Principal of Computer Science

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In this lecture

- Introduction to Microsoft Visual Basic 6.0
- Elements of the Integrated Development Environment
- To Create an Application
- Toolbox Controls
- Visual Basic Operators
- Project

Introduction

Visual Basic implements graphical user interface that allows the use of graphics for different applications.

- To run this program on user computer:

Start>programs>Microsoft Visual Studio 6.0>Microsoft Visual Basic 6.0.

- To exit from Visual Basic and return to Windows :

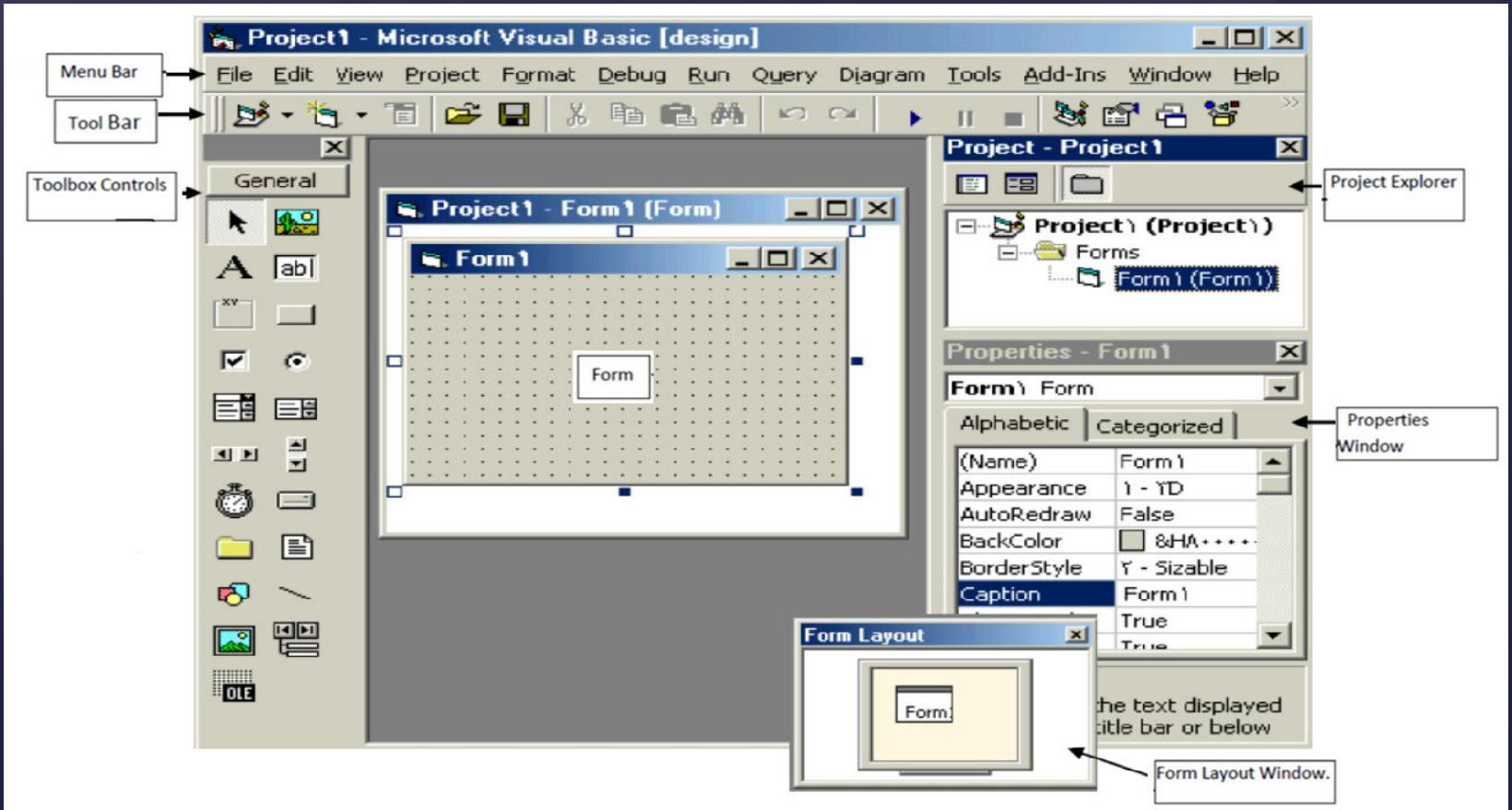
1- Click on close button icon that appears in the upper-left corner of the screen.

2- Press Alt+F4

3- Select File >Exit

Elements of the Integrated Development Environment

Some elements are displayed when Visual Basic is started (By default) as in the following figure. Other elements are displayed if the user requires them.



To Create an Application

1- Select type of project New or Exciting. A form automatically appears inthe form design .

2. To add objects (controls) to the form use the ToolBox.

3. Set the properties for the objects through properties window.

4. Write code. The Visual Basic Code consists of statements, and declarations.

5. Run the application, click the Start button on the toolbar, or press F5.

6. Stop. click on stop button in tool bar.

7. Check if there is an error, return to step 3 ,otherwise continue.

8. Save project.

9. Exit

Toolbox Controls

- To show the toolbox press

View> toolbox icon.

The user can place the tool on form, and then work with the tool.

- To place the tool on form:

click on tool>draw tool to form > the tool appears on form

or

double click on tool then the tool appears on form.

Summarizes the toolbox controls in the table below

Tool Box Control	Description
Pointer	Used to interact with controls on the form(resize them, move them, etc.). The pointer is not a control
PictureBox	A control that display images or print the result.
Label	A control that displays uneditable text to the user.
TextBox	A control for accepting user input. Textbox can also display text.
Frame	A control for grouping other controls.
CommandButton	A control that represents a button. The user presses or clicks to initiate an action.
CheckBox	A control that provides the user with a toggle choice (checked or unchecked)
OptionButton	Option buttons are used in groups where only one at a time can be true.
ListBox	A control that provides a list of items.
ComboBox	A control that provides a short list of items.
HscrollBar	A horizontal scrollbar.
VscrollBar	A vertical scrollbar.
Shape	A control for drawing circles, rectangles, squares or ellipse
Line	A control for drawing line.
DrivelistBox	A control accessing the system disk drivers.
DirlistBox	A control accessing directories on a system
Filelistbox	A control accessing file in a directory
Image	A control for displaying images. The images control does not provide as many capabilities as a picturebox.
OLE	A control for interacting with other window applications.
Timer	A control that performs a task at programmer specified intervals.

Visual Basic Operators

Arithmetic operators	+	addition
	-	subtraction
	*	multiplication
	/	division
	mod	Modulus –rest of division
	^	exponent
Relational operators	=	equal
	<	Less than
	<=	Less or equal
	>	Greater than
	>=	Greater or equal
	<>	Not equal
	Not	Logical not
	And	Logical and
	Or	Logical or

Project

Working with Standard Projects include the following steps :

a) To create project: When program starts, project box appears-select Standard EXE >Project window appears.

OR: File> New project> Box (select Standard EXE)> Project window appears

b) To add project: Any number can be added.

Project icon> Select Standard EXE> Project window appears.

Note: Usually first project runs first, but user can change that by: Selecting project from project window > mouse list > Set as startup.

c) To open an existing project: It is previously designed and saved on disc in a folder. File> Open project> Box (select existing and look for the project) >

Project window

d) To delete a project: Select project in Project window > Mouse list > Remove project.

e) To save project: The visual basic can save the project on disc in two ways, as an executable type or a non- executable type.

Thanks for attention