Customized User Forms (II)

• SpinButtons:

    - add a SpinButton to a user form

    - important properties of the SpinButton are:

     · "Min" and "Max" are the values which define the interval
      in which the Spinvalues are varied

     · "SmallChange" defines the step size by which the Spinvalue
      varies

     · "ControlSource" links the value to a cell on the worksheet

    - to link the SpinButton value to a TextBox, change the code as :

```
Sub SB1_change()            the name of the SpinButton is SB1

    TB1.Value = SB1.Value

End Sub
                     the name of the TextBox is TB1
```

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Expl.: Create a CUF with title "Trigometric Functions". The form
should have a SpinButton which allows to vary a value x
from 0 to 2π. 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 "200"
  and "SmallChange" to "5"
  (now when we click though the SpinButton it takes on the
  values 0,5,10,15,....190,195,200)

  - add five labels with text "x=", "sin(x)=", "cos(x)=","tan(x)=",
  "π". To be able to write "π", select in the Properties Window
  font "Mathematica1", then type p

  - add four TextBoxes named "TB1", ... , "TB4"

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• ListBox:
- add a ListBox to a user form
- important properties of the ListBox are:
· "ControlSource" links the selected value to a cell on the
  worksheet
· "RowSource" fills the list displayed in the ListBox
  (e.g. put a1:a20 then the list will contain the values in there)
- alternatively you can fill the list with an array in the VB code
-Expl.:

```
Private Sub UserForm_Click()

  Dim pp As Variant

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

                  "F. Schiller",  "Dante", "Cervantes", "Homer")

  Poets.List = pp

End Sub
```

the name of the ListBox is Poets

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• ComboBox:
- add a ComboBox to a user form
- important properties of the ComboBox are:
· "RowSource" fills the list displayed in the ListBox
  (e.g. it could be two columns, say a1:b20)
· "ControlSource" links the selected value to a cell on the
  worksheet
· "ColumnCount" is the number of values displayed in the
  ComboBox
  (e.g. when you have more than one you might just want to
  display a few of them)

· "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)

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- Expl.: we have the following values stored in two columns:

      W. Shakespeare   1564

      W. Blake   1757

      J.W. von Goethe   1749

· setting now BoundColumn = 2 , ColumnCount = 1
  has the effect that the names will be displayed in the
  ComboBox, but not the birth years related to the value

· change the VB code to:

   Private Sub CoB1_Change()

      Range("k14").Value = CoB1.Value

   End Sub

· the name of the ComboBox is CoB1 here

· the birth year is stored in CoB1.Value

· this value is then associated to the cell k14

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• ToggleButton:

  - add a ToggleButton to a user form

  - important properties of the ToggleButton are:

   · the name of the Button is associated to the boolean values
     "true" or "false" which you can use in the VB program

  - Expl.:   the name of the ToggleButton is ToB

 Private Sub ToB_Click()

   If ToB Then

     Range("c2").Value = "Toggle is yes"

   Else

     Range("c2").Value = "Toggle is no"

   End If

 End Sub

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Announcements

➤ There are no more Lab sessions!

➤ The exam will take place

    11-th of May 2005

➤ The entire lecture and the Lab-sessions including the solutions can be obtained from

    http://www.staff.city.ac.uk/~fring/ExcelVBA/index.html

END

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