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Subject: Re: Interactive Graphics Library  
Posted by [Raphael Sadoun](#) on Thu, 24 May 2012 15:36:33 GMT  
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On May 23, 3:34 am, Russell Ryan <rr...@stsci.edu> wrote:

>  
> So, I was looking at the code. Can either of you two explain the  
> virtues of writing a GUI as an object?

Well, one of the basic principle of the Interactive Graphics Library is that all the graphics displayed in the window constitute an object tree hierarchy with the window object at the top. So the main advantage for writing the window as an object was to benefit the automatic memory management that the catalyst library provides with the CATATOM class (using reference counting). This is really needed in order to avoid memory leakage when using an object-oriented framework like the IGL which can potentially creates a LOT of objects!

Now, it is also generally easier to write widget applications (GUI) as objects since the state of the application can be stored directly with the object (class arguments) instead of using a pointer to a structure (often referred as the "info" structure).

Cheers

Raphael

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