Subject: OptionImage ctrl: how to make it better...
Posted by fudadmin on Wed, 12 Apr 2006 15:24:38 GMT
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Ok, I'm posting my a bit improved OptionImage control version and we can disscuss it here...

```
class OptionImage : public Option {
protected:
 Image imgYes, imgNo, imgMaybe;
public:
 virtual void   Paint(Draw& draw);
 OptionImage& SetImage(const Image& m1, const Image& m2, const Image& m3)
            { imgYes = m1; imgNo = m2; imgMaybe = m3; Refresh(); return *this; }
 OptionImage& SetImage(const Image& m1, const Image& m2)
            { imgYes = m1; imgNo = m2; Refresh(); return *this; }

 OptionImage& ThreeState(bool b = true)          { threestate = b; notnull = false; return *this; }

 typedef OptionImage CLASSNAME;
 OptionImage();
 ~OptionImage(){;}
};

OptionImage::OptionImage()
{

}


void OptionImage::Paint(Draw& w) {
 Size sz = GetSize();
 if(!IsTransparent())
  w.DrawRect(0, 0, sz.cx, sz.cy, SColorFace);
 Size isz = imgYes.GetSize();  //although maybe it would be good to calc from the biggest...?
 Size tsz = GetSmartTextSize(w, label, font);
 int ty = (sz.cy - tsz.cy) / 2; //text up-down
 int iy = (tsz.cy - isz.cy) / 2 + ty;
 bool ds = !IsShowEnabled();

  Image m = (!notnull || threestate) && IsNull(option) ? ds ? imgMaybe
                      : IsPush() ? imgYes
                        : imgMaybe :
        option == 1 ? ds ? (switchimage ? imgYes : imgYes)
                    : IsPush() ? (switchimage ? imgYes : imgYes)
                      : (switchimage ? imgYes : imgYes)
                : ds ? (switchimage ? imgNo : imgNo)
                    : IsPush() ? (switchimage ? imgNo : imgNo)
                      : (switchimage ? imgNo : imgNo);
```

```
  w.DrawImage(0, iy, m);
 // if(!switchimage) //for borders - need to adjust sizes...
 //  w.DrawImage(0, iy, ds ? CtrlImg::optionedged : blackedge ? CtrlImg::blackoptionedge :
CtrlImg::optionedge);

 DrawSmartText(w, isz.cx + 4, ty, tsz.cx, label, font, ds ? SGray : SBlack, VisibleAccessKeys() ?
accesskey : 0);
 //text length problem - tsz.cx - doesn't work? adjust your size in *.lay... :)
}
```

Now it works with assigned images from *.iml:
(with autosize from the 1st img - yes...)

```
 opt3.SetLabel("Avail?");  //todo: doesn't show all text if long... - adjust your size in *.lay... :)
 opt3.ThreeState(true).SetImage( imgYes(), imgNo(), imgMaybe());
```

P.S. Unzip into ForlanoOption folder (no folders inside!)

File Attachments

1) ForlanoOption.zip, downloaded 1796 times

Subject: Re: OptionImage ctrl: how to make it better...
Posted by fudadmin on Wed, 12 Apr 2006 15:51:35 GMT
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Luigi, would you be able now to transform the code above to have possibility:

opt3.Set("Label_text", imgYes(), imgNo(), imgMaybe());

???

Subject: Re: OptionImage ctrl: how to make it better...
Posted by forlano on Wed, 12 Apr 2006 21:03:31 GMT
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fudadmin wrote on Wed, 12 April 2006 17:51Luigi, would you be able now to transform the code above to have possibility:

opt3.Set("Label_text", imgYes(), imgNo(), imgMaybe());

???

Aris,

thank you very much for your effort! Just now I've seen the code but I can try only tomorrow. I hope to be able to do so.

Luigi

Subject: Re: OptionImage ctrl: how to make it better...
Posted by fudadmin on Wed, 12 Apr 2006 21:11:14 GMT
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If you download it, it runs "out of the box"...

Subject: Re: OptionImage ctrl: how to make it better...
Posted by forlano on Thu, 13 Apr 2006 06:45:40 GMT
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fudadmin wrote on Wed, 12 April 2006 23:11If you download it, it runs "out of the box"...

