## Customized User Forms (II)

- <u>SpinButtons:</u>
  - add a SpinButton to a user form.



-Recall from last week that a SpinButton is a button whose value can be linked to a cell or a TextBox. A SpinButton takes a set of numerical values that you can adjust depending on what you want to use the button for.

-Selecting the up arrow increases the value and selecting the down arrow decreases the value.

## Open the properties window for your SpinButton:



Expl.: Create a CUF with title "Trigometric Functions". The form should have a SpinButton which allows to vary a value x from 0 to  $2\pi$ . This value should be displayed in a TextBox. The form should have three more TextBoxes which display the sin(x), cos(x) and tan(x).

- add a SpinButton to the user form
- change its name to "SB1"
- in the Properties Window set "Min" to "0", "Max" to "20" and "SmallChange" to "2" (now when we click through the SpinButton it takes on the values 0,2,4,6,...,20)
- add four labels with text "x=", "sin(x)=", "cos(x)=", "tan(x)="

- add four TextBoxes named "TB1", ..., "TB4" where the values of x, sin(x), cos(x) and tan(x) are going to be displayed.

## The solution is:



Here the "event" that makes things happen is a "change" in the value of the SpinButton.

• <u>ListBox:</u>

- add a ListBox to a user form
- Recall from last week that a ListBox is a box that contains a list of items. The value of the ListBox is the item that you choose from that list. The text can be linked to a cell on the worksheet.

UserForm1	Properties - ListBox1		"ControlSource" links the	
	ListBox1 ListBox			
	Alphabetic Categorized		value to a cell on the WS	
	ControlSource	K		
· A A	ControlTipText			
	Enabled	True	<b>(D C )) () 11 (1 1) (</b>	
Communication Communication of the communication of	Font	Tahoma	"RowSource" fills the list displayed in the ListBox (e.g. it could be the range	
	ForeColor	&H8000008&		
	Height	32,25		
	HelpContextID	0		
	IMEMode	0 - fmIMEModeNoControl		
	IntegralHeight	True	A1:A20).	
	Left	18		
	ListStyle	0 - fmListStylePlain	Alternatively you can	
	Locked	False		
	MatchEntry	0 - fmMatchEntryFirstLetter	read the list from an array	
	MouseIcon	(None)	in the VDA and	
	MousePointer	0 - fmMousePointerDefault	III the VDA code	
	MultiSelect	0 - fmMultiSelectSingle		
	RowSource			

Here is an example of how to associate a list of items to a ListBox by using the VBA Array function.

- Private Sub UserForm\_Click()
- Dim pp As Variant

```
pp = Array("W. Shakespeare", "W. Blake", "J.W. von Goethe",
```

"F. Schiller", "Dante", "M. de Cervantes",

"Homer")

Poets.List  $\equiv pp$ 

End Sub

the name of the ListBox is Poets

If we also fix the ControlSource in the properties window to be the cell A1 of the Excel WS, when we run the program, the element we pick from the list will be written in A1.

• <u>ComboBox:</u>

- add a ComboBox to a user form

- Recall from last week that a ComboBox is a TextBox with a drop-down list. You can either type or select a choice in the list. The text can be linked to cells on the worksheet.



"BoundColumn" denotes the number of the column related to the value of the ComboBox. (e.g. 2 could be the second column out of 5)

ComboBox1 Comb	oBox				
Alphabetic Categorized					
(Name)	ComboBox1				
AutoSize	False				
AutoTab	False				
AutoWordSelect	True				
BackColor	8H80000058				
BackStyle	1 - fmBackSkyleOpaque				
BorderColor	■ &H8000006&				
BorderStyle	0 - fmBorderStyleNone				
BoundColumn	1				
ColumnCount	1				
ColumnHeads	False				
ColumnWidths					
ControlSource 🛛 🖌					
ControlTipText					

"RowSource" and "ControlSource" are as for the ListBox

"ColumnCount" is the number of values displayed in the ComboBox

(e.g. in case the list of values consists of more than one row) Example: we have the following values stored in range A1:B3:

W. Shakespeare 1564W. Blake 1757J.W. von Goethe 1749

In the properties window we set RowSource=A1:B3

Setting ColumnCount = 1 has the effect that only the names (the first row) will be displayed in the ComboBox. Setting also BoundColumn = 2 has the effect that the value of the ComboBox will be associated to the corresponding date (the second column).

 $\cdot$  if we associate the following VBA code to the ComboBox:

Private Sub CoB1\_Change()

Range("a5").Value = CoB1.Value

End Sub

- $\cdot$  the name of the ComboBox is CoB1 here
- $\cdot$  the birth year is stored in CoB1.Value
- $\cdot$  this value is then associated to the cell A5

• <u>ToggleButton:</u>

- add a ToggleButton to a user form

Recall from last week that a ToggleButton is a button that remains pressed in when selected, and then releases when it is clicked again.

A ToggleButton takes two possible values: True and False

👪 CUFs.xls - Yesorno (UserForm)				
UserForm5	😭 Properties - ToB			The "Enabled"
	ToB ToggleButton			property allows you
	Alphabetic Ca	Categorized		
	(Name)	ТоВ		to choose the default
ToB	Accelerator			value of the Button
	AutoSize	False		
	BackColor	8H800000F&		
	BackStyle	1 - fmBackStyleOpaque	[	
	Caption	Тов		The "Caption"
	ControlSource ControlTipText		property allows you	
	Font	Tahoma 🗥		to write something on
	ForeColor	&H80000012&		the Dutton
	Height	61,5		the Button
	HelpContextID	0	L L	
	Left	60		
	Locked	False		0

Here is an example of a program that uses a ToggleButton:



When the Button is pressed (value is true) then it writes "Toggle is yes" in cell C2, otherwise it writes "Toggle is no".