Subject: Re: taking the widget plunge. help Posted by davidf on Wed, 06 Sep 2000 20:26:10 GMT

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Peter Brooker (ra5589@email.sps.mot.com) writes:

- > I need to write a program to learn how easy/hard IDL widgets are to
- > use. I figure that a starting point would be a well documented simple
- > program that demostrates how they are to use.

>

> Any suggestions?

I've completely re-written the IDL programming chapters of my book for the 2nd Edition, which is due out in October. This includes, in particular, all the widget programming material. You might want to try the example widget program I wrote for this book. It is named Histo\_GUI and you can find it here:

ftp://ftp.dfanning.com/pub/dfanning/outgoing/coyote2nd/histo \_gui.pro

That's all you will need if you just want to study how a program is written. If you want to run the program, you will need other programs in the Coyote library. I would just download all the programs in the coyote2nd directory. I think all the programs you need are there, although I haven't done the final run-through to be absolutely certain. You will definitely need these files:

colorbar.pro
error\_message.pro
fsc\_droplist.pro
fsc\_fileselect.pro
fsc\_inputfield.pro
fsc\_plotwindow.pro
fsc\_ps\_config\_\_define.pro
getcolor.pro
histoimage.pro
loaddata.pro
openimage.pro
pickcolorname.pro
psconfig.pro
pswindow.pro
tvimage.pro

If you need more explanation (other than what appears in the program comments), you can always read the book. :-) Best Regards, David P.S. Let's just say I wouldn't be using too many programs in the lib directory as examples. :-( David Fanning, Ph.D. Fanning Software Consulting Phone: 970-221-0438 E-Mail: davidf@dfanning.com Coyote's Guide to IDL Programming: http://www.dfanning.com/ Toll-Free IDL Book Orders: 1-888-461-0155 Subject: Re: taking the widget plunge. help Posted by Martin Schultz on Thu, 07 Sep 2000 07:51:24 GMT View Forum Message <> Reply to Message Peter Brooker wrote: > I need to write a program to learn how easy/hard IDL widgets are to > use. I figure that a starting point would be a well documented simple program that demostrates how they are to use. > > Any suggestions? > thanks-Peter Brooker Ohh! \*Using\* widgets is really easy, it's the making that sometimes causes a little more trouble ;-) Cheers. Martin [ Dr. Martin Schultz Max-Planck-Institut fuer Meteorologie  $\prod$ Bundesstr. 55, 20146 Hamburg  $\prod$ П phone: +49 40 41173-308 [[[[fax: +49 40 41173-298 [[[[ martin.schultz@dkrz.de []

## Subject: Re: taking the widget plunge. help Posted by promashkin on Thu, 07 Sep 2000 15:02:21 GMT

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I have a different problem. It is so much fun to write them that I am beginning to like that better than using them :-)
Cheers,
Pavel

Martin Schultz wrote:

>

- > Ohh! \*Using\* widgets is really easy, it's the making that sometimes
- > causes a little more trouble ;-)

>

- > Cheers,
- > Martin\*

Subject: Re: taking the widget plunge. help Posted by davidf on Thu, 07 Sep 2000 15:26:55 GMT View Forum Message <> Reply to Message

Pavel Romashkin (promashkin@cmdl.noaa.gov) writes:

- > I have a different problem. It is so much fun to write them that I am
- > beginning to like that better than using them :-)

This, in a nutshell, is \*exactly\* the problem with objects. And don't even get me started on documentation, in which you have to document each and every method in addition to the usual rigamarole. And, of course, they are so much fun to write that you have about 50 methods. Sigh...

I usually just give up and console myself with the thought that at least \*my\* programs are really cool. Even if no one else (as a result of my sloth) can figure out how they work. :-(

Cheers,

David

P.S. Let's just say I spent a couple of days writing documentation for FSC\_PSConfig, \*the\* best program I've ever written, and no one downloads it or uses it. You just figure after a while, what's the point?

--

David Fanning, Ph.D.

Fanning Software Consulting

Phone: 970-221-0438 E-Mail: davidf@dfanning.com

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

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: taking the widget plunge. help Posted by Martin Schultz on Fri, 08 Sep 2000 08:43:24 GMT View Forum Message <> Reply to Message

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David Fanning wrote:
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> >

>

> P.S. Let's just say I spent a couple of days writing

- > documentation for FSC\_PSConfig, \*the\* best program I've
- > ever written, and no one downloads it or uses it. You just
- > figure after a while, what's the point?

>

Oh, don't be so disappointed! I would say, you are just way ahead of time! Wait until a few more people catch up with the niceties of objects, and I am sure you will see your psconfig being used more and more.

Also, this probably has to do with the way a lot of code gets written: copy and paste. So, most people will have some sort of psopen and psclose in their programs already, and they just copy it into their new programs without thinking how it could be improved. And when they really need to produce a beautifully scaled postscript file, it's usually with the boss standing right behind them, so they wouldn't dare to try out something new but rather fiddle with the device keywords manually 6-10 times.

Cheer(s|up), Martin

Subject: Re: taking the widget plunge. help Posted by John-David T. Smith on Mon, 11 Sep 2000 23:25:11 GMT View Forum Message <> Reply to Message

- > P.S. Let's just say I spent a couple of days writing
- > documentation for FSC\_PSConfig, \*the\* best program I've
- > ever written, and no one downloads it or uses it. You just
- > figure after a while, what's the point?

I took this as a friendly reminder to check out your new stuff, and I was frankly amazed at how much work you'd put into the documentation. Really an astounding effort. I will try to integrate FSC\_PSConfig into some of my programs around here.

One note which I think is instructive. You include a section on customization where you outline how to directly modify your source to add personal or company-wide set-up lists. This is a very useful feature, but I think you're going to cause yourself and potential users grief here. It's a \*perfect\* place to flex our object oriented muscles. The problem will be that in a year you'll think of a great way to redesign it, or maybe RSI makes some changes to device which prompt a rewrite. Then, either all the users who have made their own modifications will be out of luck, or you'll be contrained in what kind of updates you can do. It is exactly these types of situations that scream out for some sort of object relationship. If, rather than giving direction on how to change your code, you gave a simple example of INHERIT'ing your class, and chaining to its setup code, you could fully preserve "forward compatibility" -- i.e. drop-in replacement of your updated code.

Or, since in this case the local setup changes are data-only (no fundamental method changes), you could simply provide access to an internally growable list of setups. Inheritance is not even really required.

I haven't looked closely, but a method which allows you to add setup lists (e.g. self->AddSetup, "Company Viewgraph", /EUROPEAN, FontNameSet="Helvetica"), would seem to do the trick. This might be called automatically in Init with all the built-in defaults. A user could INHERIT it, override and chain to AddSetup for a fully internal solution, or they could use a compound relationship and add the setups "from the outside" in whatever wrapper routine (or object) they use.

The details of how set-ups are stored, manipulated, etc., would be hidden, only the published interface of AddSetup need remain the same (or backwards compatible anyway... nothing to stop you adding new keywords as new features become available).

Anyway, it's just a thought. Perhaps you're afraid of scaring off potential users with objects. You shouldn't be. It's good for them.

/\*\ WORK: (607) 255-6263 J.D. Smith Cornell University Dept. of Astronomy \\*/ (607) 255-5842 304 Space Sciences Bldg. /\*\ FAX: (607) 255-5875 \\*/

Ithaca, NY 14853