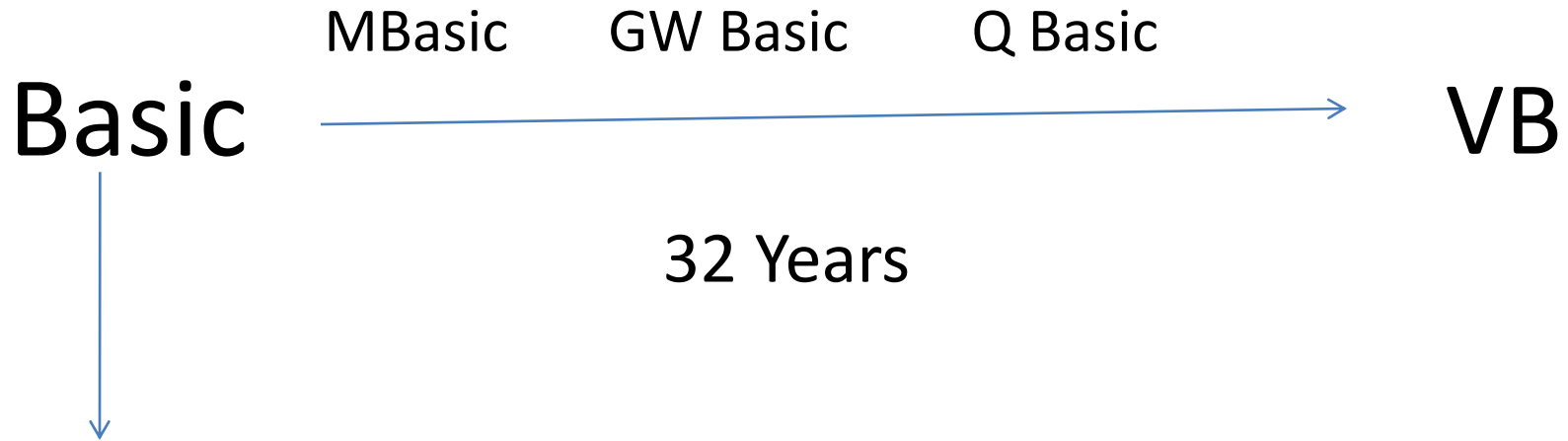


# **Learn Visual Basic 6.0**

Beginners All Purpose Symbolic  
Instruction Code



# Definition of Visual Basic

Visual Basic is a powerful windows programming language that has been developed by Microsoft Corporation . Visual Basic is a powerful language to develop windows application very quickly . It is one of the rapid application development tools that lets the programmer develop windows application very easily . Visual basic is a originally developed from a computer language called basic. The basic was a text based language , means there was no graphical facility as it is in windows.

# Some Features of Visual Basic

- ▷ Full set of objects - you 'draw' the application
- ▷ Lots of icons and pictures for your use
- ▷ Response to mouse and keyboard actions
- ▷ Clipboard and printer access
- ▷ Full array of mathematical, string handling, and graphics functions
- ▷ Can handle fixed and dynamic variable and control arrays
- ▷ Sequential and random access file support
- ▷ Useful debugger and error-handling facilities
- ▷ Powerful database access tools
- ▷ ActiveX support
- ▷ Package & Deployment Wizard makes distributing your applications simple

# Visual Basic 6.0 versus Other Versions of Visual Basic

The original Visual Basic for DOS and Visual Basic For Windows were introduced in 1991.

- Visual Basic 3.0 (a vast improvement over previous versions) was released in 1993.
- Visual Basic 4.0 released in late 1995 (added 32 bit application support).
- Visual Basic 5.0 released in late 1996. New environment, supported creation of ActiveX controls, deleted 16 bit application support.
- And, now Visual Basic 6.0 - some identified new features of Visual Basic 6.0:
  - ▷ **Faster compiler**
  - ▷ **New ActiveX data control object**
  - ▷ **Allows database integration with wide variety of applications**
  - ▷ **New data report designer**
  - ▷ **New Package & Deployment Wizard**
  - ▷ **Additional internet capabilities**

## 16 Bits versus 32 Bits

- Applications built using the Visual Basic 3.0 and the 16 bit version of Visual Basic 4.0 will run under Windows 3.1, Windows for Workgroups, Windows NT, or Windows 95
- Applications built using the 32 bit version of Visual Basic 4.0, Visual Basic 5.0 and Visual Basic 6.0 will only run with Windows 95 or Windows NT (Version 3.5.1 or higher).