Aris,
I tried your code. It works very nice (what do you mean with
"out of the box"?). I've even learned how to put in the designer a new class object (just rename the classobject after CTRL+T). Before to do my 'todo' task I tried to put the wonderful OptionImage in the arrayctrl. I've added the .iml file and the .h file then

1th temptive.

```
 arr.AddColumn("Avail", "Avail?", 4).Ctrls<OptionImage>();
```

nothing appear.

2th temptive.

```
 arr.AddColumn("Avail", "Avail?", 4).Ctrls(Avail3);
```

where, on the model of past example,

```
void Avail3(One<Ctrl>& ctrl)
{
// ctrl.Create<Option>().ThreeState();
 ctrl.Create<OptionImage>();
 ctrl.ThreeState(true).SetImage( imgYes(), imgNo(), imgMaybe());
}
```

but the compiler cryed:

C:\MyApps\vegaMenuStatus\tab1.cpp: In function `void Avail3(One<Ctrl>&)':
C:\MyApps\vegaMenuStatus\tab1.cpp:18: error: 'class One<Ctrl>' has no member named 'ThreeState'

Any idea? I attach the zipped project if could be useful. This part of the code is in the file tab1.cpp. Unzip in vegaMenuStatus with no subfolder.
Thank you,
Luigi

Edit by fudamin:
P.S old zip deleted to save space on the server. New zip below.

Subject: Re: OptionImage ctrl: how to make it better...
Posted by fudadmin on Thu, 13 Apr 2006 14:47:02 GMT
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```
void Avail3(One<Ctrl>& ctrl)
{
// ctrl.Create<Option>().ThreeState();
 ctrl.Create<OptionImage>().ThreeState().SetImage(imgYes(), imgNo(), imgMaybe());

}
```

Edit:
P.S. "out of the box" means that you don't need any adjustments or changes...

Subject: Re: OptionImage ctrl: how to make it better...
Posted by fudadmin on Thu, 13 Apr 2006 15:13:18 GMT
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and for your ArrayCtrl initialization this might be useful:

```
 arr.SetLineCy(imgYes().GetSize().cy+1);
```

Subject: Re: OptionImage ctrl: how to make it better...
Posted by forlano on Thu, 13 Apr 2006 15:43:52 GMT
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fudadmin wrote on Thu, 13 April 2006 16:47
void Avail3(One<Ctrl>& ctrl)

```
{
// ctrl.Create<Option>().ThreeState();
 ctrl.Create<OptionImage>().ThreeState().SetImage(imgYes(), imgNo(), imgMaybe());

}
```

I remind to have tried even this combination but without success . Perhaps there were a mistake in some other place.
Even arr.SetLineCy(imgYes().GetSize().cy+1); is very useful... I was looking for something like it!

How can I know when to use the '.' and connect more methods? So far I'm using the code but without to really understand the syntax. Anyway it works and the understanding can wait. Maybe if I understand the things start to go wrong.

Now I want to realize a small tutorial useful for dinosour as me to fix what I have learned so far.
Luigi

Subject: Re: OptionImage ctrl: how to make it better...
Posted by mr_ped on Thu, 13 Apr 2006 16:16:27 GMT
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The '.' makes you work with instance on the left.

'ctrl.' means you want to do something with arrayctrl (and there's no ThreeState method defined for that class)

'ctrl.Create<OptionImage>().' means you want to call "Create" method of ctrl to create OptionImage class instance with default (void) constructor. And that Create method returns reference to the freshly created control (OptionImage), so the last '.' indicates you want to do something with OptionImage.
Now there's perfectly legal to use "ThreeState" method on that one.

It's like many single lines put into one long.
I think this code would do the same (but I'm writing it just by hand, so maybe there will be some mistake)

