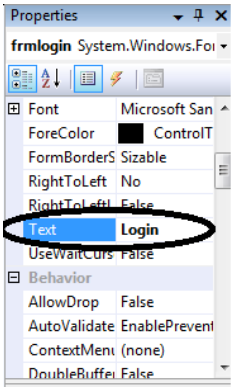
Step 2: After clicking the ok button, the following window will be appeared, where by default a form will be generated automatically.



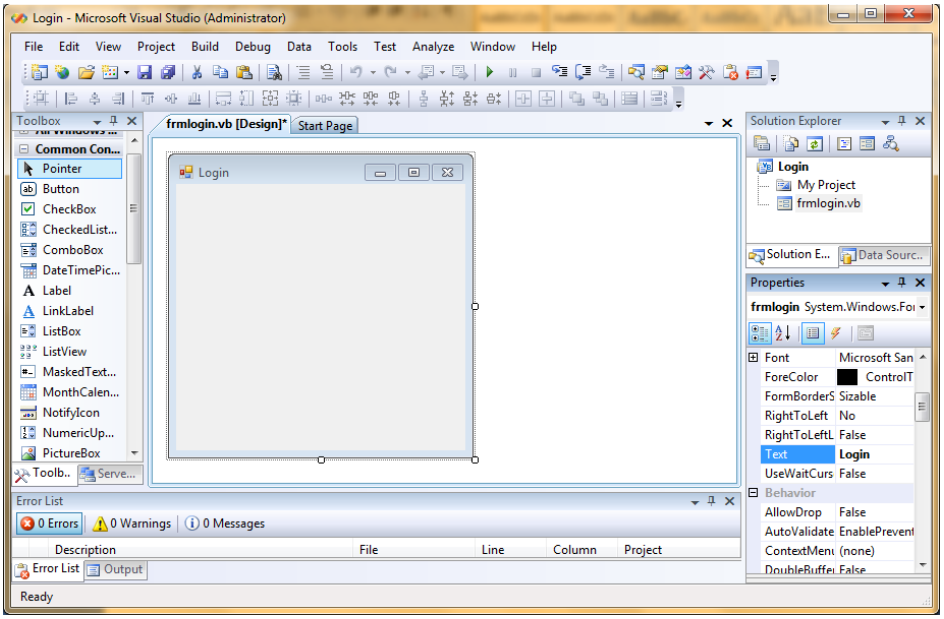
Step 3: Now we will give form name. So, just single click on Form1.vb under Solution Explorer window, and give the name 'frmlogin' as like following:



Step 4: Now we will change the text of from. So, just single click on windows form and change the property of form from the right side property panel. Now change the text property of form as like following:



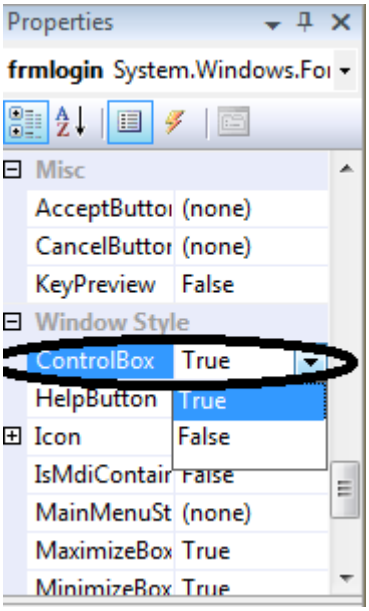
Now the form will look like the following:



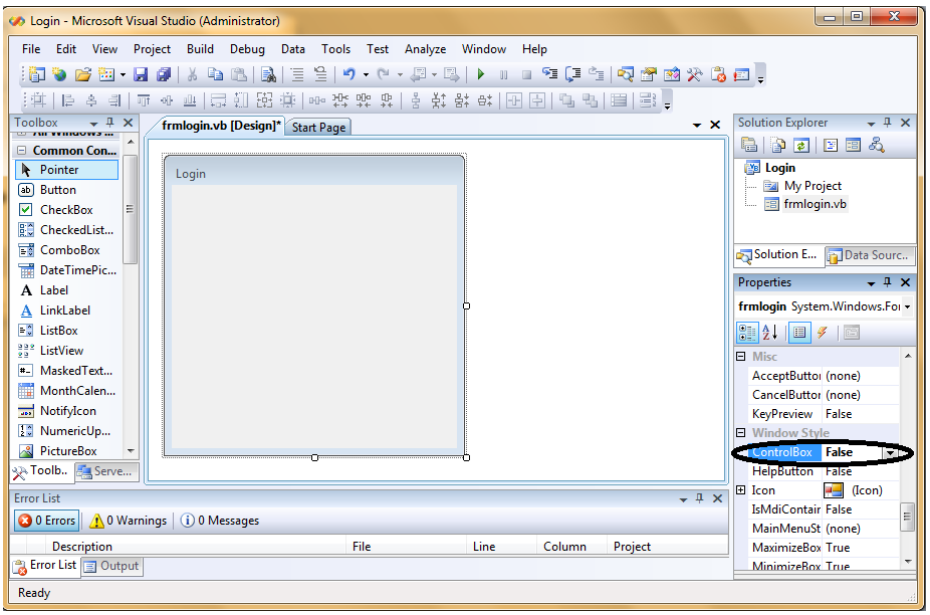
Tip

Change your application's Form file name (Form1.vb) to a name that describes the application's purpose

