

PROGRAMMING LANGUAGE 2 (SPM3112)

VISUAL BASIC OBJECTS-PART 2

NOOR AZEAN ATAN
MULTIMEDIA EDUCATIONAL DEPARTMENT
UNIVERSITI TEKNOLOGI MALAYSIA



Topics

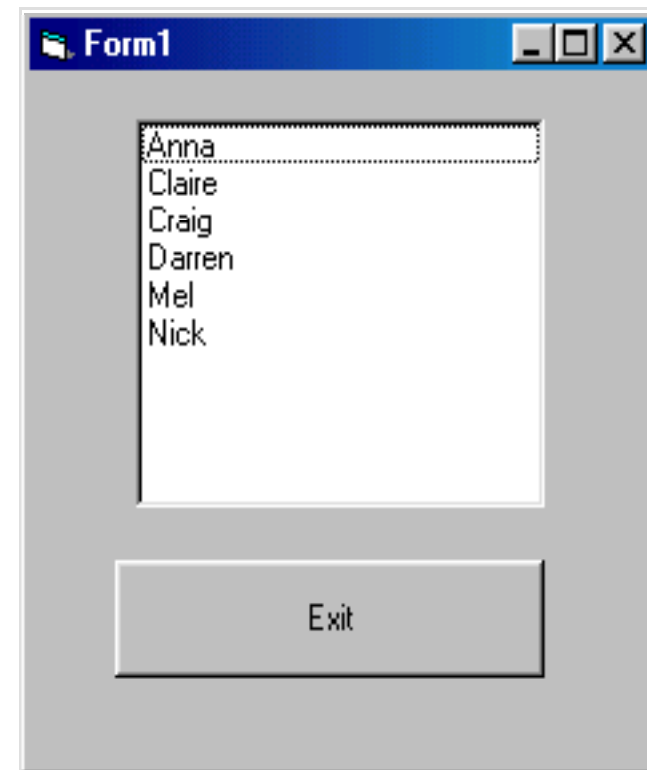
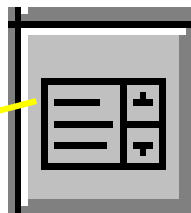
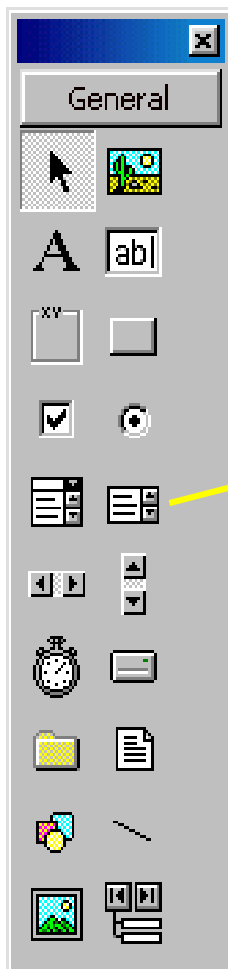
- **Combo box & List box**
- **Scrollbar**
- **Message, Input Box & Menus**
- **Drive, Directory & File List Box**

List box

- Enable users to select **items from a list**.
- Items are listed by mean of indexing.
- Index **0 refers to first item, index 1 is second item and so on**.
- Occupies several lines on form at all times.
- Can select several items but **only from entries shown**.
- List box also can display list in **multiple columns**.

List Box

Select from given options.



List box

- How to add item in list box??
 - Properties>List or;
 - List1.AddItem “Rambutan”
- How to remove item in list box??
 - Through list box properties
 - List1.Removeitem 0
- How to clear all items??
 - List1.Clear

Example : List Box Method- Additem

- Putting values into List - **AddItem Method**
 - Normally each new item is *appended* to the List.
 - First item in **List has index value = 0.**
 - An additional integer parameter allows you to insert the new value into the middle of the list.

List Box Method- Remove & Clear

- ***RemoveItem*** deletes a selected entry from List
 - e.g. To remove the fifth entry (index value 4)
 - ***List1.RemoveItem 4***
- ***Clear*** deletes all List entries
 - e.g.
 - ***List1.Clear***

List box

- **Text??**
 - The text corresponding to the selected item in list box
(**List1.Text**)
- **ListIndex??**
 - Identify item index value of the selected item in list box
(**List1.ListIndex**)
- **ListCount??**
 - The total number of list box items (**List1.ListCount**)
- **List(n)??**
 - A string array that holds items from within the list box
item = List1.ListIndex
Text4.Text = List1.List(item)