# Structure of a Visual Basic Application

**Project (.VBP, .MAK)**

**FORM1 (.FRM)**

**CONTROL 1**

**CONTROL 2**

**CONTROL 3**

**FORM 2 (.FRM)**

**CONTROL 1**

**CONTROL 2**

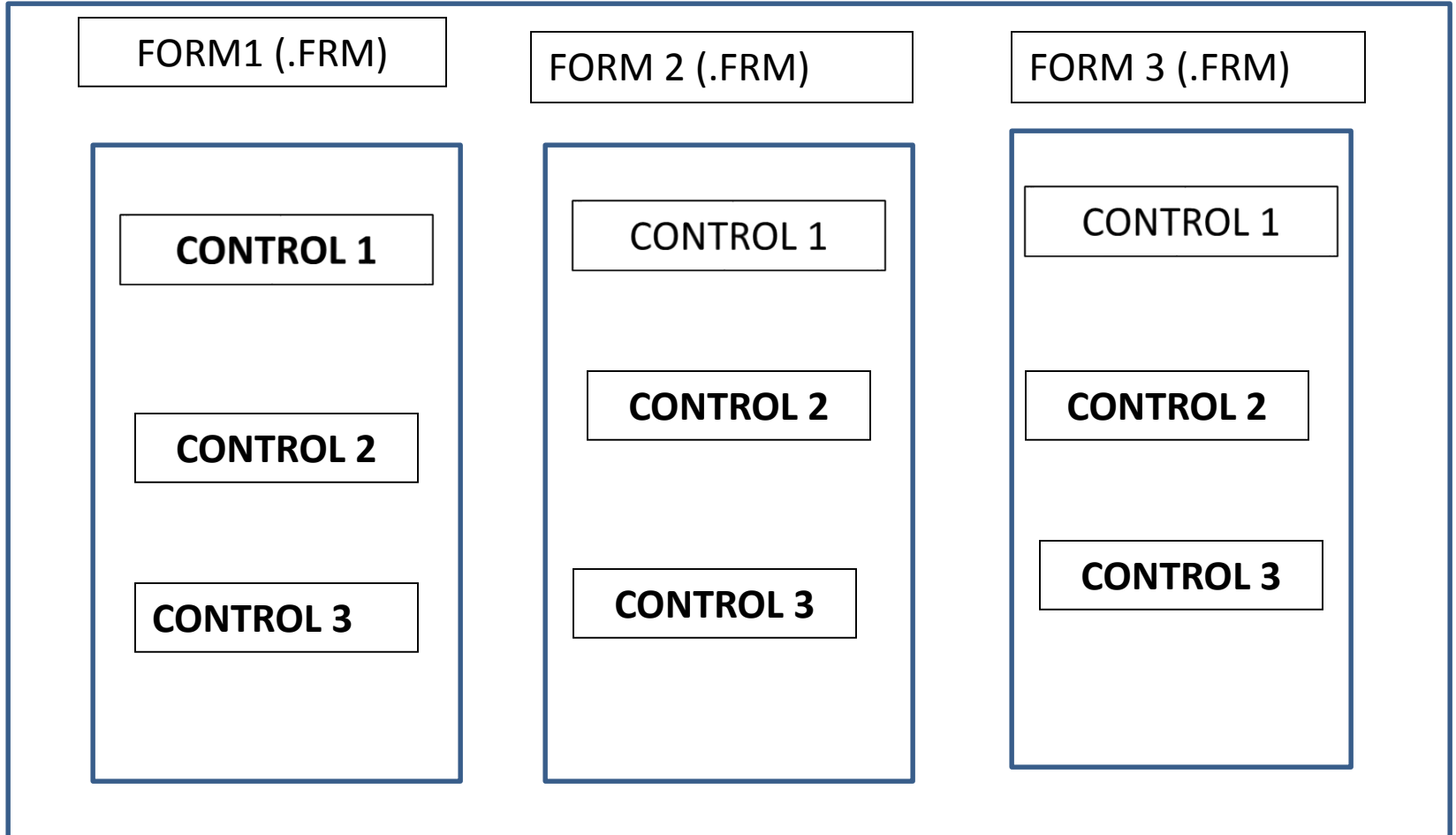
**CONTROL 3**

**FORM 3 (.FRM)**

**CONTROL 1**

**CONTROL 2**

**CONTROL 3**



# Application (Project) is made up of:

**Forms** - Windows that you create for user interface

▷ **Controls** - Graphical features drawn on forms to allow user interaction (text boxes, labels, scroll bars, command buttons, etc.) (Forms and Controls are objects.)

▷ **Properties** - Every characteristic of a form or control is specified by a property. Example properties include names, captions, size, color, position, and contents. Visual Basic applies default properties. You can change properties at design time or run time.