```
OptionImage &option_instance = ctrl.Create<OptionImage>();
option_instance.ThreeState();
option_instance.SetImage(imgYes(), imgNo(), imgMaybe());
```

i.e. in first line you create your option object instance in memory (and add it to arractrl).
And on next lines you are customizing it's behaviour by calling it's methods.

The long line with many dots is a nice shortcut, which is using the fact that many methods returns the reference to "this" instance, allowing you to continue with another '.'.

Subject: Re: OptionImage ctrl: how to make it better...
Posted by mirek on Thu, 13 Apr 2006 16:18:49 GMT
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mr_ped wrote on Thu, 13 April 2006 12:16The '.' makes you work with instance on the left.

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i.e. in first line you create your option object instance in memory (and add it to arractrl).
And on next lines you are customizing it's behaviour by calling it's methods.

The long line with many dots is a nice shortcut, which is using the fact that many methods returns the reference to "this" instance, allowing you to continue with another '.'.

And you insist you just barely know C++?

Mirek

Subject: Re: OptionImage ctrl: how to make it better...
Posted by fudadmin on Thu, 13 Apr 2006 16:24:55 GMT
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forlano wrote on Thu, 13 April 2006 16:43
1. How can I know when to use the '.' and connect more methods?

2.So far I'm using the code but without to really understand the syntax. Anyway it works and the understanding can wait. Maybe if I understand the things start to go wrong.

3. Now I want to realize a small tutorial useful for dinosour as me to fix what I have learned so far.
Luigi

1. Look at what is returned from methods:
a) in Assistant - the first column if Ctrl or Ctrl& or Ctrl* or etc.
b) in the library (mostly *.h files) (tip- use alt_J alt_I!)
P.S. In tutorial this should be named
"How to make "sausages" in your code... :)"

2. Proper understanding comes from your mistakes!
If you can drive a car, you don't need to fix it, do you ?
You learn only when you need something. Can a child learn how not to fall without falling? Then you remember it better...

3. Very good idea! What I was aiming at... Start from the content?

Subject: Re: OptionImage ctrl: how to make it better...
Posted by mr_ped on Thu, 13 Apr 2006 16:37:36 GMT
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Mirek, I'm master on assembly level.
So I perfectly understand what instance is, and what is difference between '.' and '->', between stack allocation of local variable and heap allocation by new, and when to use which.

I'm very good on algorithm/problems solving level too.

The C++ is between those two, and my mediocre knowledge is usually enough. In the end the documentation and google will save you, once you know *from* where *to* where you want to go. C++ is just path, and even if I don't choose the most optimal one, it's not the biggest obstacle to reach my goals.

Subject: Re: OptionImage ctrl: how to make it better...
Posted by fudadmin on Thu, 13 Apr 2006 17:32:54 GMT
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forlano wrote on Thu, 13 April 2006 16:43fudadmin wrote on Thu, 13 April 2006 16:47
void Avail3(One<Ctrl>& ctrl)
{
// ctrl.Create<Option>().ThreeState();
 ctrl.Create<OptionImage>().ThreeState().SetImage(imgYes(), imgNo(), imgMaybe());

}

I remind to have tried even this combination but without success . Perhaps there were a mistake in some other place.
Luigi

1. Perhaps you should try exactly what is here? (it's not in your code...)

2. I'm surprised how from such simple U++ application you were able to make a "spaghetti code"... . First of all, it doesn't run out of the box because I don't use C: and I don't have MyApps...
- Why do you use absolute references in *.upp file?
And you don't need a hundred of #include in each file with U++...

http://en.wikipedia.org/wiki/Spaghetti_code

Subject: Re: OptionImage ctrl: how to make it better...
Posted by forlano on Thu, 13 Apr 2006 21:59:18 GMT
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fudadmin wrote on Thu, 13 April 2006 19:32forlano wrote on Thu, 13 April 2006 16:43fudadmin wrote on Thu, 13 April 2006 16:47
void Avail3(One<Ctrl>& ctrl)
{
// ctrl.Create<Option>().ThreeState();
 ctrl.Create<OptionImage>().ThreeState().SetImage(imgYes(), imgNo(), imgMaybe());

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I remind to have tried even this combination but without success . Perhaps there were a mistake in some other place.
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- Why do you use absolute references in *.upp file?
And you don't need a hundred of #include in each file with U++...

http://en.wikipedia.org/wiki/Spaghetti_code

Thank you to all of you for the precious advices I've receveid. Now it is more clear.

I know perfectly what "spaghetti" and "spaghetti code" means. Nevertheless I do not understand what Aris mean in point 2) and file *.upp and #include.
I know only that now I've a beautiful OptionImage with which to play , inside and outside an ArrayCtrl. I'm very satisfied by what I've although I'm aware that there is space for improvement.
Luigi

Subject: Re: OptionImage ctrl: how to make it better...
Posted by fudadmin on Thu, 13 Apr 2006 22:18:23 GMT
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ok, not hundred... but, anyway, I'll try to make it more compact... and maybe I'll succeed with one more nice surprise... (at least for you).
And btw, is OptionImage working with ArrayCtrl?

Subject: Re: OptionImage ctrl: how to make it better...
Posted by fudadmin on Thu, 13 Apr 2006 22:33:51 GMT
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forlano wrote on Thu, 13 April 2006 22:59I know perfectly what "spaghetti" and "spaghetti code" means.

Nevertheless I do not understand what Aris mean in point 2) and file *.upp and #include.

your *.upp

