## Subject: Re: Question about selecting images from Draw Widgets Posted by David Fanning on Sat, 17 Mar 2007 03:49:46 GMT

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## gearoid.k@gmail.com writes:

- > This program takes in 10 images and displays the first 4 (image0 to
- > image3) in the GUI. For the final function 'viewNext', I would like
- > all the images (which are saved in the array 'images array' which is
- > defined in the OpenFile function) to shift up by one place, such that
- > image1 to image4 are displayed.

> Could you tell me how to do this?

Well, to start with, I wouldn't be using the GUI Builder to build your widget program. The possibility that you might actually understand how the program works is slim, to say the least. :-)

Typically, what we do is store ALL the information we need to run our program in an "info" structure. Suppose we need the four drawIDs, the window index numbers that go with the draw widgets, and the 10 images themselves. And suppose we have stored these in the variables drawlDs. wIDs, and theImages. (The array containing the images is probably a pointer array, because we don't really want to carry around 10 images.) We probably need some kind of counter, so we know which image is first in the image display. Let's call this imgCounter and suppose it starts off at 0, so the first 4 of 10 images are displayed in our windows.

info = {drawlDs:drawlDs, wlDs:wlDs, thelmages:thelmages, \$ imgCounter:imgCounter, numImages:numImages)

Usually, we make info a pointer, then we store it in the user value of the top-level base, so it is accessible to all the even handlers:

info = Ptr New(info, /No Copy) Widget Control, tlb, Set UValue=info

This is typically done just before you call XMANAGER to start your program running in the widget definition module (or sometimes called the command module).

Ok, so somewhere you have created a couple of buttons named NEXT and PREVIOUS, and you have assigned an event handler to them. Maybe you did something like this:

```
buttonID = Widget_Button(baseID, Value='Next', $
    Event_Pro='MyProgram_ButtonEvents')
 buttonID = Widget_Button(baseID, Value='Next', $
    Event_Pro='MyProgram_ButtonEvents')
So when the user hits either the NEXT or PREVIOUS
button, the event will go to this event handler.
Here is how you write it:
PRO MyProgram ButtonEvents, event
 ; Get the information you need to run the program.
 Widget_Control, event.top, Get_UValue=info
 : Which button is this?
 Widget_Control, event.ID, Get_Value=buttonValue
 ; Set the image counter.
 CASE buttonValue OF
   'Next': (*info).imgCounter = 0 > ((*info).imgCounter) + 1 < $
          ((*info).numlmages-4)
   'Previous': (*info).imgCounter = 0 > ((*info).imgCounter) - 1 < $
          ((*info).numlmages-4)
  ENDCASE
  Display the four images in the four draw widget windows.
  cnt = Indgen(4) + (*info).imgCounter
  FOR i=0,3 DO BEGIN
    WSet, (*info).wIDs[j]
    TV, *((*info).thelmages[cnt[j]])
  ENDFOR
END
That's it. Pretty simple. :-)
Cheers.
David
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Coyote's Guide to IDL Programming: http://www.dfanning.com/

Sepore ma de ni thui. ("Perhaps thou speakest truth.")