▷ **Methods** - Built-in procedure that can be invoked to impart some action to a particular object.

▷ **Event Procedures** - Code related to some object. This is the code that is executed when a certain event occurs.

▷ **General Procedures** - Code not related to objects. This code must be invoked by the application.

▷ **Modules** - Collection of general procedures, variable declarations, and constant definitions used by application.



# Steps in Developing Application

There are three primary steps involved in building a Visual Basic application:

- 1. Draw the user interface**
- 2. Assign properties to controls**
- 3. Attach code to controls**

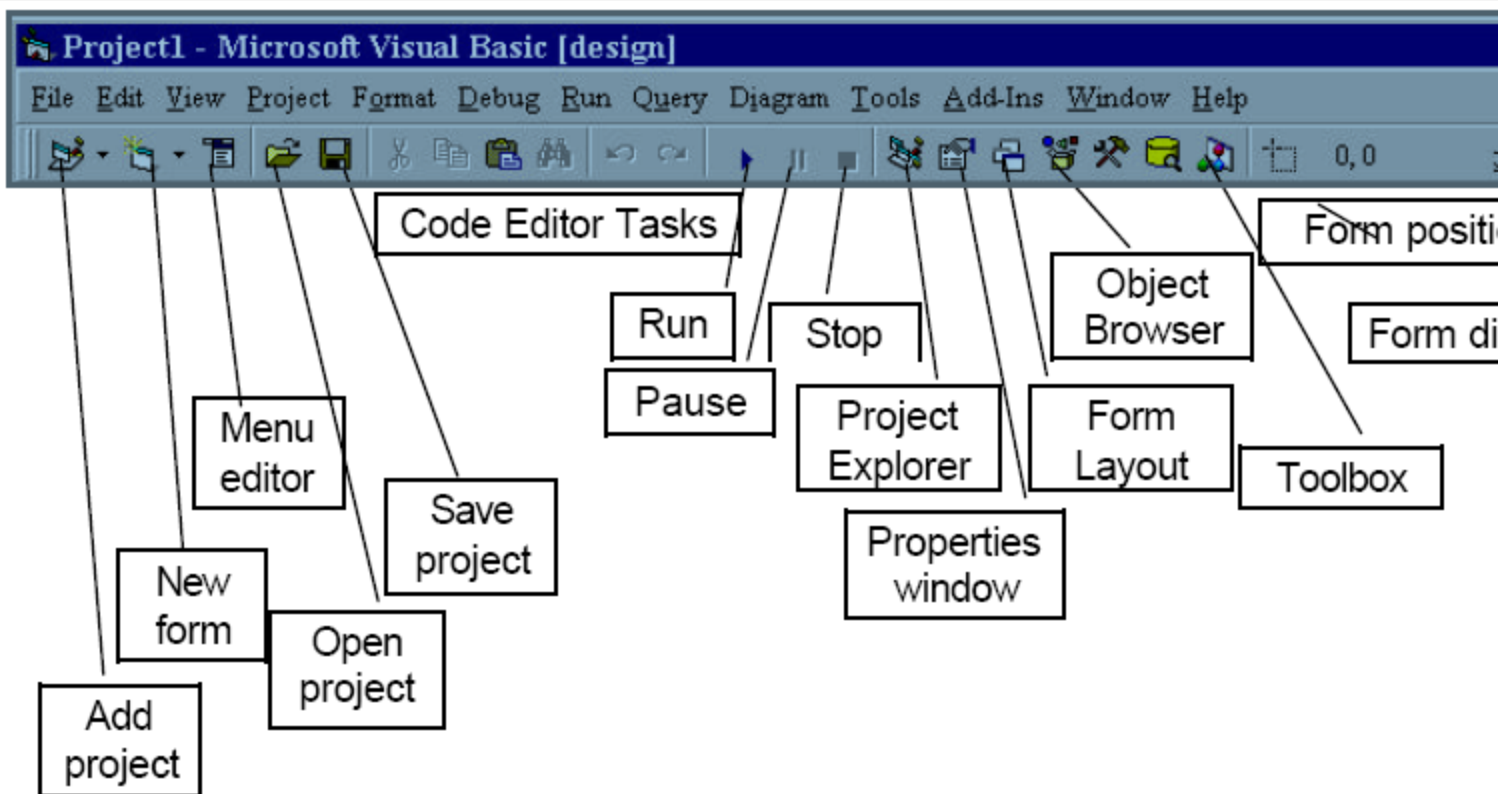
# Drawing the User Interface and Setting Properties

