

Re: MDI in MFC, Conceptually

Source: <http://www.tech-archive.net/Archive/VC/microsoft.public.vc.mfc.docview/2005-02/0034.html>

From: Roger Lakner (*mmm444_at_adelphia.net*)

Date: 02/06/05

Date: Sun, 6 Feb 2005 08:47:49 -0800

Well, its nice to know I'm not too far off base, but I'm still puzzled by something and it relates to what I alluded to in my original message. Let me be more specific. A View's access to the Document's data is through a pointer (say, pDoc). The View uses this pointer to, in my case, render the BMP file data in a window and this is typically done in OnDraw using pDC. This is easy (using GDI or GDI+ routines) for the first file I open. When I open the second file, pDoc now points to the new file data, the new window renders the second image, but because pDoc now points to the new data, when the first window which contained the image from the first file receives the OnUpdate message, OnDraw renders the image that pDoc now points to, which is the second image. So now I have the second image in both windows — not what I want. This behavior makes sense if your App contains two Views of the same Document (as most of the examples demonstrate), but it seems to me that MFC is not good when you want to display multiple documents simultaneously. Or am I missing something?

Roger

"Frank Hickman [MVP]" <fhickman_NOSP@M_noblesoft.com> wrote in message news:uwj6iE\$CFHA.328@tk2msftngp13.phx.gbl...

> "Roger Lakner" <mmm444@adelphia.net> wrote in message
> news:8oidncFitduK-pjfrVn-sw@adelphia.com...
>> *This is what I understand the way MDI works in the MFC framework:*
>> *the wizard builds you a View class, Main and Child frame classes,*
>> *the App class, and a Document class. These classes represent types.*
>> *And I can have multiple instances of each type. For example,*
>> *multiple documents open simultaneously or multiple views of a*
>> *document's data open simultaneously. If I want to have my App work*
>> *with multiple document types or multiple View types, I realize I*
>> *need to create a new Document class or a new View class to manage*
>> *these other types. Most of the MDI sample applications in the*
>> *documentation and in Prosis's book show how to implement different*
>> *View types for a single Document type. And there are a couple of*
>> *examples implementing multiple Document types. And, once explained,*
>> *these are relatively straightforward to understand. Here is my*
>> *question: how would I implement the following scenario? My*
>> *application would use one document type, for example, a BMP image*

>> *file. And the app requires only one View type appropriate for
>> displaying a BMP file. But it must be able to open many such files
>> and display them all at the same time, each in its own window.
>> This, it seems to me, is fundamentally different from the sample
>> apps I've seen because the document's data changes over the course
>> of the App's run (each time I load a new file) and the view of each
>> (old) set of data must remain constant while that data changes and
>> a new view of that new data is displayed. In fact, I think this
>> scenario is conceptually contrary to MDI as its implemented in the
>> MFC.*
>>
>> *Am I missing something? or is this just very hard to implement in
>> MFC?*
>>
>> *Thanks in advance for any and all sagely advice and kind
>> consideration.*
>>
>> *Roger*
>>
>
>
> *Your not far off-base here. If your application only handles BMP
> files then you would only need one of each doc/view/frame classes to
> handle them. Now these classes can be reused for each instance of a
> BMP file you happen open. Meaning MFC creates/maintains the objects
> in memory so you can open as many of the objects as your system's
> memory will allow, theoretically :). What you describe in your
> scenario perfectly suits the MDI framework.*
>
> --
> =====
> *Frank Hickman*
> *Microsoft MVP*
> *NobleSoft, Inc.*
> =====
> *Replace the _nosp@m_ with @ to reply.*
>
>