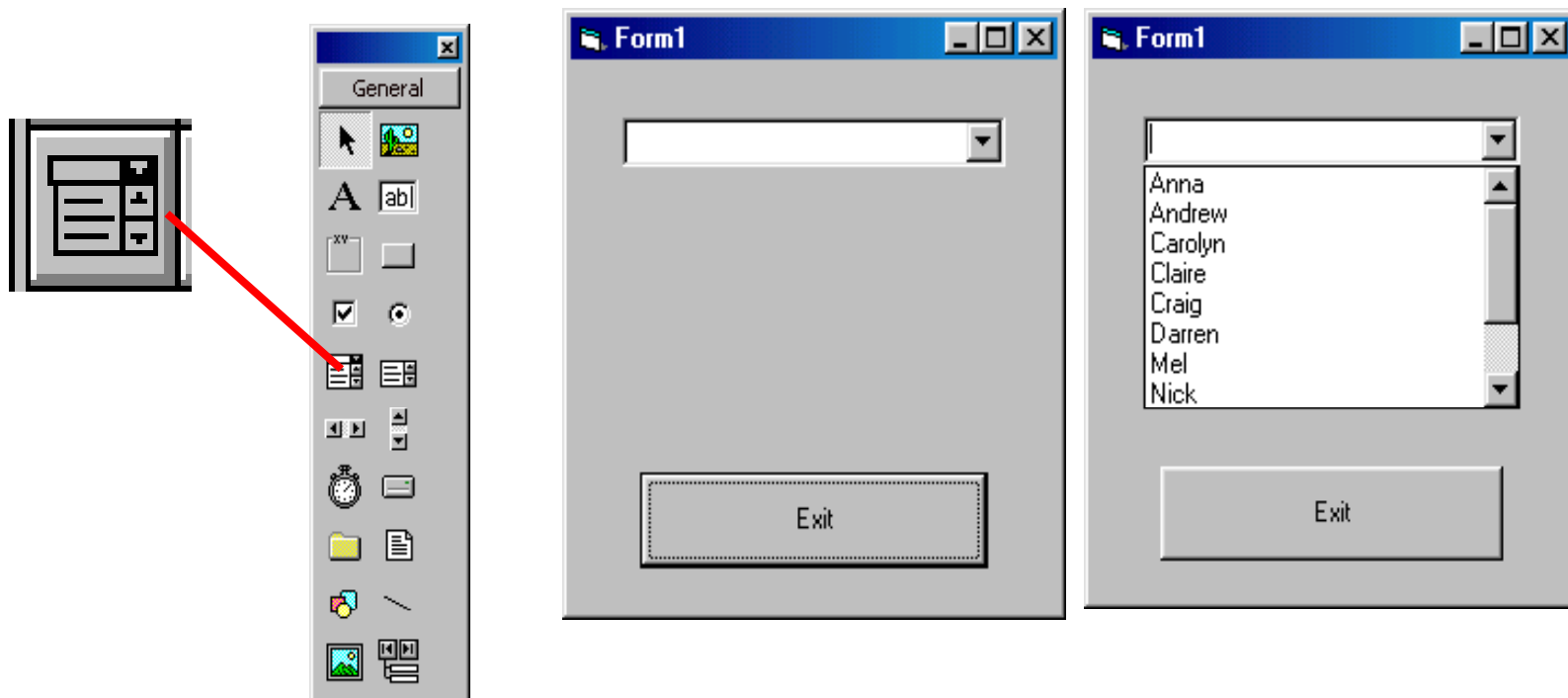
List box

More...more

- **Sorted??**
 - True, sorts items into alphabetically order (Properties>Sorted>True)
- **Selected(n)??**
 - a Boolean True/False Property
 - can be used in index value to determine if an item is selected or not
- **Multi Select??**
 - None(0), simple(1), extended(2)
- **Columns??**
 - Display multiple columns

Combo box

- Similar to List Box, but **with its own text entry area**.
- You may select one of the options *or* enter another value.

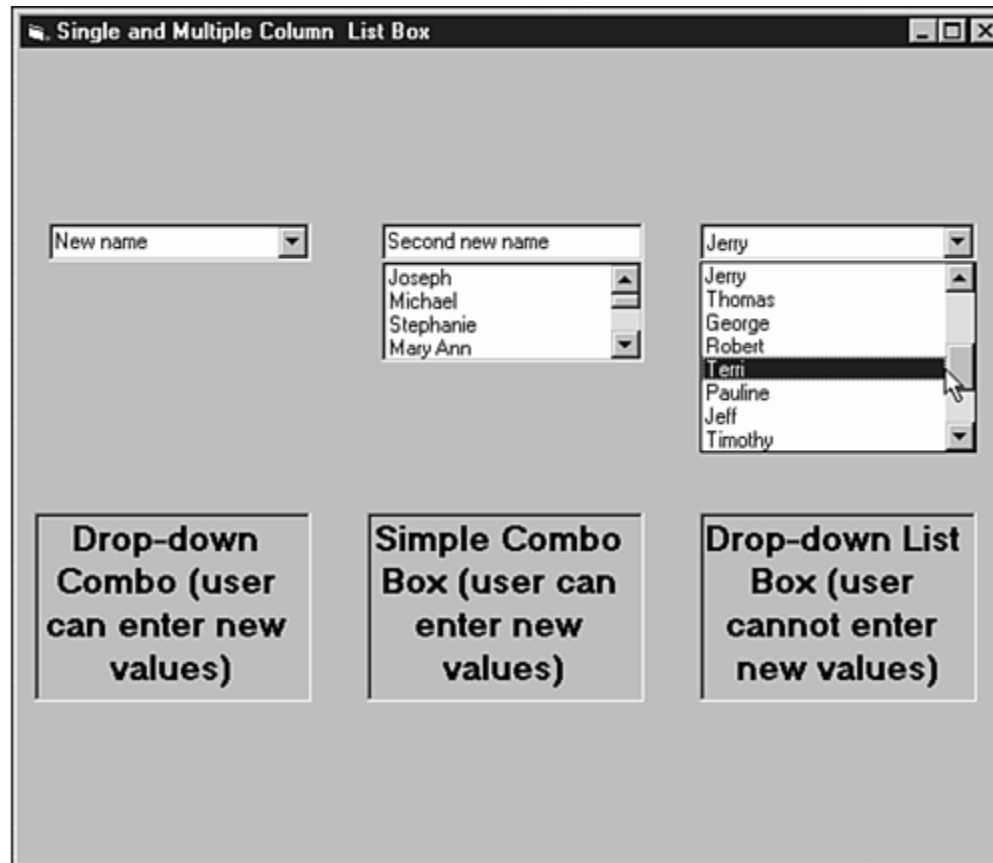


Combo box

- Combination of **list box** & **text box**.
 - **Combo box** is used when there is a range of recommendation selections but the user is still able to compose a new item.
 - Combo box shares a few **properties** of list box:
 - *Add item, remove item, text*
 - *Sorted, Selected(n)*
 - *List(n), ListIndex, ListCount*
- * Columns & MultiSelect are not allowed in combo box.

Combo box

- There are **three type of combo box**:



Events for List box & Combo box

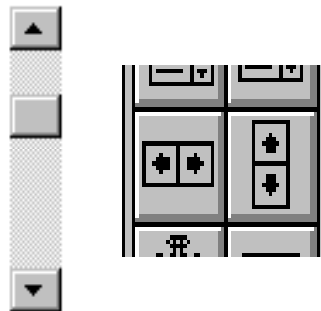
- **List & Combo both** respond to the following events
 - *Click, DblClick, DragDrop, DragOver, GotFocus, LostFocus, KeyDown, KeyUp* and *KeyPress*
- **List box** responds to these events
 - *MouseDown, MouseUp* and *MouseMove*
- **Combo box** responds to these events
 - *Change* (when user types in edit area)
 - *DropDown* (when arrow to right of edit area is clicked to drop down the list portion)

Scrollbar

- What is **scrollbar**?
 - An object that **let users control value changes**.
 - user can move the scrollbars with the mouse to specify relative positions within a range of values.
- How many **type of scrollbar exist**?
 - Horizontal?? Vertical??