Visual Basic operates in three modes.

- ▷ **Design mode** - used to build application
- ▷ **Run mode** - used to run the application
- ▷ **Break mode** - application halted and debugger is available

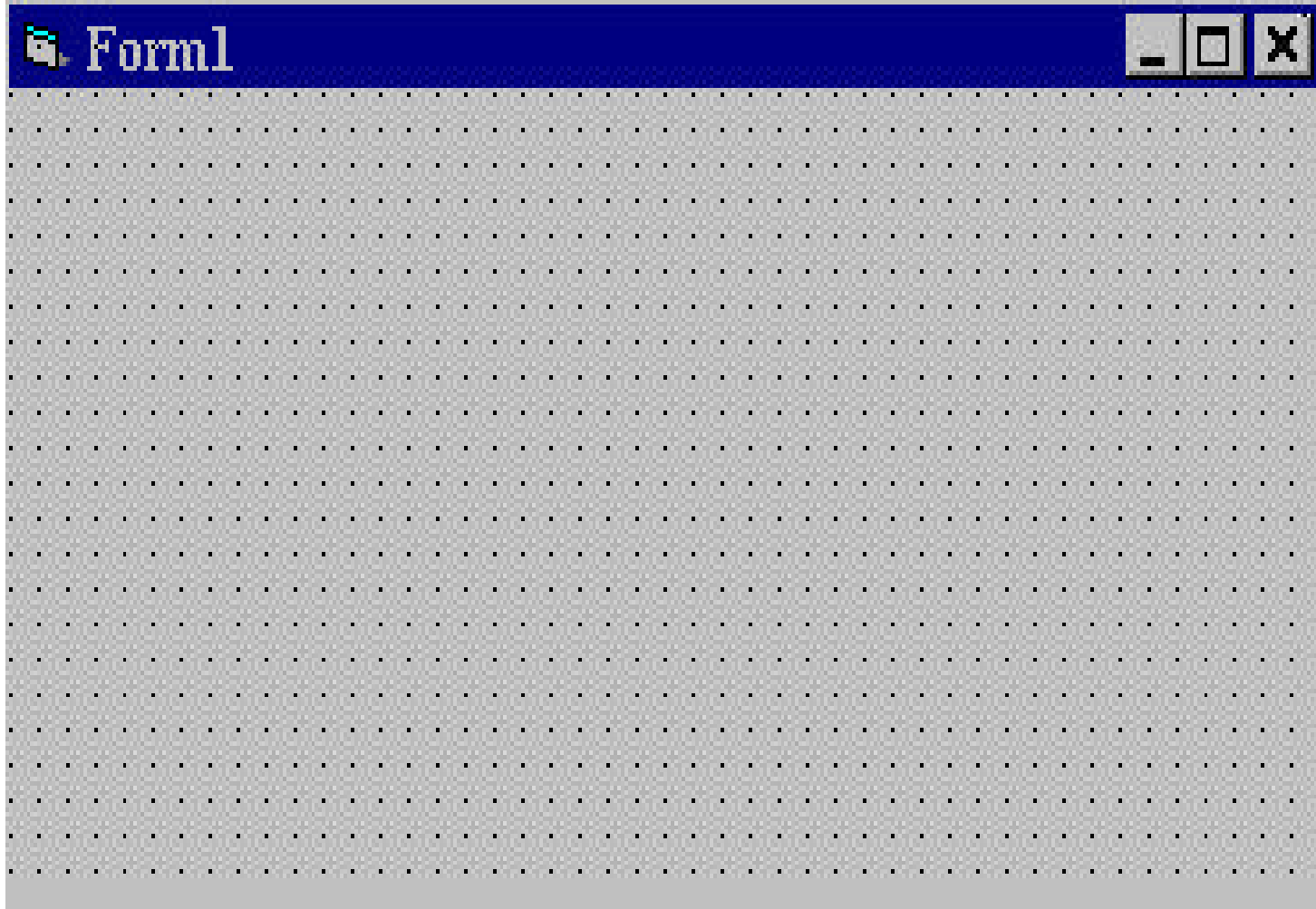
We focus here on the **design mode**.