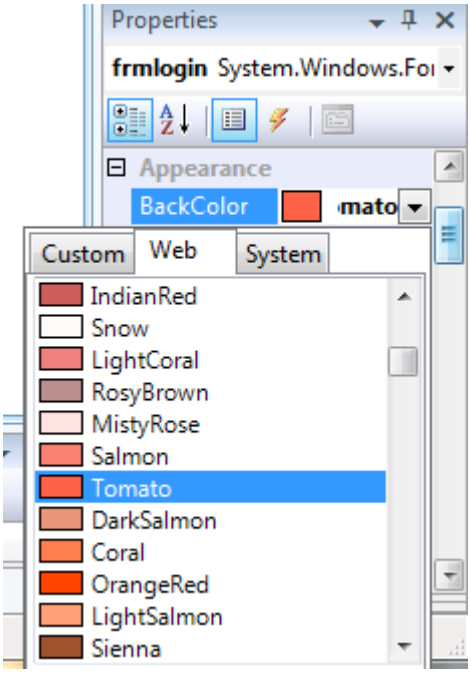
Step 5: Now change the form ControlBox property from the properties panel. By default, it is selected as True. Now you change it as False as follows:



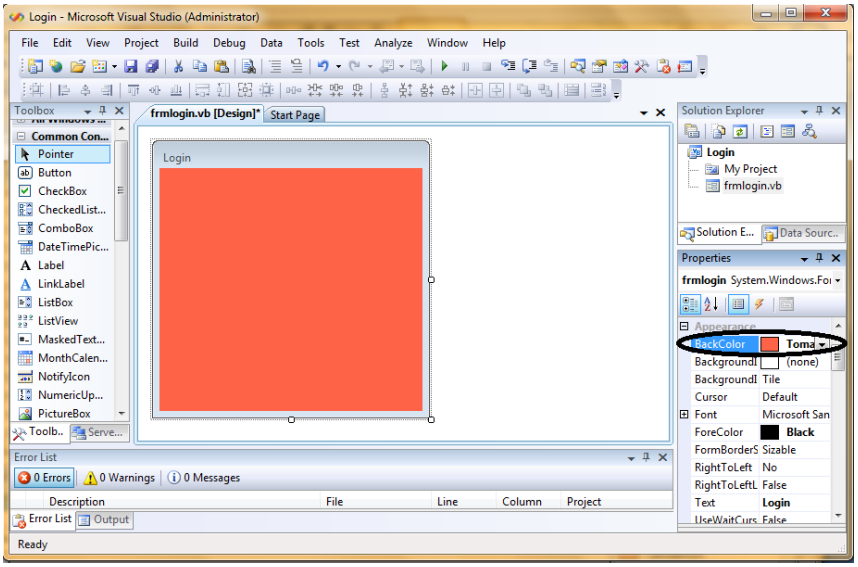
Now the form will look like the following:



Step 6: Now we want to change the form backcolor. So change the form backcolor property from the properties panel. When you select the backcolor property, you will look three color tabs such as Custom, Web, and System. You can select any type of color from this tabs which you want. Now select web tabs, and select tomato color which looks like the following:



Now the form will look like following:



Tip

If the Properties window is not visible, you can choose View / Properties Window from the menu or press the F4 shortcut key to show it.

Step 7: Now save all the projects by clicking on save all icon  from the toolbar.

Step 8: Now run the program or form by clicking on run icon  from the toolbar. You will look like the following:

Step 9: Now for stop the running program, just click on Stop debugging icon  from toolbar.

Assessment

Assessment

MCQ

1. To save all the project's files, select _____

   a) Save > Solution > Save Files b)File > Save

   c) File > Save All d)File > Save As….

2. The Form's property specifies the text that is displayed in the Form's title bar.

   a) Title b)Text

   c) (Name) d)Name

3. Property specifies how text is aligned within a Label's boundaries.

   a) Alignment b)AlignText

   c) Align d)TextAlign

4. In which mode, the application is executing.

   a) start b) run

   c) break d) design.

Exercise

1. Write the purpose of the following file types in Visual Basic

   i) .vb ii) .frm iii).exe

2. What are the advantages that visual basic have, which makes it an excellent programming tool?

3. What is IDE? Discus the following components of IDE i.e. Project Window, Property window, Form Window and Code Editor Window.