Scrollbar

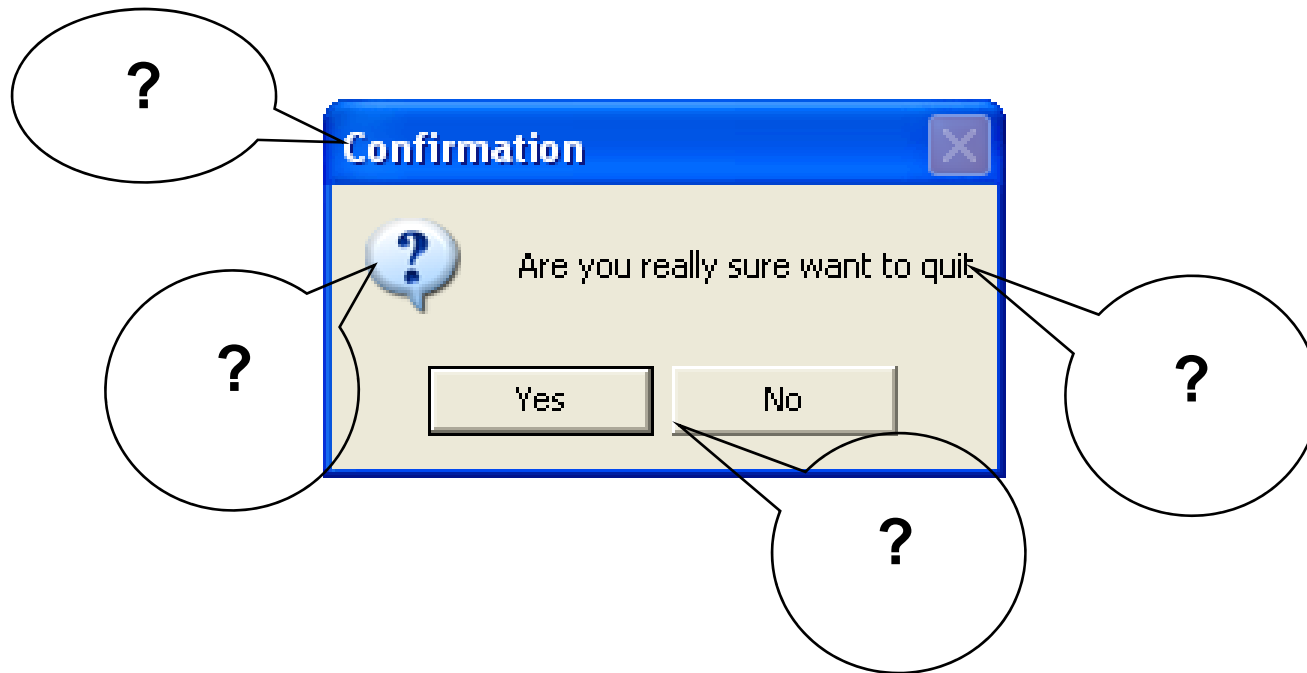
- There are **two types of Scroll Bars Vertical & Horizontal**
- Property usually **retrieved is Value**
- The **events** usually processed are **Change or Scroll**
- **Change**: when the position has changed message is received
- **Scroll**: when the thumbbar moves the message is received



Message Box

- used when you want the user to choose from a limited number of options, @ just to inform them of something.
- Warning, info, critical and question are common type of message box.
- **How to create message box?**
 - *msg = MsgBox (“message”, Button Type Response + Icon, “Title”)*

Message Box







Message Box

Button Type Response

vbOkOnly	0	Ok
vbOkCancel	1	Ok dan Cancel
vbAbortRetryIgnore	2	Abort, Retry dan Ignore
vbYesNoCancel	3	Yes, No dan Cancel
vbYesNo	4	Yes dan No
vbRetryCancel	5	Retry dan Cancel

Icon Type Response

	vbCritical	16
	vbQuestion	32
	vbExclamation	48
	VbInformation	64

1. Constant

Msg = MsgBox("Are you really want to quit?", vbQuestion + vbYesNo, "Pengesahan")

2. Value

Msg = MsgBox("Are you really want to quit?", 32 + 4, "Pengesahan")

Or

Msg = MsgBox("Are you really want to quit?", 36, "Pengesahan")

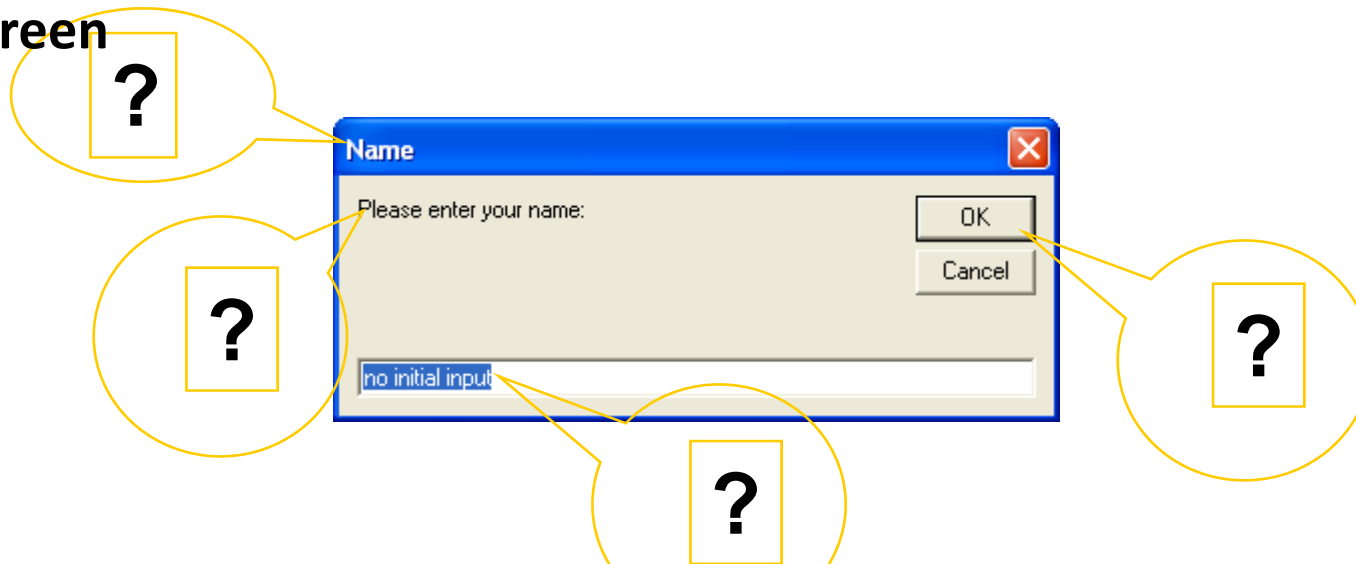
Input Box

- allows you to get information from a user.
- It returns the string that the user entered when they clicked Ok.
- If Cancel then an empty string "" is returned.