- Six windows appear when you start Visual Basic.
- ▷ The **Main Window consists of the title bar, menu bar, and toolbar**. The title bar indicates the project name, the current Visual Basic operating mode, and the current form. The menu bar has drop-down menus from which you control the operation of the Visual Basic environment. The toolbar has buttons that provide shortcuts to some of the menu options. The main window also shows the location of the current form relative to the upper left corner of the screen (measured in twips) and the width and length of the current form.

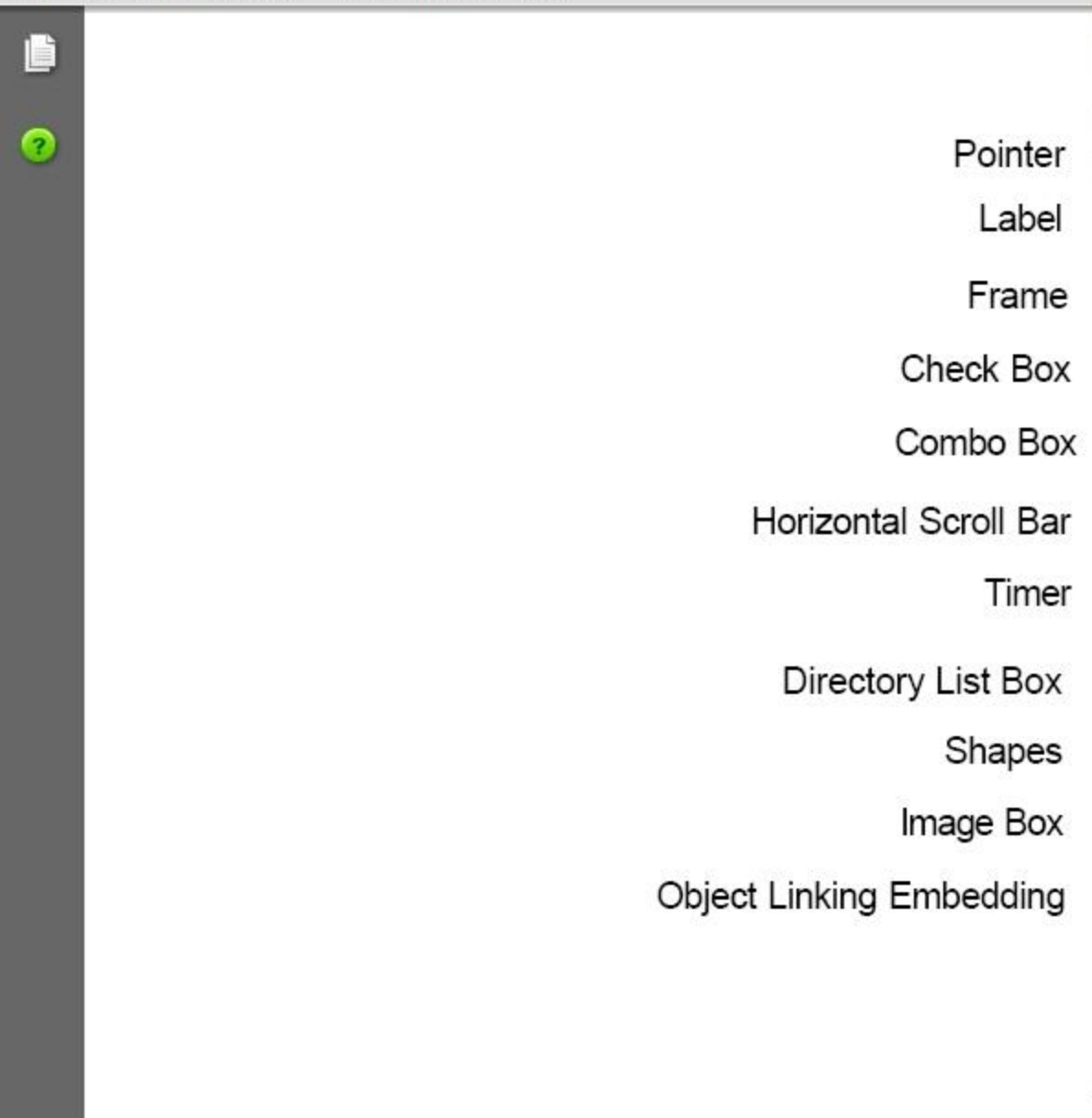


The Form Window is central to developing Visual Basic applications.

It is where you draw your application.



The Toolbox is the selection menu for controls used in your application.



General


Pointer

Label

Frame

Check Box

Combo Box

Horizontal Scroll Bar

Timer

Directory List Box

Shapes

Image Box

Object Linking Embedding

Picture Box

Text Box

Command Button

Option Button

List Box

Vertical Scroll Bar

Drive List Box

File List Box

Lines

Data Tool




The Properties Window is used to establish initial property values for objects. The drop-down box at the top of the window lists all objects in the current form. Two views are available: Alphabetic and Categorized. Under this box are the available properties for the currently selected object.

