# Chapter 2 - Introduction to the Visual Studio .NET IDE

## <u>Outline</u>

- 2.1 Introduction
- 2.2 Overview of the Visual Studio .NET IDE
- 2.3 Menu Bar and Toolbar
- 2.4 Visual Studio .NET IDE Windows
  - 2.4.1 Solution Explorer
  - 2.4.2 Toolbox
  - 2.4.3 Properties Window
- 2.5 Using Help
- 2.6 Simple Program: Displaying Text and an Image



# **2.1 Introduction**

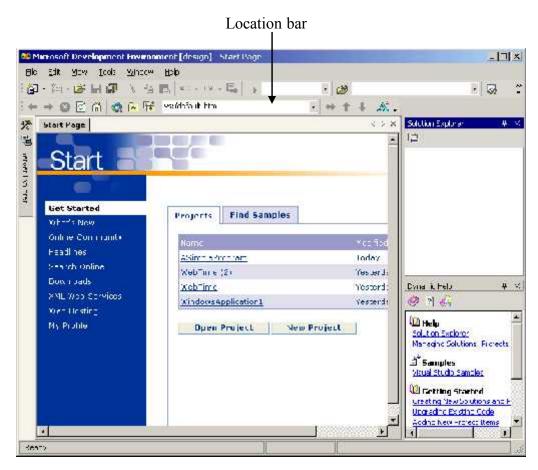
- Visual Studio .NET
  - Microsoft's Integrated Development Environment (IDE)
  - Used to create, run and debug programs (applications)
- Visual programming
  - Dragging and dropping predefined building blocks into place to create a simple Visual Basic program



# 2.2 Overview of the Visual Studio .NET IDE

- Start Page
  - Helpful links to get around
    - Get Started
    - What's New
    - Downloads
    - My Profile
  - Displays recent projects
  - Displays Open Project and New Project buttons





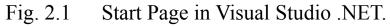




Image: Setup and Deployment Projects       Windows       Class Library         Image: Setup and Deployment Projects       Image: Setup and Deployment Projects       Image: Setup and Deployment Projects         Image: Setup and Deployment Projects       Image: Setup and Deployment Projects       Image: Setup and Deployment Projects         Image: Setup and Deployment Projects       Image: Setup and Deployment Projects       Image: Setup and Deployment Projects         Image: Setup and Deployment Projects       Image: Setup and Deployment Projects       Image: Setup and Deployment Projects         Image: Setup and Deployment Projects       Image: Setup and Deployment Projects       Image: Setup and Deployment Projects         Image: Setup and Deployment Projects       Image: Setup and Deployment Projects       Image: Setup and Deployment Projects         Image: Setup and Deployment Projects       Image: Setup and Deployment Projects       Image: Setup and Deployment Projects         Image: Setup and Deployment Projects       Image: Setup and Deployment Projects       Image: Setup and Deployment Projects         Image: Setup and Deployment Projects       Image: Setup and Deployment Projects       Image: Setup and Deployment Projects         Image: Setup and Deployment Projects       Image: Setup and Deployment Projects       Image: Setup and Deployment Projects         Image: Setup and Deployment Projects       Image: Setup and Deployment Projects       Image: Setup and Deployment Projects<	Windows Control Library
ASP.NET Web ASP.NET Web Application Service	Web Control Library
A project for creating an application with a Windows user interface Name: WindowsApplication1	
Location: C:\My Documents	Browse
Project will be created at C:\My Documents\WindowsApplication1.	





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### Fig. 2.3 Design view of Visual Studio .NET IDE.



#### <u>File Edit Yiew Project Build Debug Data Format Tools Window Help</u>

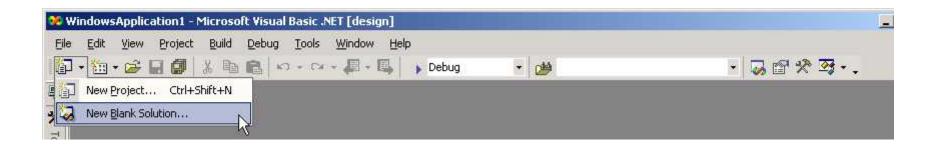
#### Fig. 2.4 Visual Studio .NET IDE menu bar.