```
uses
 CtrlLib;

file
 C:\MyApps\vegaMenuStatus\app.h,
 C:\MyApps\vegaMenuStatus\tab4.cpp,
 C:\MyApps\vegaMenuStatus\tab3.cpp,
 C:\MyApps\vegaMenuStatus\tab2.cpp,
 C:\MyApps\vegaMenuStatus\ForlanoOption.iml,
 C:\MyApps\vegaMenuStatus\ForlanoOption.h,
 C:\MyApps\vegaMenuStatus\tab1.cpp,
 C:\MyApps\vegaMenuStatus\newtournament.lay,
 C:\MyApps\vegaMenuStatus\tabs.h,
 C:\MyApps\vegaMenuStatus\editmask.lay,
 main.cpp;

mainconfig
```

"" = "GUI";

these are absolute references, aren't they? And if I use Linux? And IMHO, you are killing the whole idea of packages, forcing me to spend my precious time to rename them, then find all spaghetti includes...
It's M$ and Co approach - to waste others time... What Mirek and Co will say?!
Edit:
P.S. Have you recieved any of Ultimate's upp files like this?!
Open them as text and find out...

Subject: Re: OptionImage ctrl: how to make it better...
Posted by forlano on Fri, 14 Apr 2006 05:09:18 GMT
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fudadmin wrote on Fri, 14 April 2006 00:33forlano wrote on Thu, 13 April 2006 22:59I know perfectly what "spaghetti" and "spaghetti code" means.

Nevertheless I do not understand what Aris mean in point 2) and file *.upp and #include.

your *.upp

uses
 CtrlLib;

file
 C:\MyApps\vegaMenuStatus\app.h,
 C:\MyApps\vegaMenuStatus\tab4.cpp,
 C:\MyApps\vegaMenuStatus\tab3.cpp,
 C:\MyApps\vegaMenuStatus\tab2.cpp,
 C:\MyApps\vegaMenuStatus\ForlanoOption.iml,
 C:\MyApps\vegaMenuStatus\ForlanoOption.h,
 C:\MyApps\vegaMenuStatus\tab1.cpp,
 C:\MyApps\vegaMenuStatus\newtournament.lay,
 C:\MyApps\vegaMenuStatus\tabs.h,
 C:\MyApps\vegaMenuStatus\editmask.lay,
 main.cpp;

mainconfig
 "" = "GUI";

these are absolute references, aren't they? And if I use Linux? And IMHO, you are killing the whole idea of packages, forcing me to spend my precious time to rename them, then find all spaghetti includes...
It's M$ and Co approach - to waste others time... What Mirek and Co will say?!
Edit:
P.S. Have you recieved any of Ultimate's upp files like this?!

Open them as text and find out...

The OptionImage works inside the arrayctrl.
Your *.upp file look like this:

```
uses
 CtrlLib;

file
 "ForlanoOption.h"
 , main.cpp
 , "ForlanoOption.lay"
 , "ForlanoOption.iml"
;