Input Box

- The Input Box allows you to get information from a user
- You can set the title, message, default text and position on the screen

-

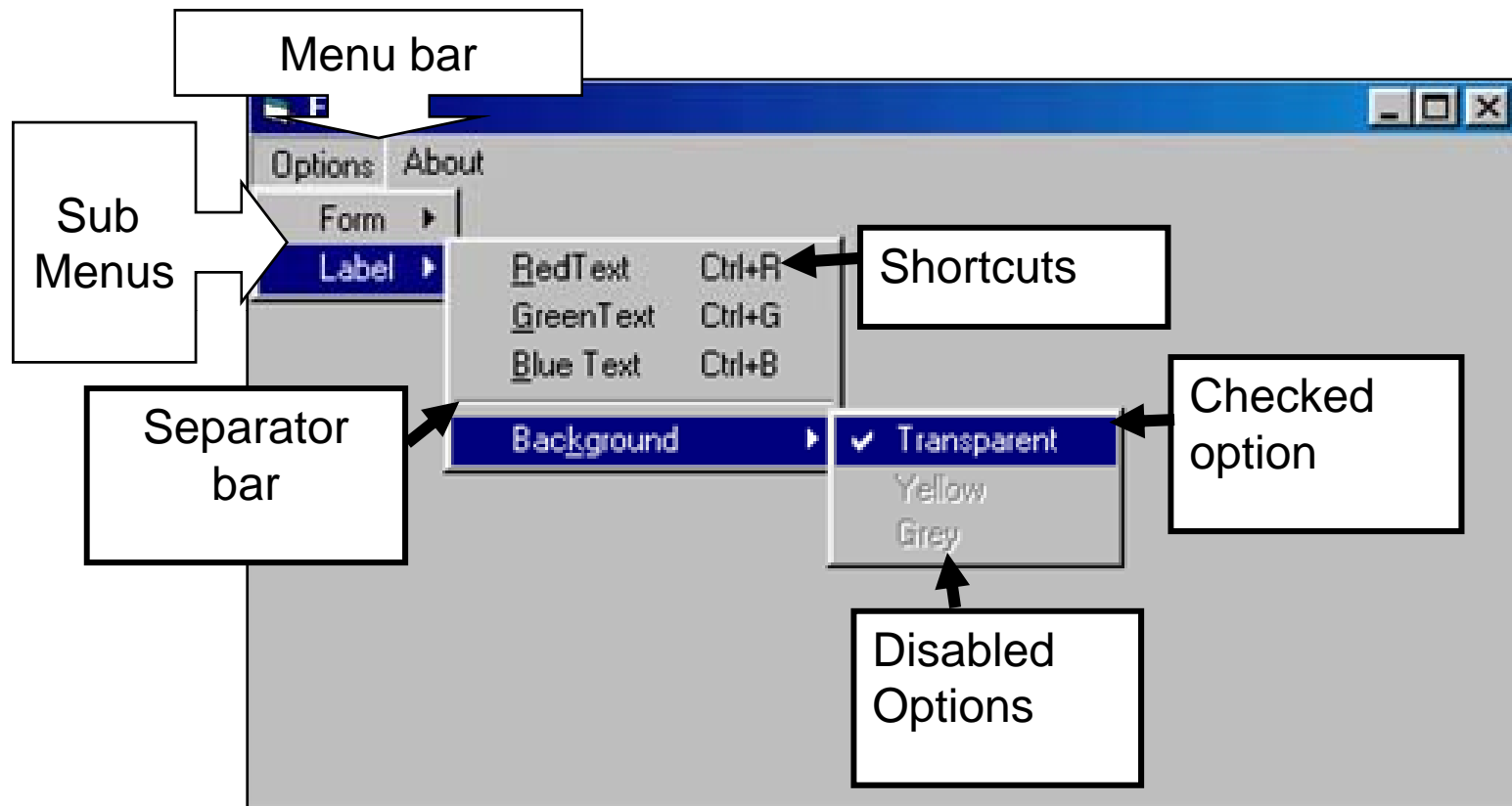


- It returns the string that the user entered when they clicked Ok
- If you Cancel then an empty string "" is returned
- Example:
`Label1.Caption=InputBox("Please enter your name","Name")`

Menus

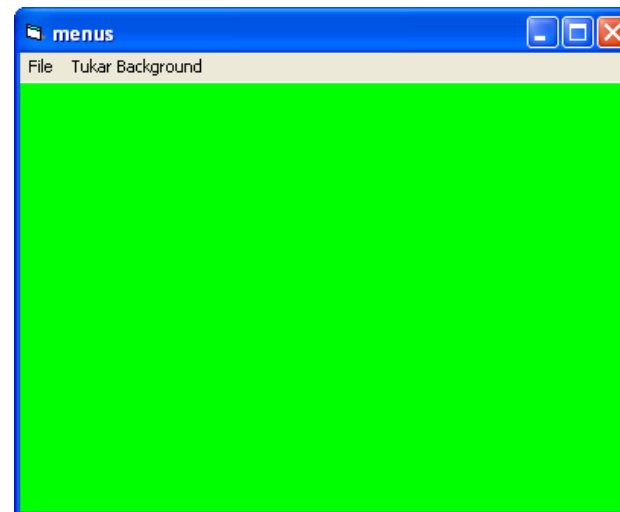
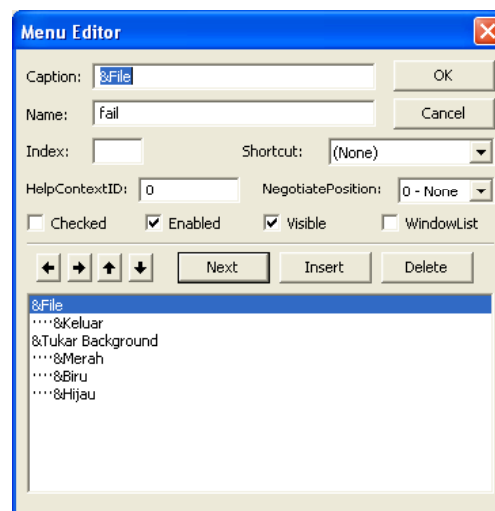
- Is basically a **drop down menu**.
- How to create menu bar?
 - **Tools > Menu Editor**
 - What else?
- Why you need menu bar??
 - To give **options to user to choose**

