Subject: Re: help with future application
Posted by Mark Hadfield on Thu, 27 Jul 2000 07:00:00 GMT
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"Phillip David" <phillip_david@xontech.com> wrote in message
news:397F4604.B0F7025E@xontech.com...
> Peter Brooker wrote:
>>
>> We are presently considering how to handle simulation requirements for
>> future technologies. (Present technologies are handled well by
>> commercial codes). As such, we have access to various internal and
>> university codes of which we have the source code. These codes are in
>> C and FORTRAN. The problem is that we have to link these codes together
>> and add GUIs to every thing to make them more user friendly. Also, once
>> a new model appears in the literature, we want to code this up as fast
>> as possible to try this out.
> Peter;
>
> In fact, if the primary thing you're looking to do is to code up a GUI,
> you might want to check out TCL (Tool Command Language). It's a
> powerful language if that's all you're trying to do. I haven't used it
> myself, but know of a number of successful projects that use this
> approach, and can work quickly to get the GUI up and running.

Another possibility in the same vein is Python:

http://www.python.org/

Like TCL and Perl, it is oriented towards scripting and rapid application development but (as far as I can tell) the base language is more elegant & scalable. There is a package called Numeric Python that makes numeric calculation in Python feasible:

http://numpy.sourceforge.net/

I have used Python for a few small text-processing utilities & have considered it as an alternative to IDL (as a language it's *much* nicer) but it doesn't have the history of application to numerics and graphics that IDL has. However I think it would be very well suited to tying together modules written in C and Fortran, and I believe it is being used for this at Lawrence Livermore. The current maintainer for Numeric Python is Paul Dubois. He writes a regular column in Computers in Physics and has covered Python in the past.

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