Menu	Description
File	Contains commands for opening projects, closing projects, printing project data, etc.
Edit	Contains commands such as cut, paste, find, undo, etc.
View	Contains commands for displaying IDE windows and toolbars.
Project	Contains commands for managing a project and its files.
Build	Contains commands for compiling a program.
Debug	Contains commands for <i>debugging</i> (i.e., identifying and correcting problems in a program) and running a program.
Data	Contains commands for interacting with <i>databases</i> (i.e., files that store data, which we discuss in Chapter 19, Databases, SQL and ADO .NET).
Format	Contains commands for arranging a form's controls.
Tools	Contains commands for accessing additional IDE tools and options that enable customization of the IDE.
Windows	Contains commands for arranging and displaying windows.
Help	Contains commands for accessing the IDE's help features.
<b>Fig. 2.5</b> Su	mmary of Visual Studio .NETIDE menus.

### Fig. 2.5 Summary of Visual Studio .NET IDE menus.





#### Fig. 2.6 Toolbar demonstration.



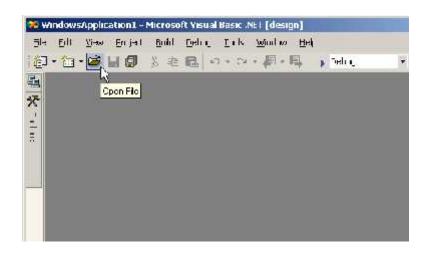


Fig. 2.7 Tool tip demonstration.



Fig. 2.8 Toolbar icons for three Visual Studio .NET IDE windows.



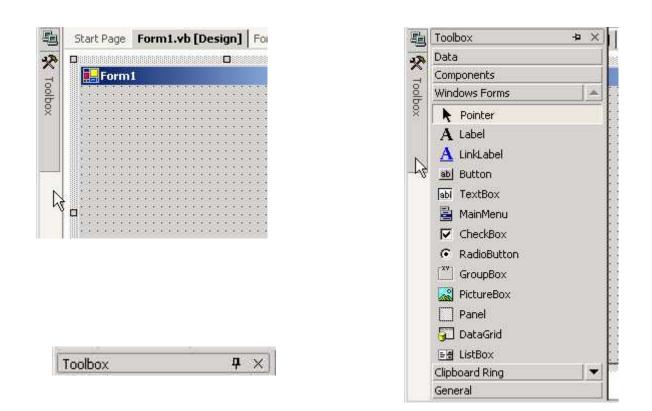


Fig. 2.9 Demonstrating the auto-hide feature.



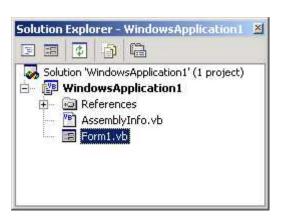


Fig. 2.10 Solution Explorer with an open solution.

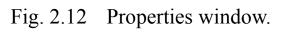






Toolbox window.

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Command	Description
Contents	Displays a categorized table of contents in which help articles are organized by topic.
Index	Displays an alphabetized list of topics through which the programmer can browse.
Search	Allows programmers to find help articles based on search keywords.
Fig. 2.13 Help	) menu commands.

Fig. 2.13 Help menu commands.



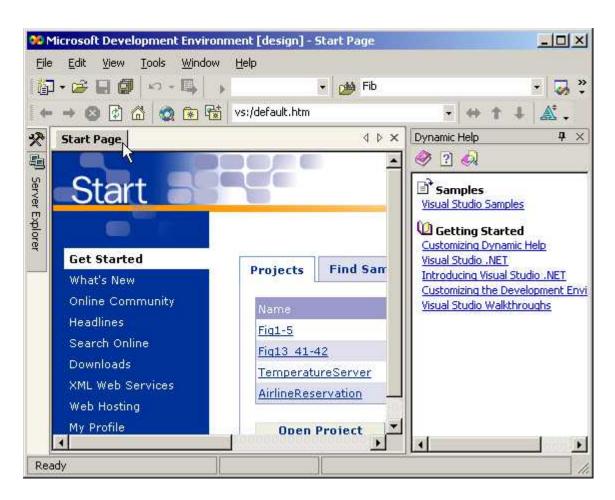
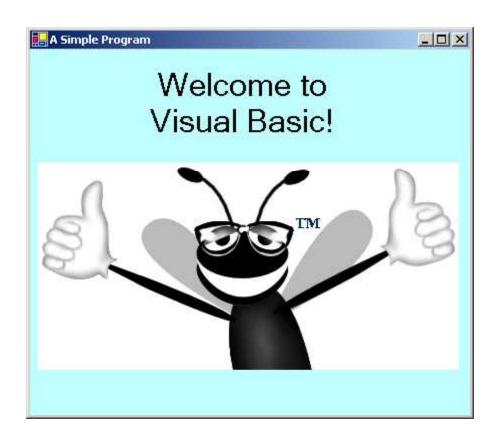
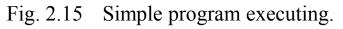


Fig. 2.14 Dynamic Help window.