Menus

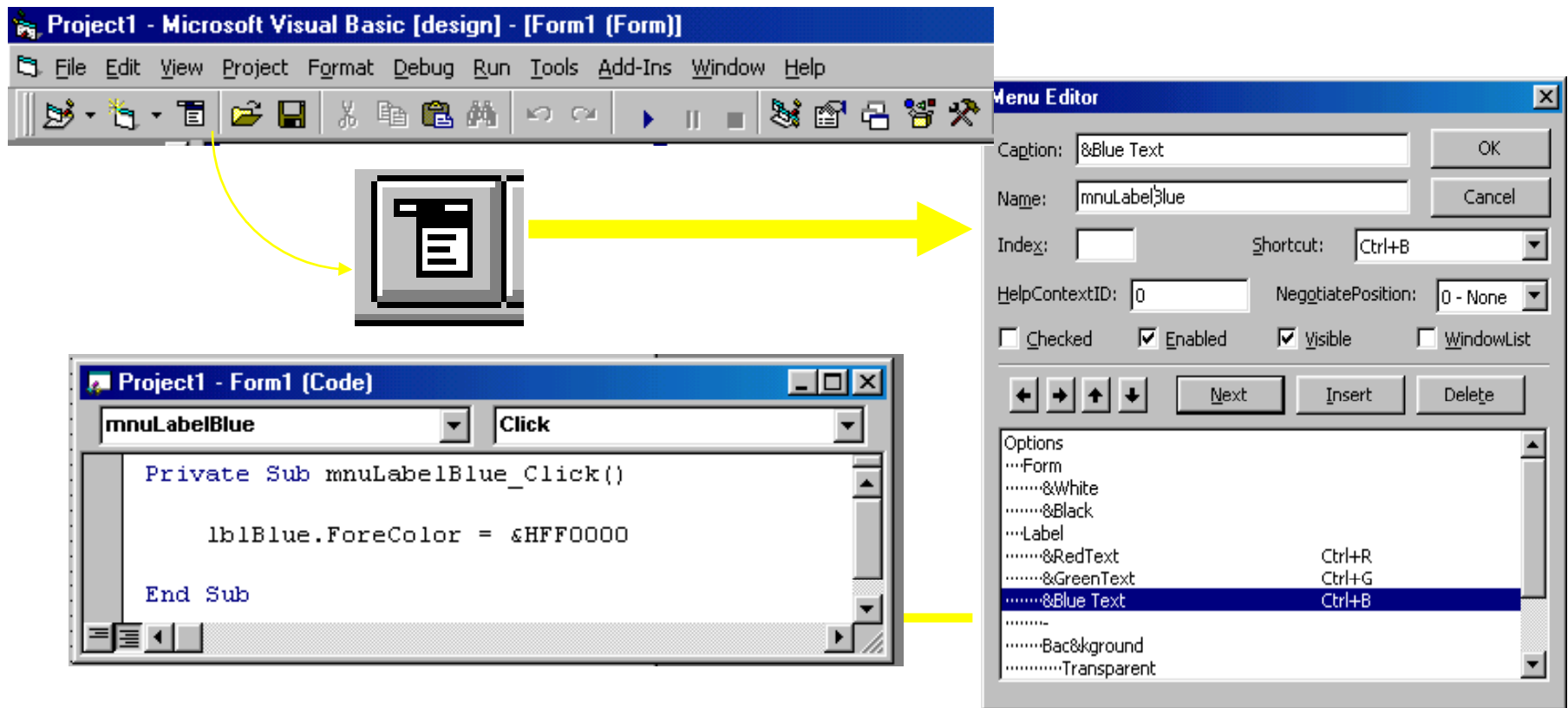


Menus

- Symbol &???
- Enabled??
- Visible??
- Next, Insert & Delete??
- How to make separator bar?



The Menu Design Window



The image shows a screenshot of the Microsoft Visual Basic IDE. The top window is titled "Project1 - Microsoft Visual Basic [design] - [Form1 (Form)]". Below it is the "Menu Editor" dialog box. The "Caption" field contains "&Blue Text", the "Name" field contains "mnuLabelBlue", and the "Shortcut" dropdown is set to "Ctrl+B". The "Enabled" and "Visible" checkboxes are checked. The "Options" list at the bottom shows a tree view with "Form" and "Label" expanded. Under "Label", the "&Blue Text" option is selected, with "Ctrl+B" listed next to it. Below the dialog box is the "Project1 - Form1 (Code)" window. The code window shows the following code:

```

mnuLabelBlue Click
Private Sub mnuLabelBlue_Click()
    lblBlue.ForeColor = &HFF0000
End Sub

```

A yellow arrow points from the "Menu Editor" dialog box to the code window, indicating the connection between the menu item and the code that executes when it is clicked.

This code gives Label1 blue text when “Blue Text” option is selected

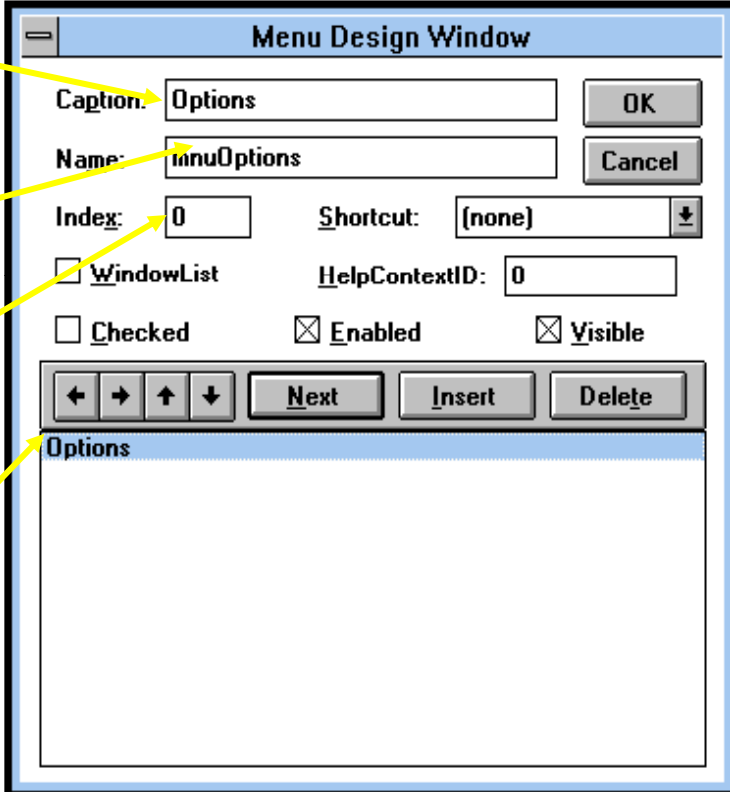
Creating the first option

Caption, to go on menu

“Internal” name for option
(used in programming - choose
a meaningful name)

