The Wayback Machine - http://web.archive.org/web/20061020032335/http://www.2dgamec...

The MaxGUI Beginner Tutorial Series - Tutorial 6: Labels and Textfields

(c) Assari Dec 24 2005

Lets take a side diversion for a while and look at a couple of easy gadgets. In this tutorial we will cover labels and textfields, two very useful but simple gadgets.

Textfields

A Textfield Gadget allows for single line text entry, useful for creating forms for user entry

Textfields are created using the CreateTextField function:-

Function CreateTextField:TGadget(x,y,w,h,group:TGadget,style=0)

Here is a very simple textfield example

SuperStrict

```
Local MyWindow:TGadget=CreateWindow("TextField Example", 200,200,320,240)

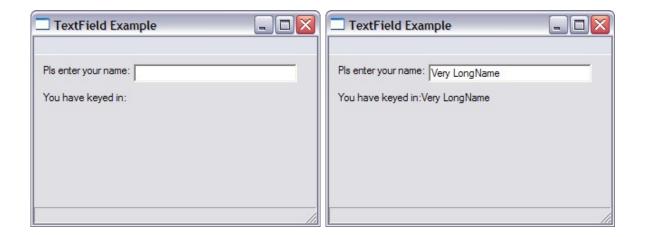
Local Label0:TGadget=CreateLabel("Pls enter your name:",10,10,100,20,MyWindow)

Local Label1:TGadget=CreateLabel("You have keyed in:",10,40,200,40,MyWindow)
```

Local MyInput:TGadget=CreateTextField(110,10,180,20,MyWindow)

```
Repeat
WaitEvent()
Select EventID()
Case EVENT_WINDOWCLOSE
End
Case EVENT_GADGETACTION
SetGadgetText(Label1,"You have keyed in:"+TextFieldText(MyInput))
End Select
Forever
```

Running the above programming and keying some text into the input field would yield something like the screen below.



Let's study our code in a bit more detail.

```
Local Label1:TGadget=CreateLabel("You have keyed in:",10,40,200,40,MyWindow)
```

```
Local MyInput:TGadget=CreateTextField(110,10,180,20,MyWindow)
```

The first two lines above creates the necessary label gadgets using the **CreateLabel** function. First for us to prompt our user what to key in (label0) and the second (label1) to give visual feedback what has been typed.

The **CreateTextField** function then creates the input area for users to key text in.

```
Case EVENT_GADGETACTION
SetGadgetText(Label1,"You have keyed in:"+TextFieldText(MyInput))
End Select
```

The **SetGadgetText** function provides the visual feedback by sending the appropriate text to <u>Label1</u>. The text which the user keyed in is derived from the **TextFieldText** function.

The **CreateTextField** function also allows us to key in password style input field. Let's take a look at how this is done. Note the change in bold below:-

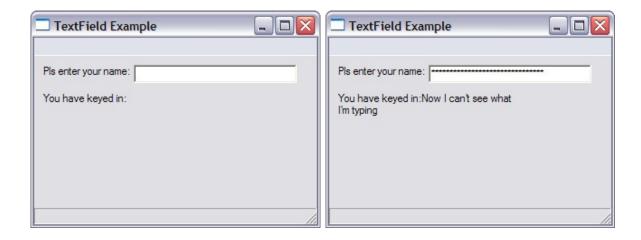
SuperStrict

```
Local MyWindow:TGadget=CreateWindow("TextField Example", 200,200,320,240)
Local Label0:TGadget=CreateLabel("Pls enter your name:",10,10,100,20,MyWindow)
Local Label1:TGadget=CreateLabel("You have keyed in:",10,40,200,40,MyWindow)
```

Local MyInput:TGadget=CreateTextField(110,10,180,20,MyWindow, TEXTFIELD_PASSWORD)

```
Repeat
WaitEvent()
Select EventID()
Case EVENT_WINDOWCLOSE
End
Case EVENT_GADGETACTION
SetGadgetText(Label1,"You have keyed in:"+TextFieldText(MyInput))
End Select
Forever
```

Notice now the text that was keyed in are displayed as asterisks. The actual text is still there and can be retrieved via the **TextFieldText** function.



