



كلية المأمون الجامعة

قسم هندسة تقنيات القدرة الكهربائية

المرحلة الثانية






















Computer Application and programming

Toolbox

It is a window box that contains tools which could be used in the project. Tools are objects that could be selected from Toolbox to be placed on form. To show the toolbox, Press toolbox icon  > the toolbox  appear as in the following diagram.



The toolbox includes many tools and in general they are:

- 1) Pointer (not control)  Used to select tools already on form
- 2) Picture box  : Used to display images in any of the following formats: BMP, DIB (bitmap), ICO (icon), CUR (cursor), WMF (metafile), EMF (enhanced metafile), GIF, and JPEG.
- 3) Label  Fixed text appears on form for remark.
- 4) Textbox  For text edit .Like note pad.
- 5) Frame  To group tools together (container).
- 6) Command button  Used as a switch (such as OK and Cancel) buttons. Code is written in the *Click* event procedure of this control
- 7) Check box  For a yes/ no (true /false) selection.
- 8) Option button  : For selection as group. Many options are placed inside container (grouped) (a Frame control). One control is selected from the group all others of the group are automatically deselected.
- 9) Combo box  consists of (list and arrow when clicked a small a list appears), if user selects item from the list, it will be displayed in TextBox. Vertical size is fixed.
- 10) List box  For a list, user adds to and deletes from this list. It takes any size.
- 11) Horizontal Scrollbar  Create stand-alone Horizontal scroll bars.
- 12) Vertical Scrollbar  Create stand-alone vertical scroll bars.
- 13) Timer  Used to control object movement.
- 14) Drive List Box  It is a special ListBox filled automatically with names, of the files in a specified directory. It is a list invariant.
- 15) Dir List Box  s a special ListBox filled with drives (Hard disc, Flopy, CD) in the system. It is an invariant.
- 16) File List Box  It is a special ListBox filled automatically with the names of all DirListBox. It is a list invariant.
- 17) Shape  Used only to display rectangles, circles, and ovals on the forms. Never raises any events
- 18) Line  Used only to display lines on the forms. It never raises any events.
- 19) Image  : Used instead of PictureBox because it consumes fewer system resources.
- 20) Data  used for data base.
- 21) OLE  used for joining with another programs.

Tool Box and Form

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 it.

Notes:

a) Each tool has a property window .To see this window: Click on tool on form > Property window appears.

b) Property can be changed manually or by code and the effect of code appears in the run time (when user runs project).

c) To put code for tool action:

Double click on tool > code sheet of the Form appears (with code of corresponding tool is written) > User write the desired code inside tool event, or outside in Form event.

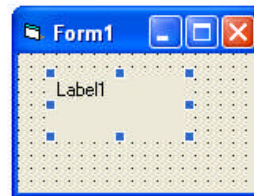
Working With Tools

The user can work with tool in the design stage.

- **To add tool:** double click on tool. Tool appears on form or drags it to design part of page and draw it in the desired size.
- **To delete:** click on element in page > press delete key of the key board or right click on object for mouse list > choose delete.
- **To display tool properties window:** click on element > properties window appear.
- **To display code form:** double click on tool code form for that element.

Label:

It is used to display fixed text on form



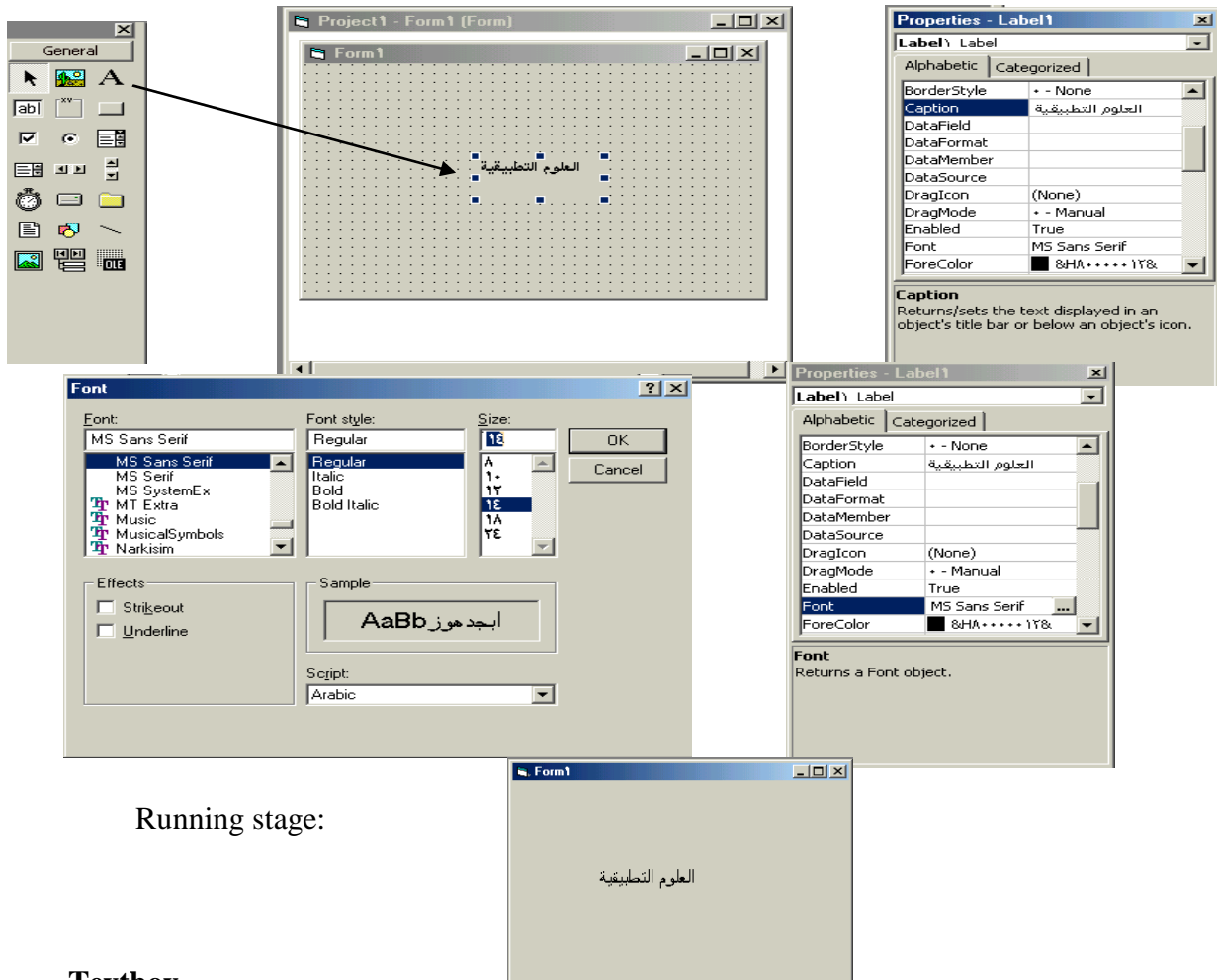
Property name	Objective	Code	Stage of Changing
Caption	String appear on label	label _{no.} .caption= "any name"	Design and run
Autosize	To resize tool to fit text	label _{no.} .autosize= true or false	Design and run
BackColor	Background color for label	label _{no.} .BackColor=QBcolor(no.)	Design and run
ForeColor	Color of text written on label	label _{no.} .forecolor=QBcolor(no.)	Design and run
Font	Font style, type and size	Size: label _{no.} .fontsize= no. Style: $\left. \begin{array}{l} italic \\ bold \\ underline \end{array} \right\} font$ Type: label.FontName = "arial"	Design and run
visible	The label appear or disappear	Label _{no.} .visible= true or false	Design and run
Enabled	The label enable or disable.	label _{no.} . Enabled =true or false	Design and run