Update the “Index”
value (optional)

Caption value “echoed” here



The screenshot shows the 'Menu Design Window' with the following fields and controls:

- Caption:** Options
- Name:** mnuOptions
- Index:** 0
- Shortcut:** (none)
- WindowList**
- HelpContextID:** 0
- Checked**
- Enabled**
- Visible**
- Navigation buttons: Left, Right, Up, Down, Next, Insert, Delete
- Options list:** Options

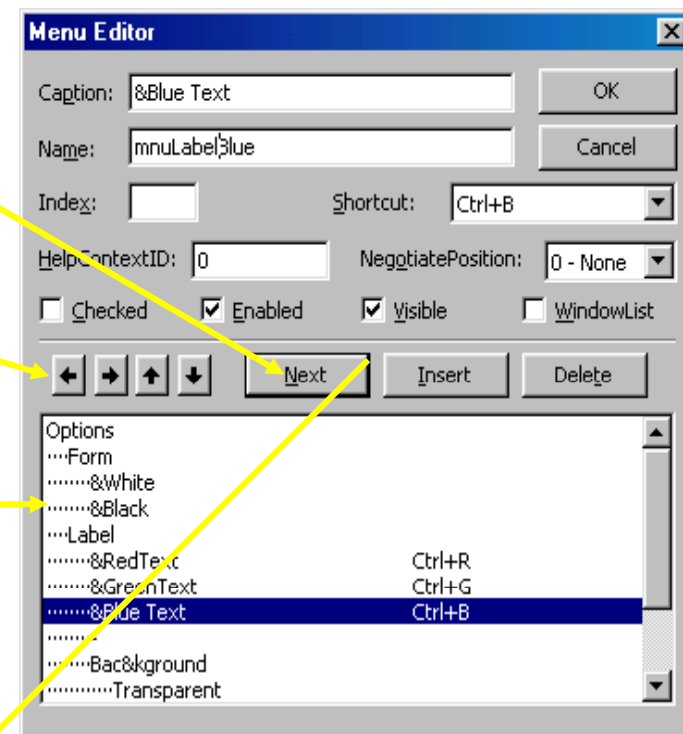
Adding further options

Press “Next” key to create another option

Use left/right arrow keys to create sub-menus

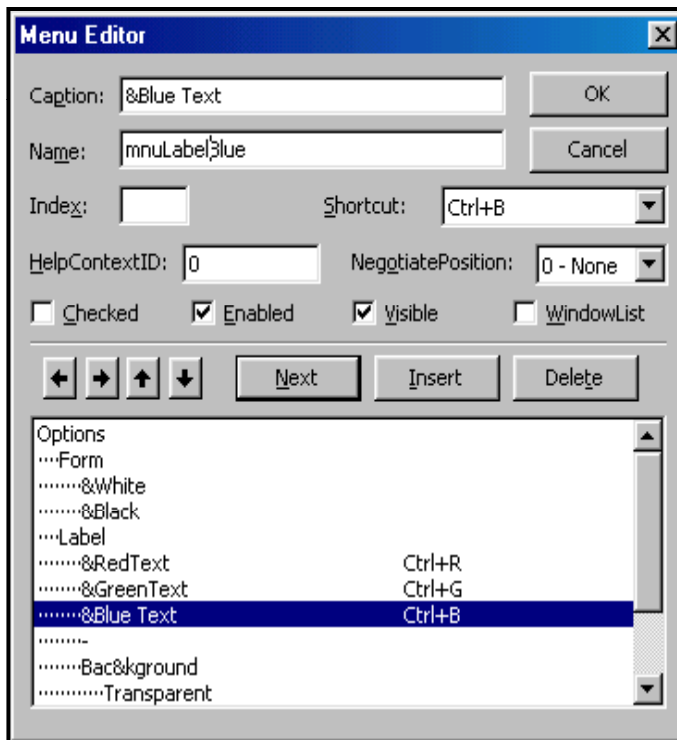
Select shortcut letter by preceding it with “&”.

Option is “enabled” (can be selected) and “visible” (default values)

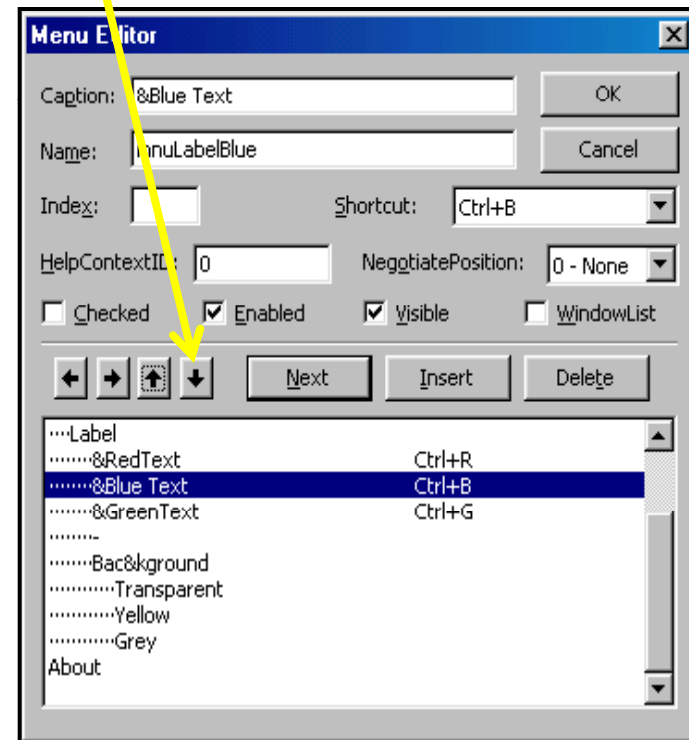


Changing the order of the Options

Select the option
to be moved...

