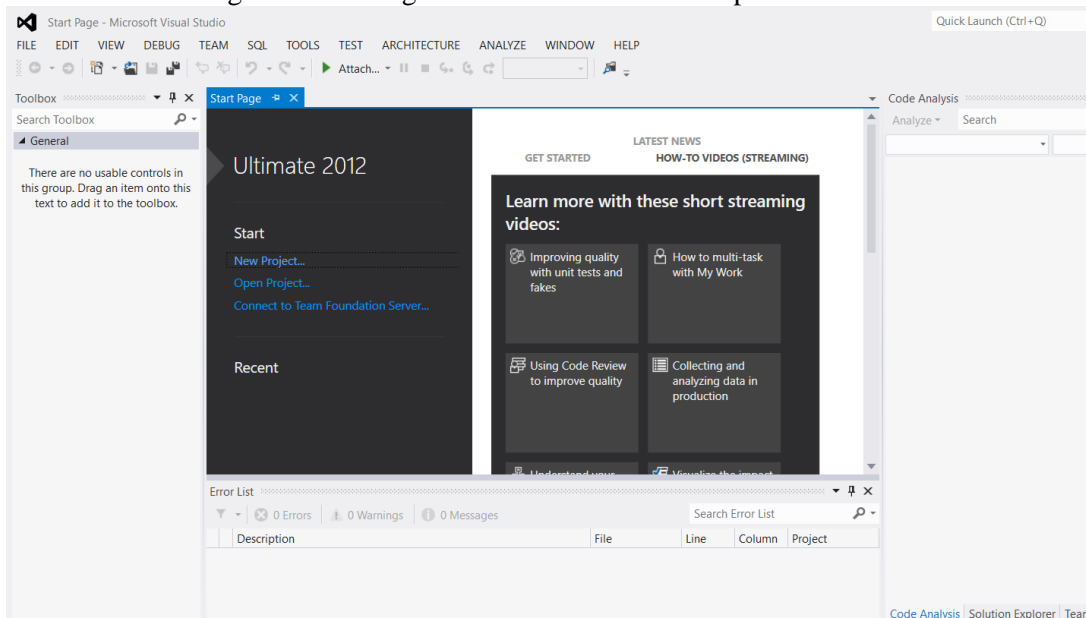# ❖ Getting Started with Visual Studio

You will use the VB component of Visual Studio to create and test projects.

- In VB, programming applications you will design and develop are called solutions.
- A solution can actually contain more than one project.
- Each solution is stored in a folder identified by the solution name.
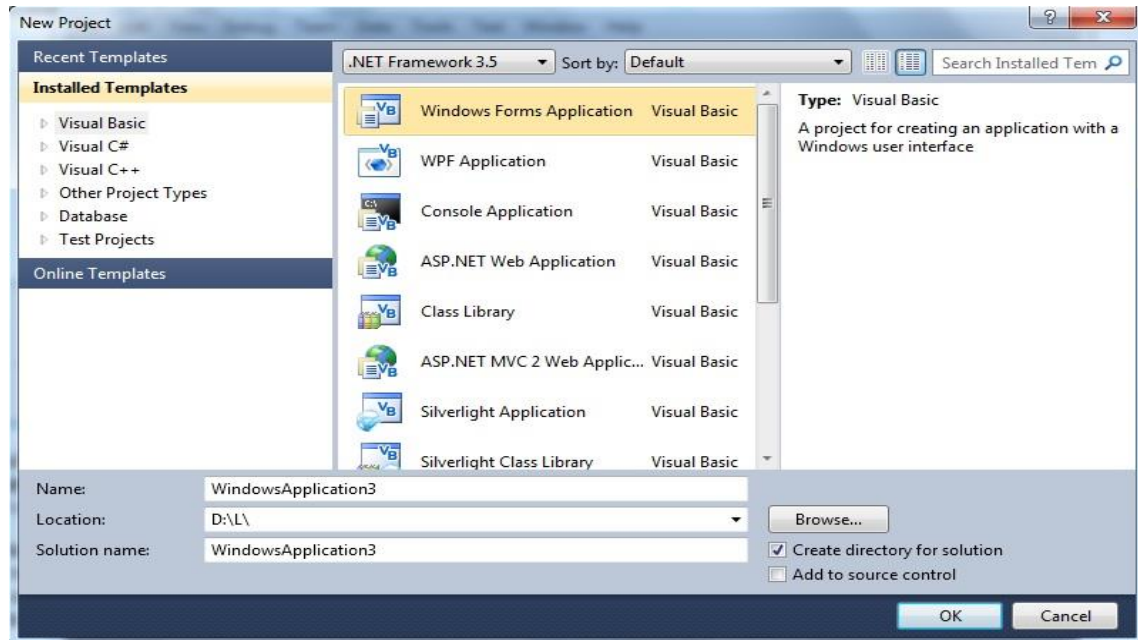
➢ Steps to Open VB 2012 and Create a New Project

1. Start Visual Studio 2012. Figure1
2. On the *Visual Studio File* menu, click *New Project*, or you can start a new project by clicking the blue *New Project link* on the *Start Page*. The New Project dialog box opens, as shown Figure 2.

