
Subject: Re: Comments on Coding Style

Posted by [Maarten\[1\]](#) on Thu, 29 Apr 2010 08:44:57 GMT

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On Apr 29, 8:26 am, Aram Panasenco <panasenco...@gmail.com> wrote:

- > I want your comments on the programming conventions I use and how I can
- > change them to make the code more clear and desirable for other
- > programmers to improve. Some things to consider:
- >
- > - Should I use comments or is the code (so far) pretty self-explanatory?

Always add a description of the intention of the code. Not the trivial bits ("increment var by 1" is pointless, adding a comment `_why_ var` is incremented can save you a lot of headaches). This code was not self-explanatory for me.

- > - Is the non-standard capitalization annoying you? Should I switch to
- > the classic IDL capitalization (All-caps for IDL keywords, capitalized
- > function and procedure names)?

I'm more annoyed by the over-capitalization of classic IDL. All-caps is like shouting all the time, and at some point I stop listening. An editor with syntax coloring is more valuable, and a code index is even better. Don't do yourself what a computer can do better.

Maarten

Subject: Re: Comments on Coding Style

Posted by [David Fanning](#) on Thu, 29 Apr 2010 13:05:02 GMT

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Aram Panasenco writes:

- > I want your comments on the programming conventions I use and how I can
- > change them to make the code more clear and desirable for other
- > programmers to improve. Some things to consider:
- >
- > - Should I use comments or is the code (so far) pretty self-explanatory?
- > - Is the non-standard capitalization annoying you? Should I switch to
- > the classic IDL capitalization (All-caps for IDL keywords, capitalized
- > function and procedure names)?
- > - Is there anything wrong with the way I handle the IDL class? The
- > routines?
- > - Anything wrong at all? I'd rather fix it now than thousands of lines
- > of code later.

I like the style, but, yes, you need comments. Lots of them. :-)

Also, the `__DEFINE` method has to be the **last** method in the file, not the first, or you will spend all your programming time compiling files as if you were programming in C or something. :-)

<http://www.dfanning.com/tips/namefiles.html>

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Comments on Coding Style
Posted by [Aram Panasenco](#) on Thu, 29 Apr 2010 19:26:44 GMT
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David Fanning wrote:

> Aram Panasenco writes:

>

>> I want your comments on the programming conventions I use and how I can
>> change them to make the code more clear and desirable for other
>> programmers to improve. Some things to consider:

>>

>> - Should I use comments or is the code (so far) pretty self-explanatory?

>> - Is the non-standard capitalization annoying you? Should I switch to
>> the classic IDL capitalization (All-caps for IDL keywords, capitalized
>> function and procedure names)?

>> - Is there anything wrong with the way I handle the IDL class? The
>> routines?

>> - Anything wrong at all? I'd rather fix it now than thousands of lines
>> of code later.

>

> I like the style, but, yes, you need comments. Lots of
> them. :-)

>

> Also, the `__DEFINE` method has to be the **last** method

> in the file, not the first, or you will spend all your
> programming time compiling files as if you were programming
> in C or something. :-)
>
> <http://www.dfanning.com/tips/namefiles.html>
>
> Cheers,
>
> David
>
>
>

Thank you Maarten and David for your comments ;)

I have followed your advice and added comments, added a header, and moved the `__DEFINE` method to the bottom of the file. That means I am now going to need more criticism about these things.

I am going to try and use only one header per class that will describe the entire class interface. I am using non-standard tags (Name, Design Details, Abstraction, Syntax, and Public Methods) instead of the more standard (Name, Purpose, Category, Superclasses, Subclasses, Syntax). Is that a bad change? What would you like to see different about the header?

Are the comments describing the intention of the code rather than repeating it? Are the comments distracting, are there too many or too little?

Class:

<http://pastebin.com/QuNuMKwu>

Subject: Re: Comments on Coding Style

Posted by [penteado](#) on Thu, 29 Apr 2010 19:38:34 GMT

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On Apr 29, 4:26 pm, Aram Panasenco <panasenco@gmail.com> wrote:

> I am going to try and use only one header per class that will describe
> the entire class interface. I am using non-standard tags (Name, Design
> Details, Abstraction, Syntax, and Public Methods) instead of the more
> standard (Name, Purpose, Category, Superclasses, Subclasses, Syntax). Is
> that a bad change? What would you like to see different about the header?

If you use one of the standard formats (and tags) for the comments, then you can use IDLdoc to generate nice documentation pages (which include very useful features like links and search). If you are not

familiar with it, see

<http://idldoc.idldev.com/>

Also, using one of the standard formats allows the Workbench to show the help for the routine.

Subject: Re: Comments on Coding Style
Posted by [David Fanning](#) on Thu, 29 Apr 2010 19:42:37 GMT
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pp writes:

> Also, using one of the standard formats allows the Workbench to show
> the help for the routine.

How is this done?

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Sepore ma de ni thue. ("Perhaps thos speakest truth.")

Subject: Re: Comments on Coding Style
Posted by [Aram Panasenco](#) on Thu, 29 Apr 2010 20:10:53 GMT
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pp wrote:

> On Apr 29, 4:26 pm, Aram Panasenco<[panasenco@...@gmail.com](mailto:panasenco@...)> wrote:
>> I am going to try and use only one header per class that will describe
>> the entire class interface. I am using non-standard tags (Name, Design
>> Details, Abstraction, Syntax, and Public Methods) instead of the more
>> standard (Name, Purpose, Category, Superclasses, Subclasses, Syntax). Is
>> that a bad change? What would you like to see different about the header?
>
> If you use one of the standard formats (and tags) for the comments,
> then you can use IDLdoc to generate nice documentation pages (which
> include very useful features like links and search). If you are not

> familiar with it, see
>
> <http://idldoc.idldev.com/>
>
> Also, using one of the standard formats allows the Workbench to show
> the help for the routine.

