Visual Studio .NET

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Edition: 2.0 (matches V2)
Printing: August 6, 2005

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1 Introduction

The on-line help facility for Visual Studio .NET contains a lot of useful information about using that tool. However, that information really isn't organized in a tutorial fashion, and no source examples are supplied for testing. The information contained in this document, along with the accompanying demonstration files, is intended to get people "up to speed" with the Visual Studio .NET IDE in a day, assuming they have a working knowledge of using Windows-based programs.

Visual Studio .NET is intended to provide a single integrated development environment for the development of software in a Microsoft Windows environment. Prior to the release of this product, different versions of the IDE existed for Visual Basic, Visual C++, and Visual J++, each with its own text editor, debugger, idiosyncrasies, strengths, and weaknesses.

Before staring this tutorial you should create a directory called VSNET and copy all of the associated files to that directory.

Lines beginning with ■ indicate actions you should perform.

All mouse click instructions assume the mouse is configured for right-hand use.

2 Getting Started

2.1 Menu Basics

- Start Visual Studio .NET by selecting it from an icon on the desktop, an item in the Start menu, or from the Start menu item Programs.
- Close all windows that appear except for the main one, which you should maximize.

  The top left of the display should look like the following (it may contain other things too, but you can ignore those for now):

The names File, Edit, View, Tools, Window, Community, and Help indicate *menus*, and they are attached to an invisible horizontal *menubar*. Menus contain *items*, and an item may be a *submenu* which, in turn, contains other items, some of which are submenus, and so on. In different operating modes, the menubar may have other menus as well as, or instead of, those shown above.

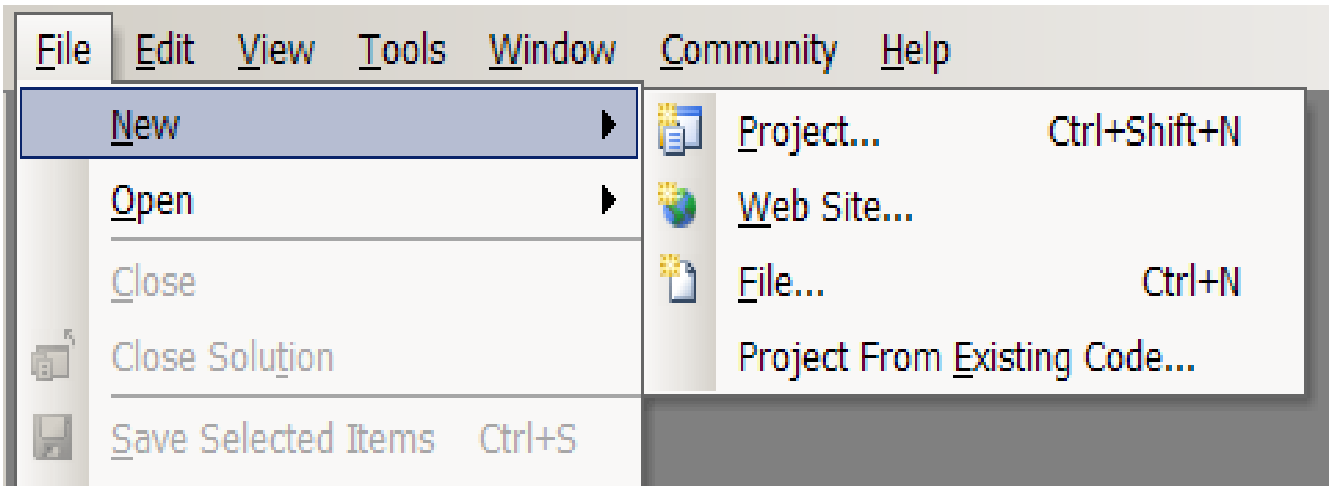
- Right-click anywhere on the menubar, and in the list that is displayed, clear each item that is checked. (You must clear them one at a time.) Note that the list may exceed the height of your screen, in which case, you need to position the mouse over the black down-arrow at the bottom of the list to scroll down.
- Select the following menu and submenu items in order: Tools, Options, Environment, and Startup. (In future, such a menu selection will be written as Tools|Options|Environment|Startup.) From the At startup: listbox chose Show empty environment. This ensures that the IDE starts out empty next time it is run.
- Close the options window.