Note: The available color numbers that used with QBcolor is the integers 0 to 15 only.

Example: Design a form contains label "العلوم التطبيقية" in size 14.

Sol: the properties are:

Label1	
caption	Applied science
fontsize	14



Running stage:

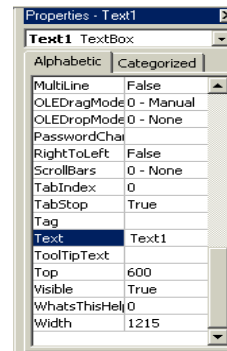
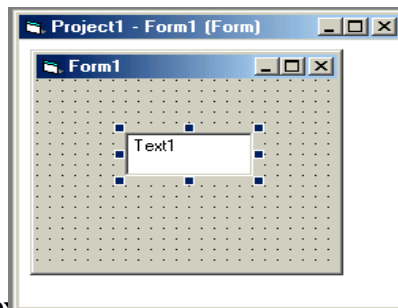
Textbox

The textbox is a box for entering and displaying text (characters or values) in user project. This tool is used frequently in most of the application. The textbox has property window, with no caption, but with space for text. The most important property of this tool is the text content which is described in the following:

Property name	Objective	Code	Stage of Changing
Text	String appear on textbox	text _{no.} .text = "any name"	Design and run
multiline	To enter more than one line	true or false	Design
BackColor	Background color for textbox.	text _{no.} .BackColor=Qbcolor(no.)	Design and run
ForeColor	Color of text written on textbox.	text _{no.} .forecolor=Qbcolor(no.)	Design and run

Font	Font style, type and size.	Size: text _{no.} .fontsize= no. Style: font { italic bold underline Type: label.FontName = "arial"	Design and run
visible	The textbox appear or disappear	text _{no.} .visible= true or false	Design and run
Enabled	The textbox enable or disable.	text _{no.} . Enabled =true or false	Design and run
passwordchar	A row of symbols appear instead of letters	Text _{no.} .passwordchar=(symbol)	Design and run
Setfocus	Put the focus on the specified textbox	Text _{no.} .setfocus	Run

Change text manually: change text property from property window, click inside textbox and add text.

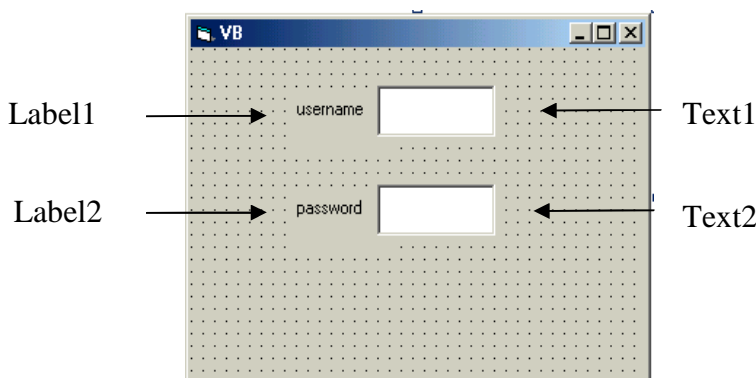


Change text by code.

- 1- Text1.text=" "
- 2- Text1.text=" نص "
- 3-Text1.text=text2.text
- 4- Text1.text=label1.caption
- 5- Text1.text = inputbox ("نص")

Example: Design a form to enter username and password such that the title of the form is VB.

Sol: design stage



Form1	
caption	V.B
Text1	
text	
Text2	
Text	
Label1	
caption	username
Label2	
caption	password