I have just checked out IDLdoc and... wow! I am downright speechless. It does generate amazing help pages. I am sure there is a way to fine-tune it (or downright modify the source code) to work with nonstandard tags, though. Right now, human readability is a bigger concern for me.

~Aram Panasenco

Subject: Re: Comments on Coding Style
Posted by [Aram Panasenco](#) on Thu, 29 Apr 2010 20:17:07 GMT
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pp wrote:

> On Apr 29, 4:26 pm, Aram Panasenco<panasenco...@gmail.com> wrote:
>> I am going to try and use only one header per class that will describe
>> the entire class interface. I am using non-standard tags (Name, Design
>> Details, Abstraction, Syntax, and Public Methods) instead of the more
>> standard (Name, Purpose, Category, Superclasses, Subclasses, Syntax). Is
>> that a bad change? What would you like to see different about the header?
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> If you use one of the standard formats (and tags) for the comments,
> then you can use IDLdoc to generate nice documentation pages (which
> include very useful features like links and search). If you are not
> familiar with it, see
>
> <http://idldoc.idldev.com/>
>
> Also, using one of the standard formats allows the Workbench to show
> the help for the routine.

Actually, I have just explored more of IDLdoc and I think it has some pretty good standards. Maybe I will switch to documenting each routine by them. I will see. Thanks again for the info!

~Aram Panasenco

Subject: Re: Comments on Coding Style
Posted by [Michael Galloy](#) on Thu, 29 Apr 2010 20:52:01 GMT
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On 4/29/10 1:42 PM, David Fanning wrote:

> pp writes:

>

>> Also, using one of the standard formats allows the Workbench to show

>> the help for the routine.

>

> How is this done?

Nothing needs to be done to turn it on, just write the comments in IDLdoc's rst format. To get started on using IDLdoc including what rst format comments look like, see:

<http://idldoc.idldev.com/wiki/GettingStarted>

More details on what the allowable tags are is embedded in the help page of any IDLdoc output, for example:

<http://docs.idldev.com/idllib/idldoc-help.html>

I need to make a friendlier guide sometime, but I think all the information is on these pages.

Mike

--

www.michaelgalloy.com

Research Mathematician

Tech-X Corporation

Subject: Re: Comments on Coding Style

Posted by [David Fanning](#) on Thu, 29 Apr 2010 20:59:55 GMT

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Mike Galloy writes:

>>> Also, using one of the standard formats allows the Workbench to show

>>> the help for the routine.

>>

>> How is this done?

>

> Nothing needs to be done to turn it on, just write the comments in

> IDLdoc's rst format.

But how is this accessed from the Workbench?

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Sepore ma de ni thue. ("Perhaps thos speakest truth.")

Subject: Re: Comments on Coding Style
Posted by [Michael Galloy](#) on Thu, 29 Apr 2010 21:17:41 GMT
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On 4/29/10 2:59 PM, David Fanning wrote:

```
> Mike Galloy writes:
>
>>>> Also, using one of the standard formats allows the Workbench to show
>>>> the help for the routine.
>>>
>>> How is this done?
>>
>> Nothing needs to be done to turn it on, just write the comments in
>> IDLdoc's rst format.
>
> But how is this accessed from the Workbench?
```

Ah, just mouse over a call to a routine in the editor. I see something like:

http://michaelgalloy.com/wp-content/uploads/2010/04/vis_convert_mouseover.png

VIS_CONVERT has a header like:

```
;+
; Use ImageMagick to convert a file between formats.
;
; :Params:
;   basename : in, optional, type=string
;     basename of file to convert (used for output name as well)
;
; :Keywords:
;   density : in, optional, type=long, default=300
;     density of output image in dots per inch
;   scale : in, optional, type=long, default=100
;     scale percentage to use
;   from_extension : in, optional, type=string
;     extension to use for input file
;   from_eps : in, optional, type=boolean
```

```

;   if set, indicates the input is a Encapsulated PostScript file
;   from_png : in, optional, type=boolean
;   if set, indicates the input is a PNG file
;   from_ps : in, optional, type=boolean
;   if set, indicates the input is a PostScript file
;   max_dimensions : in, optional, type=lonarr(2)
;   maximum dimensions for the output image in pixels
;   to_extension : in, optional, type=string
;   extension to use for output file
;   to_eps : in, optional, type=boolean
;   if set, indicates the output should a Encapsulated Postscript file
;   to_png : in, optional, type=boolean
;   if set, indicates the output should a PNG image file
;   to_ps : in, optional, type=boolean
;   if set, indicates the output should a Postscript file
;   command : out, optional, type=string
;   convert command
;   output : out, optional, type=bytarr
;   output image if output format is an image type
;   convert_location : in, optional, type=string
;   location of the convert command
;-

```

```

pro vis_convert, basename, $
    density=density, $
    max_dimensions=maxDimensions, $
    scale=scale, $
    from_extension=fromExtension, $
    from_eps=fromEps, $
    from_png=fromPng, $
    from_ps=fromPs, $
    to_extension=toExtension, $
    to_eps=toEps, $
    to_png=toPng, $
    to_ps=toPs, $
    command=cmd, $
    output=output, $
    convert_location=convertLocation

```

Mike

--

www.michaelgalloy.com
 Research Mathematician
 Tech-X Corporation

Subject: Re: Comments on Coding Style
 Posted by [Aram Panasenco](#) on Thu, 29 Apr 2010 23:30:40 GMT

I have just finished reformatting my code by IDLdoc standards (<http://pastebin.com/97ThuDCj>). Not only does it provide for a great header standard, it also makes pretty, pretty documentations. I can't thank Mike Galloy enough for this.

~Aram Panasenco