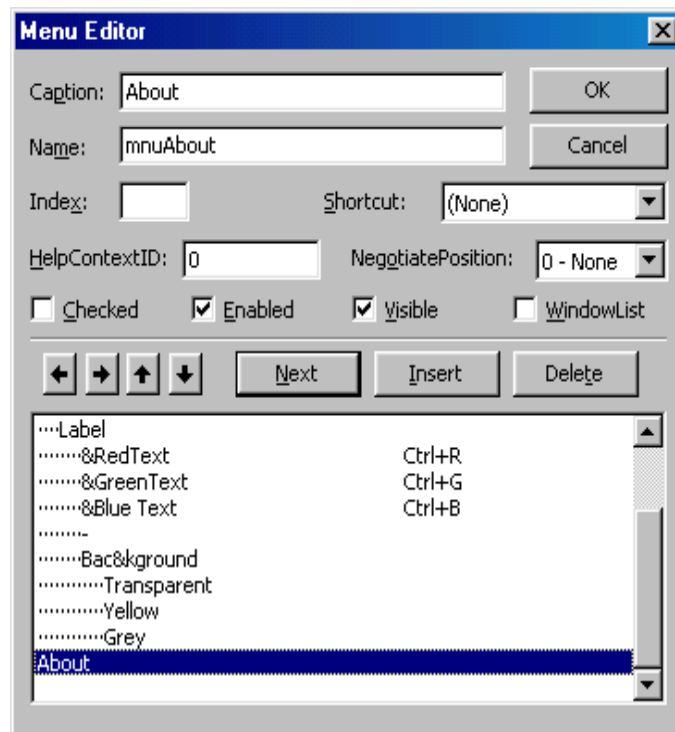


...then move it with the
up/down arrow keys

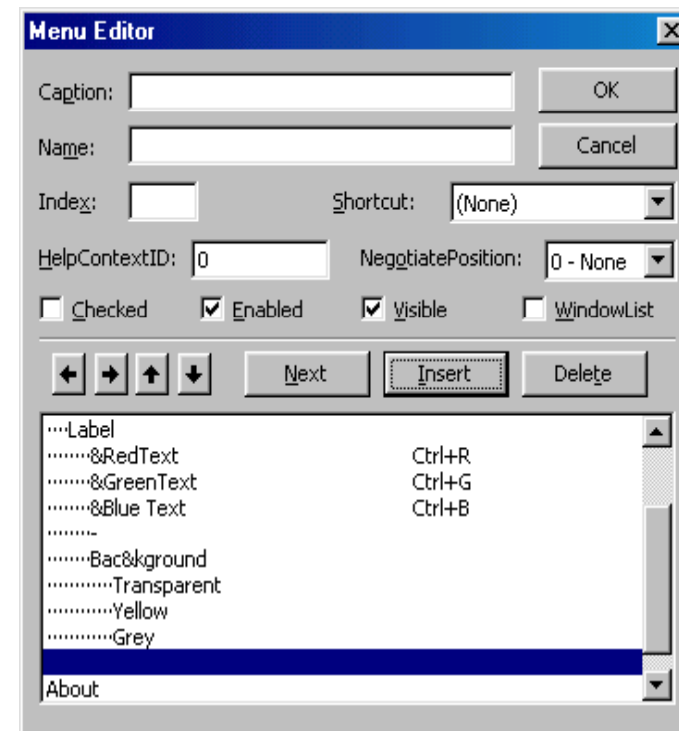


Inserting another option into the menu

e.g. Select “About” option, then press Insert key.



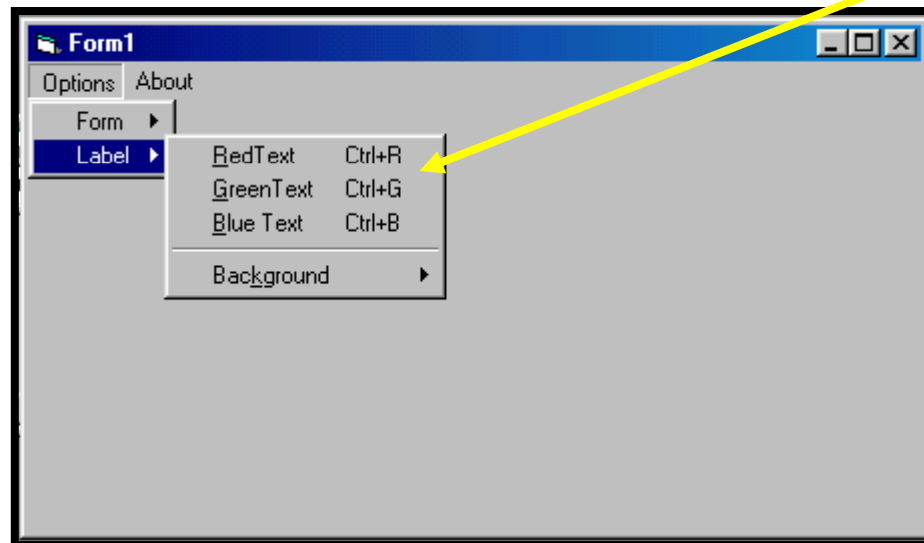
before...



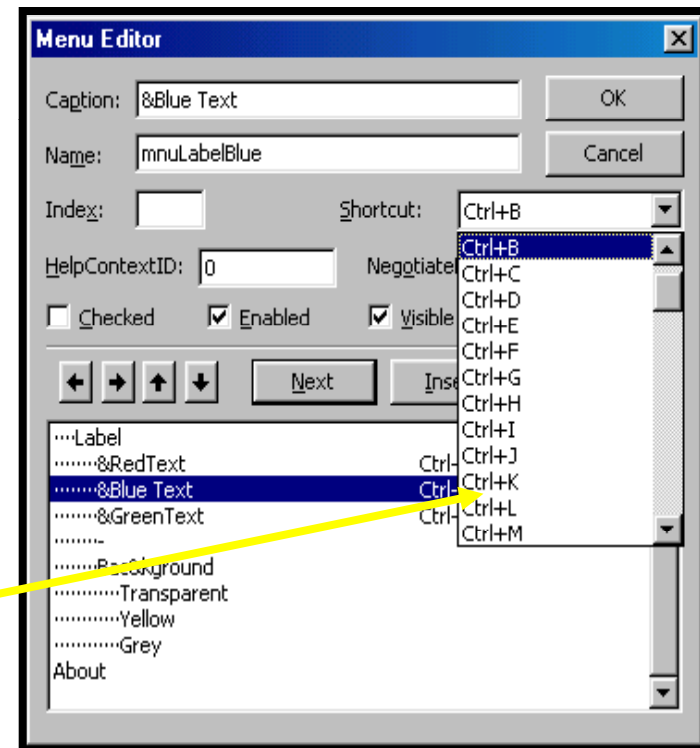
after...