mainconfig
 "" = "GUI";
```

That is more clean than mine. However I do not know why my upp file has those absolute paths. When I need a new file I click on "insert any file(s)" and write its name. I'am not aware of this absolute reference... and still I countinue to not understand in what the problem consist (I do not see problem when all work as I want).

Luigi

Subject: Re: OptionImage ctrl: how to make it better...
Posted by forlano on Fri, 14 Apr 2006 05:26:51 GMT
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Quote:When I need a new file I click on "insert any file(s)" and write its name. I'am not aware of this absolute reference... and still I countinue to not understand in what the problem consist (I do not see problem when all work as I want).
Perhaps I have understood. I should click instead on "insert package directory file(s)". Now the absolute path in *upp disappeared. If this is true, what advantage I achieve in this last method? Which connection has it with the include file?

Luigi

Subject: Re: OptionImage ctrl: how to make it better...
Posted by fudadmin on Fri, 14 Apr 2006 05:29:46 GMT
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Ok, your new version is here:

Edit:
P.S. I'll delete the previous file to save space on the server.

File Attachments
1) ForlanoVega.zip, downloaded 1793 times

Subject: Re: OptionImage ctrl: how to make it better...
Posted by fudadmin on Fri, 14 Apr 2006 05:44:33 GMT
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forlano wrote on Fri, 14 April 2006 06:26Quote:When I need a new file I click on "insert any file(s)" and write its name. I'am not aware of this absolute reference... and still I countinue to not understand in what the problem consist (I do not see problem when all work as I want). Perhaps I have understood. I should click instead on "insert package directory file(s)". Now the absolute path in *upp disappeared. If this is true, what advantage I achieve in this last method? Which connection has it with the include file?

Luigi
Advantages:
1. Other people do not need to waste time renaming to help you...
2. You can make simple backups or copies (branches) or move the whole dirs with packages...
3. And especially usefull when you work with a team...

P.S. Maybe Mirek can tell more advantages?

Subject: Re: OptionImage ctrl: how to make it better...
Posted by mr_ped on Fri, 14 Apr 2006 07:01:31 GMT
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I did check my test projects, and I did use "Insert any file" too to add files to my package.

Mirek: what's the real difference between those two?
I think (from what I see) they both work in the same way: add the file to the package. The only difference is that the first one makes the path relative, the second one absolute.
But both ways will make any added .cpp file to compile when I hit "Build", so it looks that "any file" belongs to main package anyway.

I think the context menu naming is somewhat confusing in such case (if that's the only difference).

Actually I would prefer single "Insert file" menu in such case, with option "absolute path ON/OFF", which would be set to OFF by default.

Or maybe "Insert any file" should switch the selection from package to "prj-aux" or what's appropriate? And to not add such file to build process (as I believe only package files should be involved in the building process of package).

I'm still a bit confused by packages (I understand them as "libraries" in C terminology), so maybe I don't understand it correctly, but I think TheIDE is right now a bit confusing with those 2x "Insert

file". (And the "any file" one was easier to find for me, I never realised there was the package one on the first line (ignored it always) until I read this topic)

Subject: Re: OptionImage ctrl: how to make it better...
Posted by mirek on Fri, 14 Apr 2006 07:26:22 GMT
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mr_ped wrote on Fri, 14 April 2006 03:01I did check my test projects, and I did use "Insert any file" too to add files to my package.

Mirek: what's the real difference between those two?
I think (from what I see) they both work in the same way: add the file to the package. The only difference is that the first one makes the path relative, the second one absolute.
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Sorry about confusion. I guess this is classical case where you have to choose between stronger and easier to use feature set.

It is true that "Insert any file.." for regular package is (should be..) very seldom used, however it can have advantages sometimes (e.g. experimenting with 3rd party code).

Mirek

Subject: Re: OptionImage ctrl: how to make it better...
Posted by forlano on Fri, 14 Apr 2006 16:46:38 GMT
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fudadmin wrote on Fri, 14 April 2006 07:29Ok, your new version is here:

Aris,

I can't recognize the application. It is a new one and of course much better! Thanks a lot .
I've studied it and I've some questions. But I'll post them after I finished a first draft of the tutorial. It deal with the Designer and has a lot of picture to guide step by step a beginner. I struggled with it several hours the first time for lack of information and I was going away riskying to loose a treasure. I hope to finish it quickly.

Luigi

Subject: Re: OptionImage ctrl: how to make it better...
Posted by fudadmin on Fri, 14 Apr 2006 18:45:15 GMT
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forlano wrote on Fri, 14 April 2006 17:46fudadmin wrote on Fri, 14 April 2006 07:29Ok, your new version is here:

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Luigi

Thanks for your appreciation!
More things that I've noticed.
Your code coloring looked messy because of not using tab indents. You should switch them on (to see) in Setup... Editor "Show tabs"...
You were not using Ctrl_Shift_up and down to make order with you package files? And also, *.upp file separators are a very good thing...
Commented but usefull code snippets it is usefull to keep in notes.txt in the package or a separate snippets.txt or etc. to have them "under hand" but not to take most of the compiled files lines... or ...
With Ctrl_Enter you can open Topic++ (I created one for you...) and start a nice docs of your nice app...
Waiting for your next task
Aris