Properties - Form1



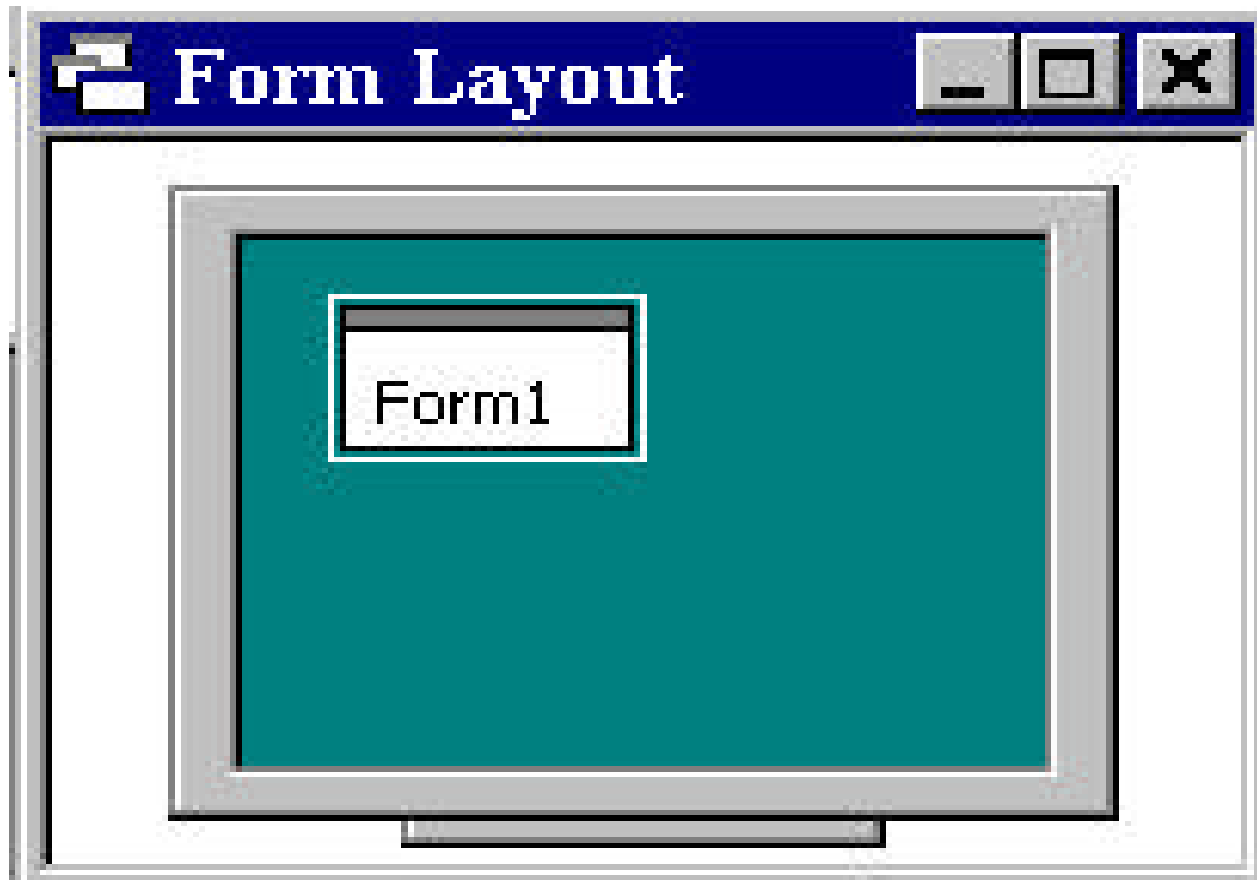
Form1 Form

Alphabetic | Categorized

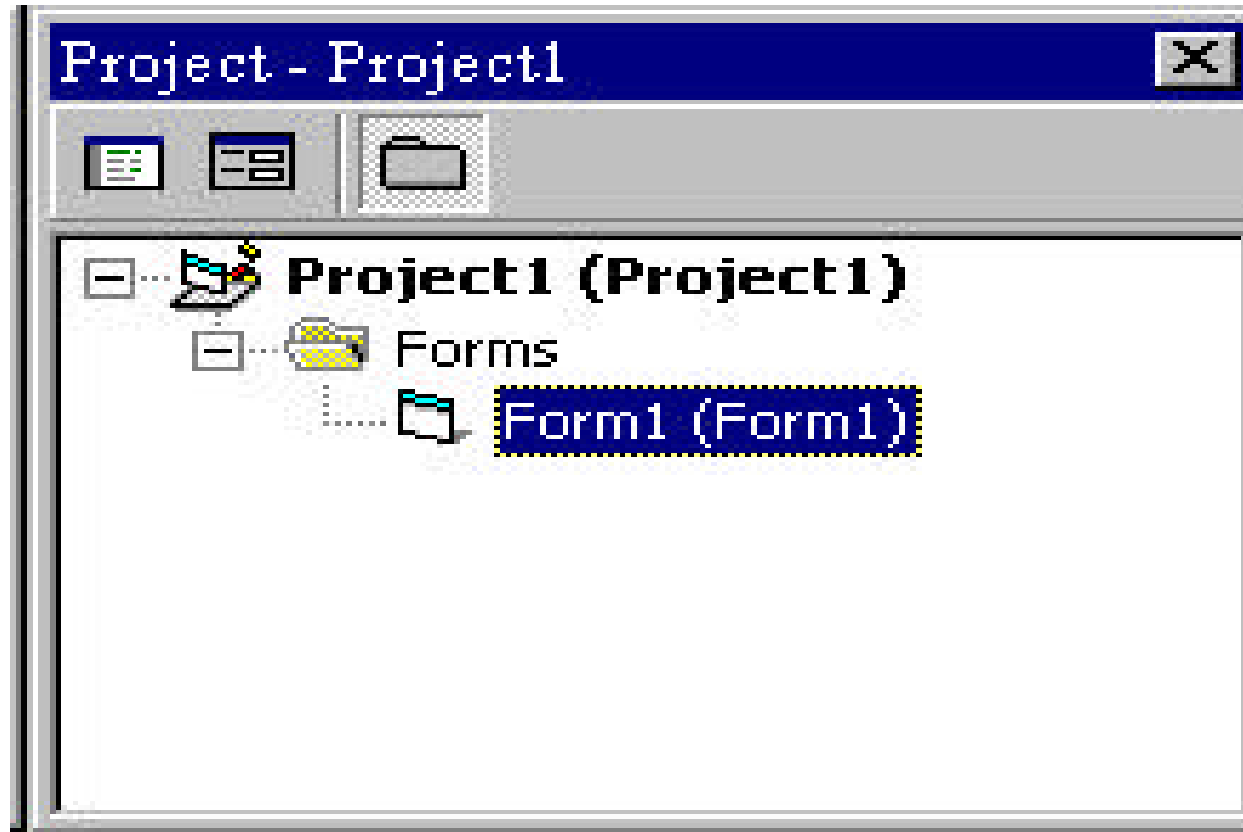
(Name)	Form1
Appearance	1 - 3D
AutoRedraw	False
BackColor	 &H80000000F&
BorderStyle	2 - Sizable
<b>Caption</b>	Form1
ClipControls	True
ControlBox	True
DrawMode	13 - Copy Pen
DrawStyle	0 - Solid
DrawWidth	1
Enabled	True
FillColor	 &H000000000&
FillStyle	1 - Transparent
Font	MS Sans Serif
FontTransparent	True
ForeColor	 &H800000012&
Height	6285
HelpContextID	0
Icon	(Icon)
KeyPreview	False
Left	0