Adding “shortcuts”

Shortcut keys

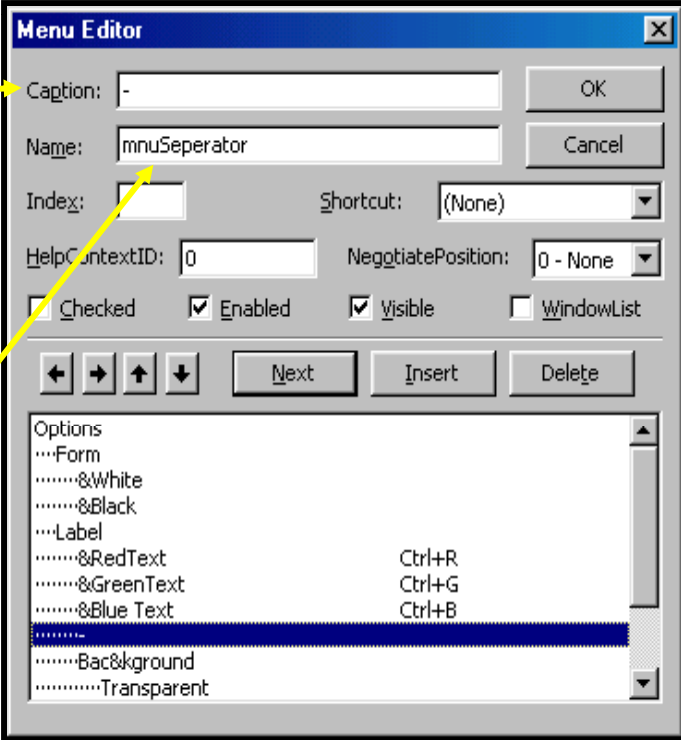
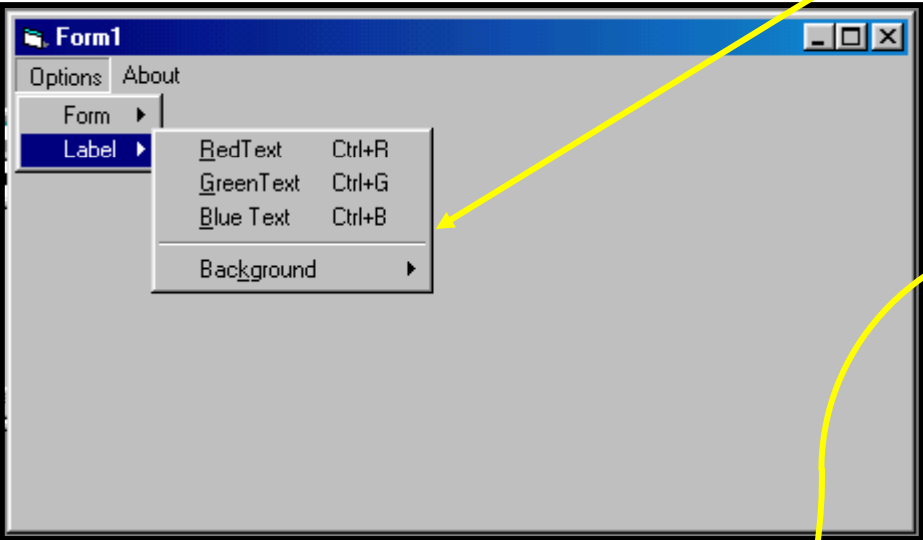


Shortcut key selection



Adding a “Separator bar” to your menu

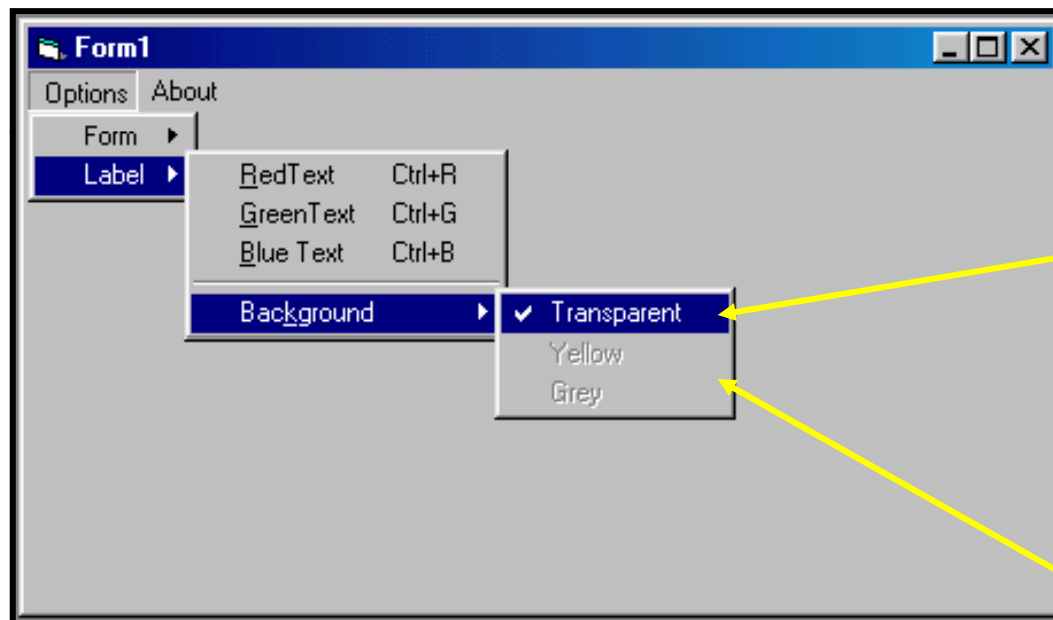
Separator bar



Caption = “-”

Choose any “Name”

Using the “checked” option



Checked option in use.

(N.B. Other options can also be disabled if required.)

Drive, Directory & File

- **Drive** enables a user to
 - select a valid drive at run time.
- **Directory** displays all available folders on a selected drive.
- **File** gives user opportunity to choose files from selected folder.
- **Drive must be use together with directory and file.**
- Drive, Path, Filename are the three important properties.

Drive, Directory & File

- How to use them?
 - Drive (Drive1.drive)
 - Path (Dir1.Path)
 - Filename (File1.Filename)

```
Private Sub Dir1_Change()  
File1.Path = Dir1.Path  
End Sub
```

```
Private Sub Drive1_Change()  
Dir1.Path = Drive1.Drive  
End Sub
```

```
Private Sub File1_Click()  
Dim pilihfail As String  
pilihfail = File1.Path & "\" & File1.FileName  
Picture1.Picture = LoadPicture(pilihfail)  
End Sub
```