Figure1: Start Page for Visual Basic 2012 Express Edition.

The Visual Studio Start Page in this figure above is slightly different for Visual Studio 2012 Visual Basic 2012 Express Edition.

Figure 2

- Your first project will be a Visual Basic Project using a Windows Forms Application template as shown in the figures above.
- The default name is WindowsApplication1 – You can change the project name
- Click the OK button – it takes several seconds to create the project files from the template.

➤ **The Integrated Development Environment**

Familiarize yourself with the Integrated Development Environment (IDE). Figure 3.

- Across the top are menus with different options used in the designing of an application.
- Toolbars with shortcut icons are shown below the menus.
- Form Designer (also termed the Document Window).
- Solution Explorer Window – displays filenames for files that comprise a project. The solution name is also shown here.
- Properties Window – displays properties of the currently selected object – in the figure the properties displayed are those of the Form object.
- ToolBox Window – this is shown along the left edge of the figure in collapsed display.
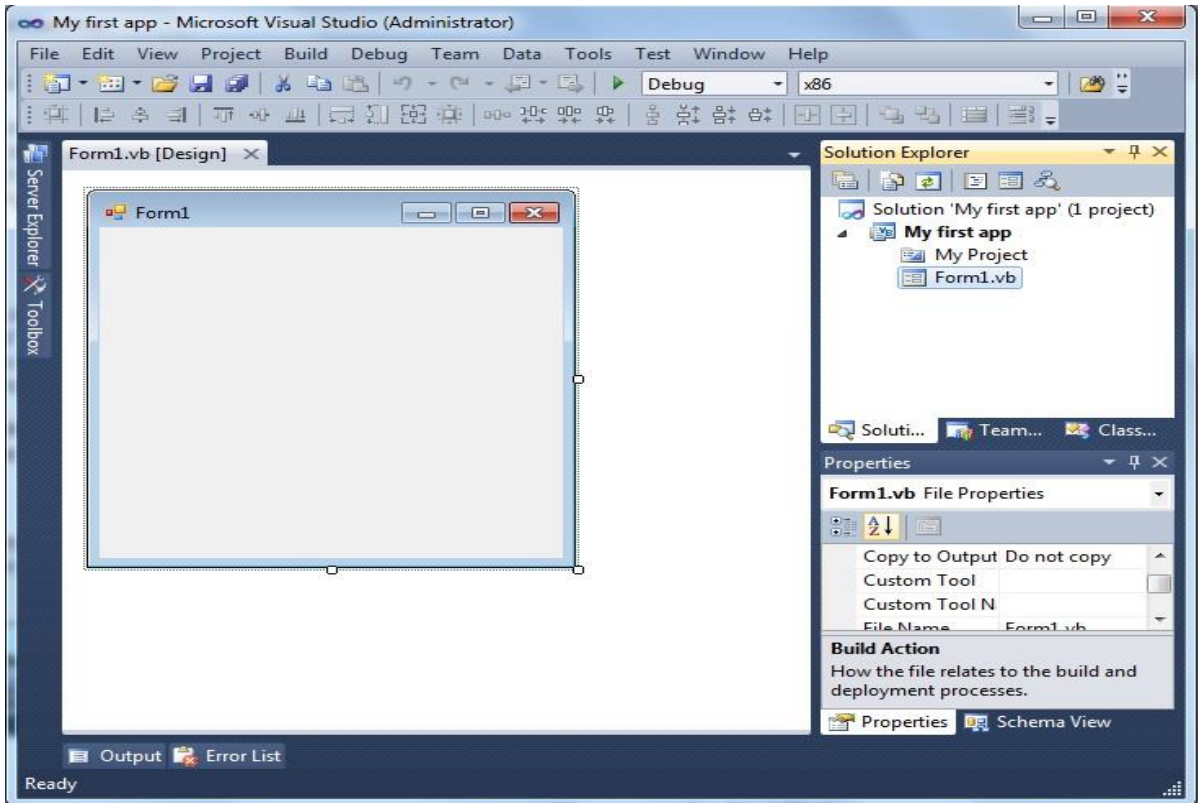
Figure 3

➢ Saving and Running a Project

To save a project, use **File-Save**. AVOID using **File-Save As**. You can click the **Save All** button on the tools bar. This will save all files in the project.

