Subject: Re: Two widget questions Posted by Craig Markwardt on Mon, 08 Nov 1999 08:00:00 GMT View Forum Message <> Reply to Message

pln@egret1.stanford.edu (Patrick L. Nolan) writes:

- > 2. My base window contains a menu bar, a scrolling list, and a draw
- > widget. I want to handle resize events properly. At first I resized
- > the draw widget to event.x and event.y. This doesn't work properly
- > because of the space occupied by the menu bar and list. The user
- > moves the window corner to the desired place, and then the thing
- > grows a bit. By experimenting I found approximately how much padding
- > is required to make it come out right, but this is a very fragile
- > solution.

- > So far I haven't found a reliable solution. I have been trying to
- > use widget info(/geometry) and widget control,/tlb get size to
- > find the actual sizes of the draw and base widgets before and after
- > the resize. Unfortunately the results don't seem to be reliable, or
- > I just don't understand how to interpret them. Indeed, the manual
- > says that widget info(/geometry) returns an incorrect value if there
- > is a menu bar.

- > Is there some general way to deal with this? Have I just missed
- > the proper section in the book?

I never found a textbook way to solve this problem. The resizing bug is truly a nuisance. Here is my best solution:

1. Create an encapsulating top level base with xpad=0 ypad=0 and then put your practical top level base within that. Example:

```
tlb0 = widget_base(column=1, tlb_size_events=1, xpad=0, ypad=0)
tlb = widget_base(tlb0, column=1)
... fill up the tlb base ...
```

This doesn't work if you insist on a top-level menu. You can create an IDL menu under tlb if you need to.

However, this seems to take care of the growing widget problem. The rest of the steps are optional if you decide to add a menu widget.

- 2. Create a menu if you need it under tlb.
- 3. Realize the widget and get the size of the menu.

- 4. If needed, enlarge the window to fully encompass the menu.
- 5. When resize events come, resize the widget taking into account the menu size.

Craig

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Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

Subject: Re: Two widget questions

Posted by davidf on Mon, 08 Nov 1999 08:00:00 GMT

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Patrick L. Nolan (pln@egret1.stanford.edu) writes:

- > I'm back with more questions about my first widget program.
- > My first question about flashing colors was solved nicely. Now
- > I'm getting into more advanced details.

Oh, boy, this is great. :-)

> 1. Is it possible to have exclusive button under a menu bar?

No, it is not possible.

- > I tried putting a widget_base,/exclusive or a cw_bgroup as
- > children of a menu bar button. In both cases it told me that
- > the parent was the wrong type.

Exactly. About the best you can do is have some visual way of indicating the menu item is selected. For example, you can put an asterisk in front of selected items. Here is a small example of how to do something like this:

PRO Example_Button_Events, event

Widget_Control, event.id, Get_Value=buttonValue, Get_UValue=buttonUValue Widget_Control, event.id, Set_Value=buttonUValue, Set_UValue=buttonValue END

PRO EXAMPLE

```
tlb = Widget_Base(Column=1, Title='Make a Choice...')
selectID = Widget_Button(tlb, Value='Animal Selections...', /Menu, $
 Event Pro='Example_Button_Events', Scr_XSize=200)
choice1 = Widget_Button(selectID, Value='Choose Dogs', /Menu)
button = Widget Button(choice1, Value='Retriever', UValue='* Retriever')
button = Widget_Button(choice1, Value='Boxer', UValue='* Boxer')
button = Widget Button(choice1, Value='Great Dane', UValue='* Great Dane')
choice2 = Widget Button(selectID, Value='Choose Cows', /Menu)
button = Widget Button(choice2, Value='Holstein', UValue='* Holstein')
button = Widget_Button(choice2, Value='Angus', UValue='* Angus')
button = Widget_Button(choice2, Value='Jersey', UValue='* Jersey')
Widget_Control, tlb, /Realize
XManager, 'example', tlb, /No Block
END
> 2. My base window contains a menu bar, a scrolling list, and a draw
> widget. I want to handle resize events properly.
```

- > Is there some general way to deal with this? Have I just missed
- > the proper section in the book?

Uh, I'm sure it's in my book...somewhere. At least it *should* be. :-(

Here is what I would do. Just before I realize the TLB I would find out what size it is:

```
tlb_geom = Widget_Info(tlb, /Geometrv)
```

I would use the screen X and Y sizes here. What I want to know is how much space in my top-level base is NOT composed of the draw widget.

```
draw geom = Widget Info(drawID, /Geometry)
extraXpixels = tlb geom.scr xsize - draw geom.scr xsize
extraYpixels = tlb_geom.scr_ysize - draw_geom.scr_ysize
```

Now, I would save these numbers in my info structure so that when I do the resize I can do something like this:

```
Widget_Control, info.drawID, Draw_XSize=event.x - info.extraXpixels $
 Draw_YSize=event.y - info.extraYpixels
```

This leaves enough space for the other widgets that are still in the

top-level base and doesn't change their position or size.

Sadly, you sometimes still need a "fudge" factor on various platforms, since the reporting of sizes is not totally consistent from one platform to another. Test it on all the computers you expect to run on. Something like this usually works OK.

Cheers,

David

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