* 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.

Start Page - Microsoft Visual St	tudio			Quick Launch (Ctrl+Q)
	FEAM SQL TOOLS TEST ARCHITECTURE #	analyze window help		
Toolbox 👻 🕈 🛪	Start Page → ×			Code Analysis
Search Toolbox				Analyze - Search
▲ General		L	ATEST NEWS	-
There are no usable controls in	Ultimate 2012	GET STARTED	HOW-TO VIDEOS (STREAMING)	
this group. Drag an item onto this				
text to add it to the toolbox.		videos:	hese short streaming	
	Start	videos:		
	New Project	The second secon	How to multi-task	
	Open Project	with unit tests and fakes	with My Work	
	Connect to Team Foundation Server			
		層 Using Code Review	E Collecting and	
	Recent	to improve quality	analyzing data in	
			production	
		P Understand your	T Visualize the impact	· ·
	Error List			
	🔻 👻 0 Errors 👍 0 Warnings 🕕 0 Messa	ges	Search Error List	φ - Q
	Description	File	Line Column Proj	ect
				Code Analysis Solution Explorer Team

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

Recent Templates		.NET Fra	mework 3.5 • Sort by:	Default	_	- Search Installed Tem 🔎
Installed Templates					*	Type: Visual Basic
Visual Basic		V B	Windows Forms Application	i Visual Basic		A project for creating an application with a
 Visual C# Visual C++ 		VB (WPF Application	Visual Basic		Windows user interface
 Other Project Type Database Test Projects 	s		Console Application	Visual Basic	ш	
Online Templates			ASP.NET Web Application	Visual Basic		
		Ув	Class Library	Visual Basic		
			ASP.NET MVC 2 Web Applic	Visual Basic		
		VB	Silverlight Application	Visual Basic		
		VB ARKA	Silverlight Class Library	Visual Basic	Ŧ	
Name:	WindowsApplic	ation3				
Location:	D:\L\			•		Browse
Solution name:	WindowsApplic	ation3				Create directory for solution Add to source control

- 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.

🗙 My first app - Microsoft Visual Studio (Administrator)	
File Edit View Project Build Debug Team Data Tools Test Window He	lp
 [1] * ● * ● * ● * ● * ● * ● * ● * ● * ● Debug * * [1] * ● * ● * ● * ● □ □ ● * ● * ● * ● * ● *	
Form1.vb [Design] X	Solution Explorer Solution My first app' (1 project) Solution 'My first app' (1 project) My first app My Project Form1.vb Form1.vb Form1.vb Form1.vb Form1.vb File Properties Solution Copy to Output Do not copy Custom Tool Custom Tool Cust
Ready	



Saving and Running a Project

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

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

		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

Figure 4: Examples of valid Hungarian Naming Conventions:

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.

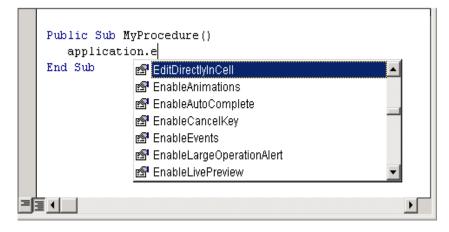


Figure 5