
Subject: Re: Error Handling Advice

Posted by [David Fanning](#) on Sat, 12 Jan 2013 00:15:30 GMT

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Matthew Argall writes:

>
>> 3. The only exception to 2 is for utility functions
>
> What qualifies as a utility function?
>
>
>> 5. I make sure I check EVERY SINGLE ONE of my parameters and keywords to
>> see that they are defined as *something*.
>
> Just to see if they are defined, or do you make sure they are scalars, arrays, have the proper
dimensions, etc? Is there a "too overboard"?

Well, despite all my blather, there is a "too overboard" factor at work,
too. If it matters to me, I'll do more checking. But, if I write a
program that works with images, I probably won't check to see if the
user passed in a scalar value. Not worth my time to do so. Let CATCH
handle it. But, I can tell I do a LOT more checking than most of the IDL
programs I look at. :-)

>> 9. CATCH error handlers are to catch program errors that I know
>> inevitably occur, but that I don't anticipate. I check EVERY SINGLE ONE of my
>> parameters and I try to anticipate common errors and check for those.
>> Sometimes it is embarrassing how much code is error handling code in a
>> small program. Don't use CATCH error handlers because you are too lazy
>> to do any work.
>
> So, check all anticipated/potential errors, then include a CATCH for the ones you miss. When
you discover one you missed, you put in another check. Is that the gist of it?

Yes, I often add more error checking if I find people are confused about
how something should be used. But, I also look at the interface. If I
call a program wrong several times in a row, I know I got the interface
wrong, and I try to change it. One example off the top of my head is
PS_START. It has a default filename of "idl.ps", so if the user wants to
change it, they can use a FILENAME keyword:

```
PS_START, FILENAME='test.ps'
```

But, when I use PS_START, I always called it like this:

```
PS_START, 'test.ps'
```

I did that so often, I made an optional positional parameter to handle this correctly. FILENAME was what I can an "inefficient" keyword.

Cheers,

David

--

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

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