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Project Types:		Templates:	000
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A project for cre	sating an application with a Win	dows user interface	
Jame:	ASimpleProgram		
ocation:	C:\MyProjects	•	Browse
Project will be cro	eated at C:\MyProjects\ASimple	eProgram.	
- 9403	- I	OK Cancel	Help

Fig. 2.16 Creating a new Windows Application.



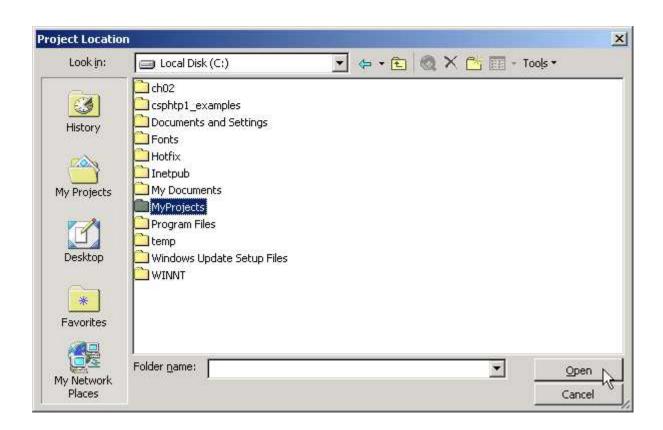


Fig. 2.17 Setting the project location in the Project Location dialog.



Properties Form1 System.Window	Form1 System.Windows.Forms.Form								
FormBorderStyle	Sizable	٠							
RightToLeft	No	1000							
Text	A Simple Program								
🗄 Behavior									
AllowDrop	False								
ContextMenu	(none)	-							
Text The text contained in the	e control.								

Fig. 2.18 Setting the form's Text property.



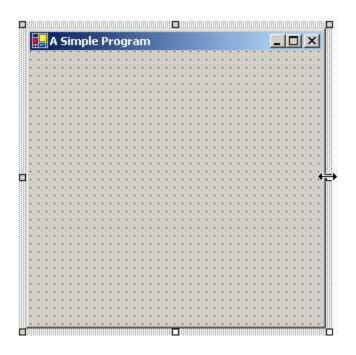


Fig. 2.19 Form with sizing handles.



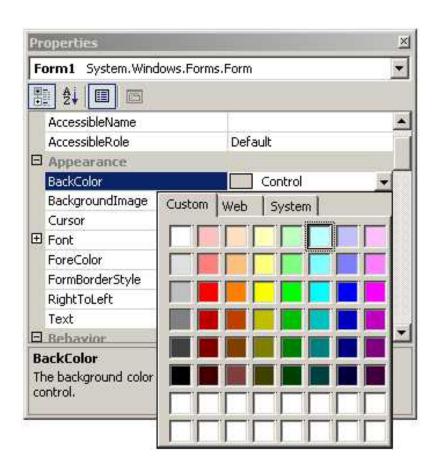


Fig. 2.20 Changing the form's BackColor property.



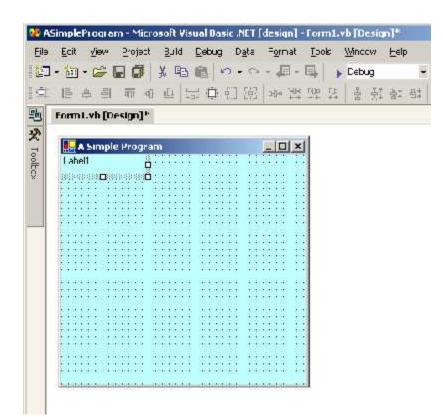


Fig. 2.21 Adding a label to the form.



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Fig. 2.22 Label in position with its Text property set.



Properties	2
Label1 System.Win	dows.Forms.Label
Cursor	Default
FlatStyle	Standard
🗄 Font	Microsoft Sans Serif, 8.25pt 🔜
ForeColor	ControlText
Image	(none)

Fig. 2.23 Properties window displaying the label's properties.