To run project there are several ways. Use the **Debug menu**, **Start Debugging** option, or press **F5 function key** to run the project, or **Click the shortcut green arrow** on the shortcut toolbar.

➢ Naming Rules and Conventions

Visual Basic automatically assigns a value to the Name property of each control by default, for example, Label1, Label2 or TextBox1, TextBox2 or Button1, Button2, etc. However, it is difficult to remember the difference between them so, it is best to rename them to a more meaningful name.

- An object name can begin with an uppercase letter or with "underscore" character.
- An object name can include letters, digits, and underscores.
- An object name CANNOT include a space or a punctuation mark.
- An object name CANNOT be a VB reserved word such as Button, Close, etc.
- Select object names that are meaningful.

- There are different types of rules for writing name of an object name. In this course we will use Hungarian Naming rules.

Figure 4: Examples of valid Hungarian Naming Conventions:

		Hungarian Naming Conventions
Form	Frm	FrmMain, FrmStudent, FrmTeachers
TextBox	Txt	txtName, txtMajor
Button	Btn	btnShipping, btnExit, btnReset
Label	Lbl	lblName, lblOutput
Listbox	Lst	LstName
Image	Img	ImgBox
Option Button	Opt	OptSelect

➤ Adding Program Code

Most VB objects may have code (programs) attached to it. When the user clicks on the object, VB will execute this program. *Double click on any objects on the form (at design time) will transfer system to another window (View Code Window or Editor Window).* You can also access the code view from the *View menu or the View icon in the Solution Explorer window*. Each procedure should begin with:

Private Sub object name_Events name ( ) ………….   Header Line

VB commands and statements here ………………

End Sub

Notes :

* Commands are the lines of code you type in order to perform what you desire.
* A header line begins with optional keyword **Private** and must contain the keyword **Sub**. Private Sub & End Sub are key words automatically included by VB.
* For event procedures, the name consists of *object identification*, an underscore *(_)*, a *valid event* for the specific object, **parameters** between parentheses, the keyword *Handle* followed by *object identification*, *dot Character*, and a *valid event*.
* A Remark statement is a line of code shown in green. It is used to document your program code. Remarks are very useful for large programs. Remark statements are non-executable. In VB you can begin your comments or any remark statement with an apostrophe (').

* Often you will need to switch between View Designer and View Code Windows. **Click** one of the tabs to display either the View Designer or View Code windows, **Click** the View Code icon in the Solution Explorer to open the coding window, **Click** the View Designer icon in the Solution Explorer to display the form for additional design layout, or **Click** the View menu and select either the Code or Designer submenu options.

* VB also provides an Auto List Members feature (Editor-Intellisense). This feature presents a drop-down list of available members (such as properties and methods). It is use to accelerating your typing and help you when you aren't sure which property or method are available for a specific control.
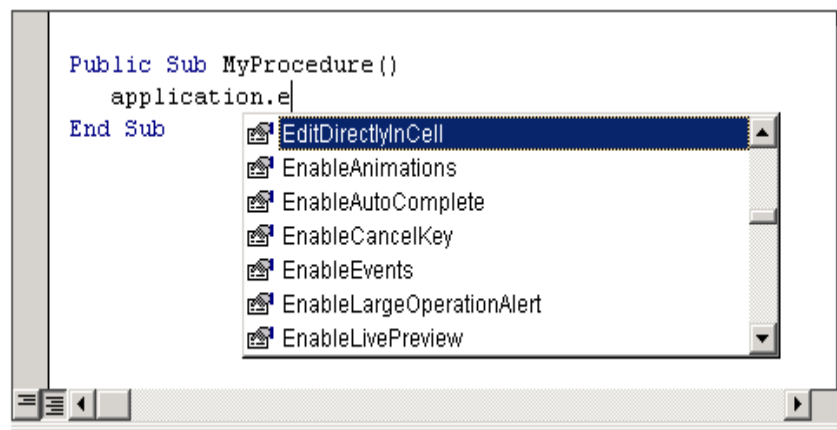
```
Public Sub MyProcedure()
    application.e
End Sub       EditDirectlyInCell
              EnableAnimations
              EnableAutoComplete
              EnableCancelKey
              EnableEvents
              EnableLargeOperationAlert
              EnableLivePreview
```

Figure 5