Subject: How to use callbacks
Posted by Patisab on Fri, 15 Jan 2016 17:56:04 GMT
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Good evening,

I would like to execute a function when the value in an EditField changes. I've tried something like this :

testcallback.h :
```
#ifndef _testcallback_testcallback_h
#define _testcallback_testcallback_h
#include <CtrlLib/CtrlLib.h>
using namespace Upp;
#define LAYOUTFILE <testcallback/testcallback.lay>
#include <CtrlCore/lay.h>
class testcallback : public WithtestcallbackLayout<TopWindow> {
public:
 void fCalcul();
 typedef testcallback CLASSNAME;
 testcallback();
};
#endif
```

main.cpp :
```
#include "testcallback.h"
testcallback::testcallback()
{
 CtrlLayout(*this, "Test CallBack");
 go <<= THISBACK(fCalcul);
}
GUI_APP_MAIN
{
 testcallback app;
 app.Run();
}
```

calcul.cpp :
```
#include "testcallback.h"
struct Saisie : public WithsaisieLayout<TopWindow> {
 Saisie()  {
  CtrlLayoutOKCancel(*this, "Saisie des valeurs");
  vs.WhenAction <<= THISBACK(Calcul);
  vm.WhenAction <<= THISBACK(Calcul);
 }
    void Calcul()
    {
        int Vs, Vm, Vc;
```

```
    Vs = vs.GetData();
      Vm = vm.GetData();
    Vc = Vs * Vm;
      vc.SetData(Vc);
      vc.Refresh();
   }
};
void testcallback::fCalcul()
{
 Saisie dlg;
 dlg.Run();
}
```

testcallback.lay :

```
LAYOUT(testcallbackLayout, 200, 100)
 ITEM(Button, go, SetLabel(t_("Calcul")).LeftPosZ(72, 56).TopPosZ(80, 15))
END_LAYOUT
LAYOUT(saisieLayout, 200, 100)
 ITEM(Label, dv___0, SetLabel(t_("Valeur à saisir :")).LeftPosZ(4, 92).TopPosZ(4, 19))
 ITEM(EditInt, vs, LeftPosZ(104, 64).TopPosZ(4, 19))
 ITEM(Label, dv___2, SetLabel(t_("Valeur modifiable :")).LeftPosZ(4, 92).TopPosZ(28, 19))
 ITEM(EditInt, vm, LeftPosZ(104, 64).TopPosZ(28, 19))
 ITEM(Button, ok, SetLabel(t_("OK")).LeftPosZ(40, 56).TopPosZ(80, 15))
 ITEM(Button, cancel, SetLabel(t_("Cancel")).LeftPosZ(104, 56).TopPosZ(80, 15))
 ITEM(Label, dv___6, SetLabel(t_("Valeur calculée :")).LeftPosZ(4, 92).TopPosZ(52, 19))
 ITEM(EditInt, vc, SetEditable(false).LeftPosZ(104, 64).TopPosZ(52, 19))
END_LAYOUT
```

When I compile I obtain this error message :

error: 'Calcul' is not a member of 'Upp::TopWindow::CLASSNAME {aka Upp::TopWindow}'

Thank very much for your help.

Best regards.

Subject: Re: How to use callbacks
Posted by Oblivion on Fri, 15 Jan 2016 19:12:41 GMT
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In order to use THISBACK macro(s), which actually expands to callback(this, &CLASSNAME::foo) and other variants, where foo should be a method (memeber) of the CLASS pointed with "this" pointer, you simply need to add the following line to your class' declaration.

```
typedef Saisie CLASSNAME;
```

Now, of course you can also use a (1) non-member function as a callback or a (2) public method of another object, without defining a CLASSNAME (type).

E.g.,

1) callback(&foo)

2) callback(&cpp_object, &other_cpp_object::foo)

See U++ documents and reference examples (there is a "Callback" named example code in reference examples.)

Regards,

Oblivion

Subject: [SOLVED]: How to use callbacks
Posted by Patisab on Sat, 16 Jan 2016 09:00:56 GMT
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Good morning,

Thank you very much Oblivion. Your explainations are clear. I've seen example but I didn't understand it because of use of one layout which make the use of callback in the main function. I've not understand the necessary declaration of the classname in the structure using another layout.

Thanks a lot.

Best regards.