The **Form Layout Window** shows where (upon program execution) your form will be displayed relative to your monitor's screen:



The **Project Window** displays a list of all forms and modules making up your application. You can also obtain a view of the **Form** or **Code** windows (window containing the actual Basic coding) from the Project window.



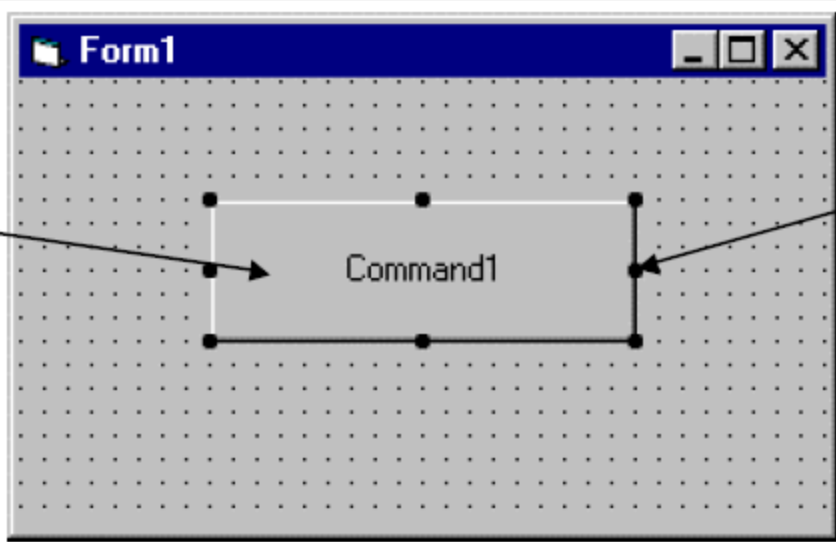
As mentioned, the user interface is 'drawn' in the form window. There are two ways to place controls on a form:

1. Double-click the tool in the toolbox and it is created with a default size on the form. You can then move it or resize it.

2. Click the tool in the toolbox, then move the mouse pointer to the form window. The cursor changes to a crosshair. Place the crosshair at the upper left corner of where you want the control to be, press the left mouse button and hold it down while dragging the cursor toward the lower right corner. When you release the mouse button, the control is drawn.

- **To move a control you have drawn, click the object in the form window and drag it** to the new location. Release the mouse button.
- **To resize a control, click the object so that it is select and sizing handles appear.** Use these handles to resize the object.

Click here



Click here to  
move object

Use sizing  
handles to  
resize object