If any tabs appear against the left or right edge (such as the Server Explorer window), hover over each tab in turn, right-click that tab's window taskbar, clear Auto Hide, and close that window,

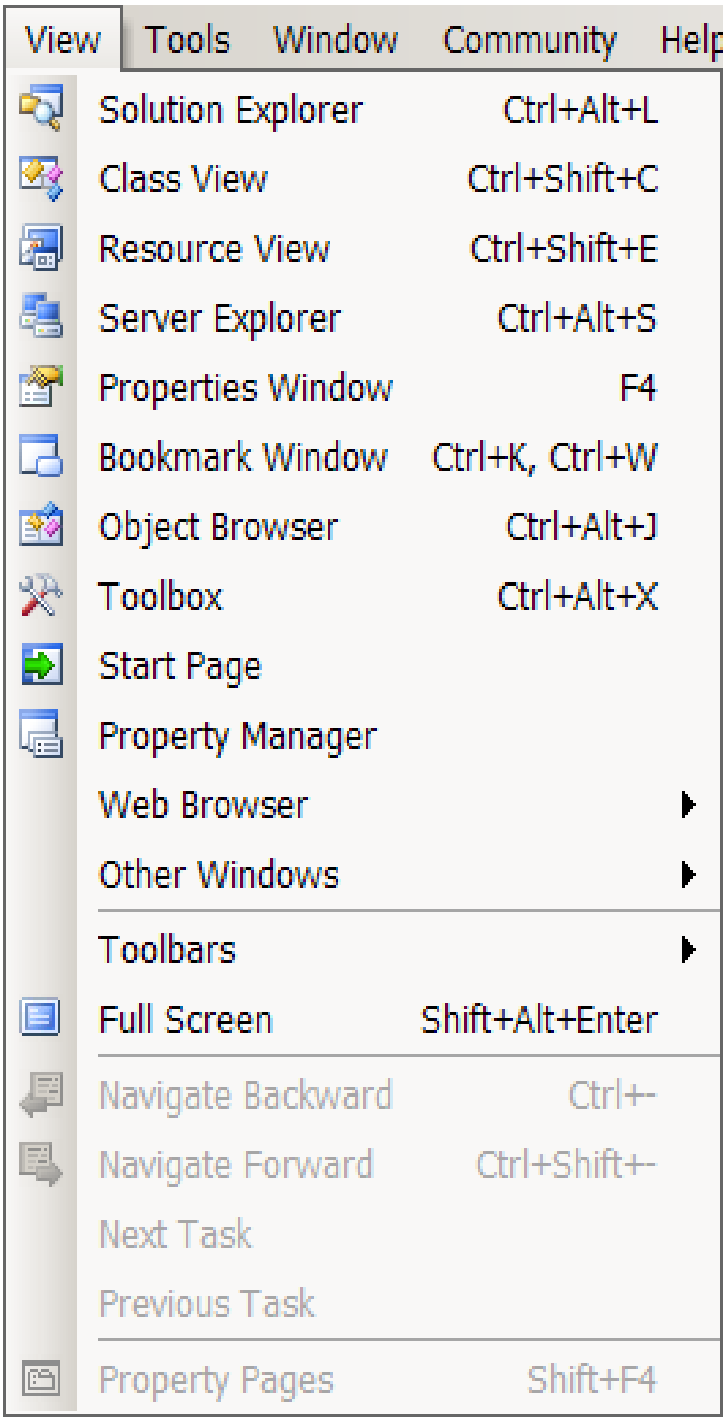
Now the screen should contain only the menubar, as shown above. (The letters are only underlined if the Alt key is pressed.)

A menu can be displayed either by clicking it or by typing the Alt key followed by the menu's underlined letter key which, for File, is F, for Edit is E, and so on. The underlined letter is called a *shortcut*, and can be entered in either upper- or lowercase.

