
Subject: Can I make entries in CW_PDMENU insensitive?
Posted by [Steffen Luesse](#) on Wed, 24 Feb 1999 08:00:00 GMT
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Dear all,

I am using IDL 5.2 on solaris 2.6. I want to use the CW_PDMENU routine to create a pull-down menu in my widget programs. In principle, everything works well. However, I am wondering if it is possible to make some menu entries insensitive like I can do it with buttons or sliders when they should not be used. I did not find any information about my problem in the IDL documentation and would appreciate if anybody could give me a hint.

Thanks in advance,

Steffen

Subject: Re: Can I make entries in CW_PDMENU insensitive?
Posted by [davidf](#) on Tue, 02 Mar 1999 08:00:00 GMT
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David Foster (foster@bial1.ucsd.edu) writes:

> David -
>
> I agree that creating pulldown menus using the /MENU keyword to
> WIDGET_BUTTON() calls is very easy, and makes your code easier
> to read and maintain (especially your event handler!).
>
> But all of the limitations of CW_PDMENU mentioned above can be
> overcome by using the IDS= keyword to return a vector of the
> widget IDs for the buttons, and then using WIDGET_CONTROL to
> manage these widgets (eg. make insensitive, assign an event-handler,
> set the uvalue, etc.).

I don't dispute this. I just argue that using the button IDs like this will make the code significantly harder to extend and maintain over time. Since I'm not so bright that I think of everything I need in a program at the time I write it, extendability and maintainability is something I prize highly. :-)

Adding a menu item as a button, assigning an event handler for it, and writing the new event handler can be done in a matter of minutes, as opposed to re-ordering my index numbers in a large event

handler, making several mistakes that introduce other errors, etc. When it comes to programming, I need all the help I can get.

Cheers,

David

--

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

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Subject: Re: Can I make entries in CW_PDMENU insensitive?

Posted by [David Foster](#) on Tue, 02 Mar 1999 08:00:00 GMT

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David Fanning wrote:

>

> Steffen Luesse (luesse@rad.uni-kiel.de) writes:

>

>> I am using IDL 5.2 on solaris 2.6. I want to use the CW_PDMENU routine
>> to create a pull-down menu in my widget programs. In principle,
>> everything works well. However, I am wondering if it is possible to make
>> some menu entries insensitive like I can do it with buttons or sliders
>> when they should not be used. I did not find any information about my
>> problem in the IDL documentation and would appreciate if anybody could
>> give me a hint.

>

> CW_PDMENU sounds like a good idea until you actually start
> writing a widget program. Then you find you want to make
> a button insensitive, or you want to assign a special event
> handler to a button, or you want to put something in the
> user value of a button, or whatever it is, and CW_PDMENU
> doesn't let you do it.

>

> At this point you can either hack the CW_PDMENU code (ugh!), or
> you can do what I do and use the trivially easy solution of
> setting the MENU keyword on button widgets to create your
> own pull-down menus.

David -

I agree that creating pulldown menus using the /MENU keyword to
WIDGET_BUTTON() calls is very easy, and makes your code easier

to read and maintain (especially your event handler!).

But all of the limitations of CW_PDMENU mentioned above can be overcome by using the IDS= keyword to return a vector of the widget IDs for the buttons, and then using WIDGET_CONTROL to manage these widgets (eg. make insensitive, assign an event-handler, set the uvalue, etc.).

Dave

--

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~~~~~

Subject: Re: Can I make entries in CW_PDMENU insensitive?

Posted by [davidf](#) on Wed, 03 Mar 1999 08:00:00 GMT

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Stein Vidar Hagfors Haugan (steinhh@ulrik.uio.no) writes:

> Ok - you asked for it :-) In the case that one needs to
> manipulate the status of several buttons on a pulldown menu,
> the sensible thing is to write a pulldown menu *object*.

Oh, Stein Vidar, don't *even* get me started!

Of course you want an object. But do you know how many really good programmers on this newsgroup are deathly afraid of objects? It's an uphill battle, my friend. :-)

Cheers,

David

P.S. I've been looking for a good compound widget as object example for my book. I had something else in mind, but maybe I'll code this up instead. And if I can do it, anyone can. :-)

--

David Fanning, Ph.D.

Subject: Re: Can I make entries in CW_PDMENU insensitive?
Posted by [steinhh](#) on Wed, 03 Mar 1999 08:00:00 GMT
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David Fanning wrote:

- > Adding a menu item as a button, assigning an event
- > handler for it, and writing the new event handler
- > can be done in a matter of minutes, as opposed to
- > re-ordering my index numbers in a large event
- > handler, making several mistakes that introduce
- > other errors, etc.

I agree, David, that this is easily done in a few minutes - although the situation might require a bit more than just an event handler. You might want to (de)sensitize the button(s) based on a number of different criteria, not just based on events from the buttons themselves... So you'll probably need to store the ID(s) in the info structure anyway.

Anyway, the ID extraction from the array would come directly after the cw_pdmenu call using the IDS= keyword, so it isn't that difficult to remember the update when you're changing the cw_pdmenu call...

Given that button IDs for several buttons need to be stored for later use, the difference isn't all that big... But personally I agree that the direct method using /MENU in widget_button is aesthetically more pleasing.

- > When it comes to programming, I need all the help I can
- > get.

Ok - you asked for it :-) In the case that one needs to manipulate the status of several buttons on a pulldown menu, the sensible thing is to write a pulldown menu *object*.

When this is done once and for all, you can forget all about IDs and widget_control calls. Something like this (off the top of my head, the specific mode of operation is at the programmers discretion, of course):

```
menu = obj_new('mypdmenu',base,'Pull Down Menu')
menu->add,'Level 1a','LEVEL1A' ;; Second arg. is an optional
menu->add,'Level 1b','LEVEL1B' ;; identifier, [UVALUE]
menu->add,'Level 1c','LEVEL1C',/menu
menu->add,'Level 2a','LEVEL2A'
menu->add,'Level 2b','LEVEL2B'
```

We keep the object pointer in the info structure, and later we use it like this:

```
;; No argument means desensitize whole menu
menu->desensitize
```

```
;; One argument means desensitize that button (or
;; submenu)
menu->sensitize,'LEVEL1A' ;; Single button
menu->desensitize,'LEVEL1C' ;; Submenu.
```

The rationale behind using identifiers like 'LEVEL1A' etc is to be independent of the actual button text (like, if somebody translates the text to serbocroatian... :-)

You may of course specify event handlers etc. in the "add" method..

Regards,

Stein Vidar