If we want to display some default text into our input area (textfield) we can use the **SetGadgetText** function as follows:-

SuperStrict

```
Local MyWindow:TGadget=CreateWindow("TextField Example", 200,200,320,240)
Local Label0:TGadget=CreateLabel("Pls enter your name:",10,10,100,20,MyWindow)
Local Label1:TGadget=CreateLabel("You have keyed in:",10,40,200,40,MyWindow)

Local MyInput:TGadget=CreateTextField(110,10,180,20,MyWindow)
SetGadgetText(MyInput,"Default Name")

Repeat
WaitEvent()
Select EventID()
Case EVENT_WINDOWCLOSE
End
Case EVENT_GADGETACTION
SetGadgetText(Label1,"You have keyed in:"+TextFieldText(MyInput))
End Select
```

Yielding the following:-

Forever



If we wish to allow users to start keying direct into the textfield, we need to set the focus onto our textfield gadget. This we can do by using the **ActivateGadget** function as follows:-

Local MyInput:TGadget=CreateTextField(110,10,180,20,MyWindow)
ActivateGadget MyInput

Labels

We have been using labels in the above program as well as in previous tutorials. Lets explore this function in a bit more detail

Function CreateLabel:TGadget(name\$,x,y,w,h,group:TGadget,style=0)

The CreateLabel function supports the following style

Constant Meaning

LABEL_FRAME The label has a simple border. LABEL SUNKENFRAME The label has a sunken border.

LABEL SEPARATOR

The label is an etched box with no text useful for drawing

separators.

LABEL CENTER The label's text is aligned to the center.

LABEL RIGHT The label's text is right aligned.

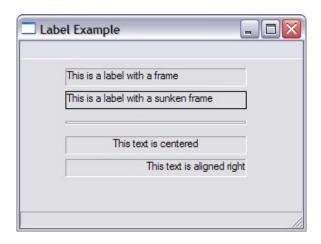
So let us see the impact of the various styles on the appearance of labels in our window via the program below

SuperStrict

```
Local MyWindow:TGadget=CreateWindow("Label Example", 200,200,320,240)
Local Label0:TGadget=CreateLabel("This is a label with a frame", 50,10,200,20,MyWindow, LABEL_FRAME)
Local Label1:TGadget=CreateLabel("This is a label with a sunken frame", 50,35,200,20,MyWindow, LABEL_SUNKENFRAME)
Local Label2:TGadget=CreateLabel("This is a separator", 50,68,200,20,MyWindow, LABEL_SEPARATOR)
Local Label3:TGadget=CreateLabel("This text is centered", 50,85,200,20,MyWindow, LABEL_CENTER|LABEL_FRAME)
Local Label4:TGadget=CreateLabel("This text is aligned right", 50,110,200,20,MyWindow, LABEL_RIGHT|LABEL_FRAME)
```

Repeat
WaitEvent()
Select EventID()
Case EVENT_WINDOWCLOSE
End
End Select
Forever

Running the above program yields the various styles as can be seen in the screenshot below.



Local Label2:TGadget=CreateLabel("This is a separator" ,50,68,200,20,MyWindow, LABEL_SEPARATOR)

Note that eventhough I placed some text in the **CreateLabel** function with the LABEL SEPARATOR style, none came out as the separator label simply creates a horizontal

line on the screen.

Local Label3:TGadget=CreateLabel("This text is centered" ,50,85,200,20,MyWindow, LABEL CENTER|LABEL FRAME)

In order to see the effect of the center and right styles, I have combined the style with a LABEL FRAME style using the | operator which allows styles to be combined.

Summary

That was a fairly easy tutorial with no difficult concepts. We just need to remember how the various styles work.

In this tutorial we covered

- TextFields which can be created using **CreateTextField** and the user entered text can be retrieved via **TextFieldText**
- Default text can be placed in the textfield using SetGadgetText and focus can be set using ActivateGadget
- The various styles of labels and the password style for **CreateTextField**

So thats ends our tutorial for now. Back to Tutorial Index.