- Select the File menu with the mouse, and hold the cursor over the menu item New. The display should look as follows, with each black triangle pointing to a corresponding submenu:



- The menu items displayed at half intensity (such as Close and Print) are currently disabled. Drag the mouse down the File menu's item list noting that only enabled items are highlighted as the mouse cursor passes over them.
- Press the Esc key once for each nested menu level to be closed.
- Create the same File menu display by using the Alt key and the appropriate shortcuts.
- Use the up- and down-arrow keys to traverse the File menu's item list noting that the boxes around disabled items are not filled with color. Use the right- and left-arrow keys to enter and leave a submenu, respectively.
- Display the View menu; it should look like this:

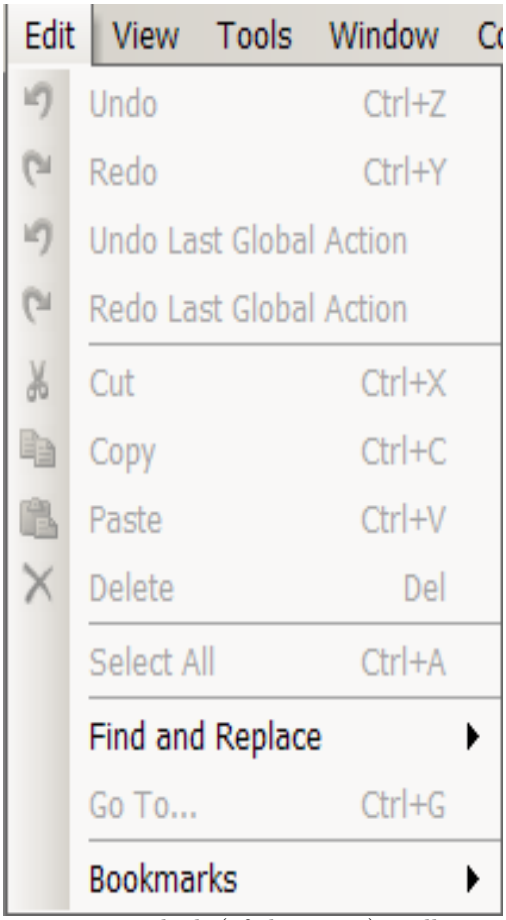


Some of the menu items contain shortcuts. For example, Ctrl+Alt+L is the shortcut for Solution Explorer, while F4 is the shortcut for Properties Window. Menu item shortcuts are unique across all menus. These shortcuts can only be used when all menus are closed. Using shortcuts for disabled items has no affect.

- The IDE supports multiple sets of shortcut key mappings for backward compatibility with earlier versions of Visual Basic and Visual C++. To ensure that the shortcuts that appear on your system match those shown in this tutorial, you need to set the shortcut scheme to that for Visual Studio .NET. Do this by selecting Tools|Options|Environment|Keyboard, and setting Apply the following additional keyboard mapping scheme: to (Default) Setting].
- With all menus closed, test the two shortcuts mentioned above, in turn, closing the window that results for each one.

2.2 Toolbar Basics

The left margin of some menu items shows the corresponding toolbar button that can be used to achieve the same purpose. (Toolbars will be discussed later.) For example, a number of the Edit menu items contain such buttons:



Note, however, that no indication is given as to which (of the many) toolbars actually contains that button.