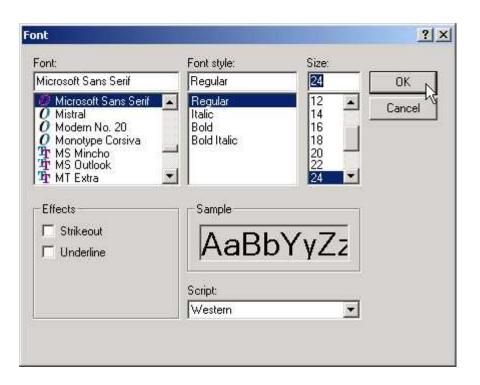


Fig. 2.24 Font window for selecting fonts, styles and sizes.



Properties	
Label1 System. Windows. Form	s.Label 🔤
11 di 🗐 🖻	
Text	Welcome to Visual Basic!
TextAlign	TopLeft 👻
UseMnemonic	
🛛 Behavior	
AllowDrop	
TextAlign Determines the position of the te	

Fig. 2.25 Centering the label's text.



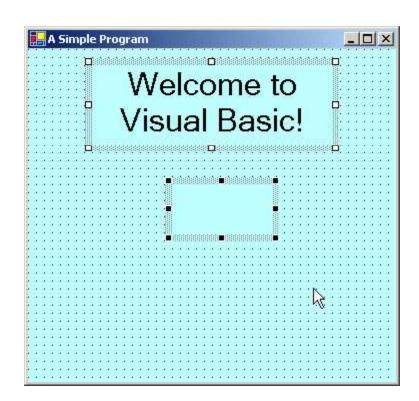


Fig. 2.26 Inserting and aligning the picture box.



Properties	
PictureBox1 System	1.Windows.Forms.PictureBox 🗾 🝷
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BorderStyle	None
Cursor	Default
Image	(none)
Behavior	
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Fig. 2.27 Image property of the picture box.



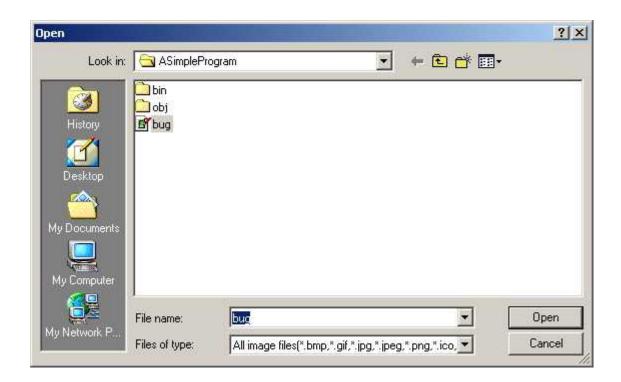
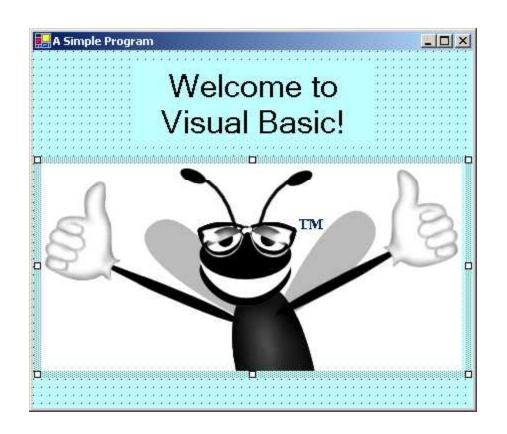
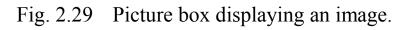


Fig. 2.28 Selecting an image for the picture box.









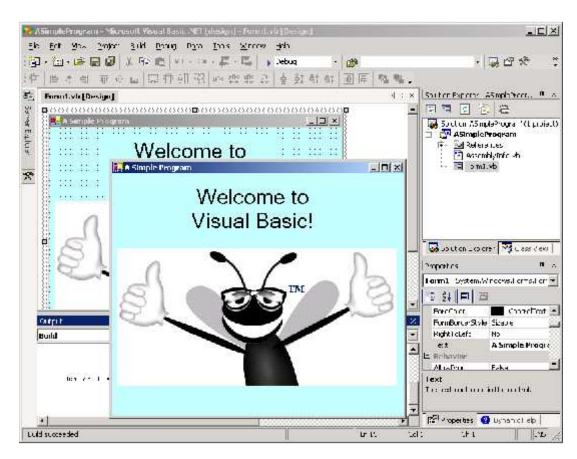


Fig. 2.30 IDE in run mode, with the running application in the foreground.