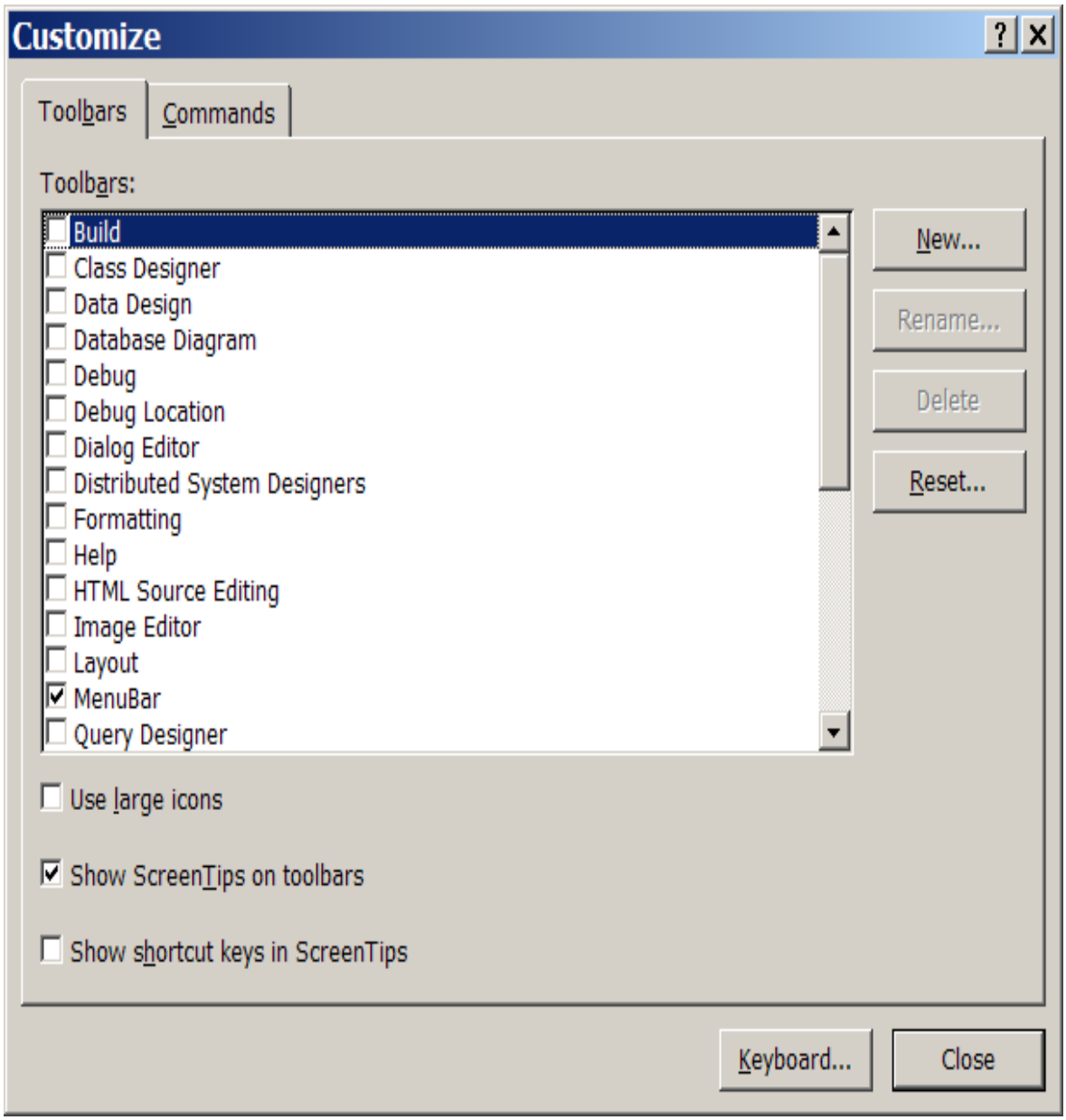
A *toolbar* is a horizontally or vertically arranged set of selectable options, most of which are generally buttons. (Such buttons are often referred to as *commands*). There are more than 20 predefined toolbars with each one containing options having some related purpose. For example, the Text Editor toolbar contains options to assist with editing text.

As you saw earlier, the toolbar menu can be displayed by right-clicking anywhere on the menubar. An alternate approach is to use View|Toolbars. When all toolbar menu items are unchecked it should look like the following[1] (the tall menu has been broken into three parts to fit this page):

[1]Some versions of Developer Studio .NET contain more toolbars than others, since they provide more features.

- Check some items in the toolbar menu and note what happens. Each will result in a corresponding toolbar's being displayed in one of a number of locations. (You'll learn how to control the shape and location of toolbars in §2.5.)
- Uncheck all toolbar menu items.

An alternate way to enable and disable toolbars is via Tools|Customize and the tab Toolbars, which results in the following display:



- Note that the menubar is listed as a toolbar; however, this toolbar cannot be hidden.
- Hide all other toolbars except for Standard. If this toolbar seems to be floating around in its own window, drag that window upward until it attaches itself to the bottom of the menubar. If this toolbar is already attached to the bottom or side edges of the main window, select the line of gray dashes on the top (or left) end and drag the toolbar upward until it attaches itself to the bottom of the menubar. The top left corner of the main window should look like this:

Toolbar options that are disabled are displayed in gray.