
Subject: How to catch and overwrite child control event?
Posted by [kompotFX](#) on Mon, 21 Jan 2008 00:39:20 GMT
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Hi,

I'm new in upp. The "not-well-documented" documentation can't help me so much in my simple task.

What I want:

I want to make port for short tool (I wrote in MFC some time ago) in order to use it on linux. I made a choice to use upp bcs it seems to be very simple, straight forward.

The main functionality I try to achieve is to catch DocEdit control key input events (child control of my dialog) and modify them. E.g. when user types "A", it appear as "B", "a" -> "b" etc. So, basically tool must make key filtering and conversion.

In MFC it was done very simple - all key events to child was modified by parent wnd by using PreTranslateMessage event.

In upp I tried use method Key(dword key, int count) of dialog - but no effect. The key user pressed was forwarded to control.

For myDocEdit <<= THISBACK(ModifyKey); - same thing

I tried also derive my own control from DocEdit - compiler returns an error from lay file:

error: 'MyClassX' does not name a type

In function 'void InitLayout(Upp::Ctrl&, L&, D&, MyAppLayout__layid&)...etc

What to do?

Subject: Re: How to catch and overwrite child control event?
Posted by [Oblivion](#) on Mon, 21 Jan 2008 01:00:36 GMT
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One more general (maybe application wide) way is to use a "keyhook".

I assume you derive your class from Ctrl or a Ctrl derived class (as usual in U++):

Define a KeyHook.

Below is the code of a key hook for intercepting Ctrl+Home key:

```
class foo : public Ctrl
```

```
{
```

```
// some other declarations...
```

```
// some other declarations...
```

```
    static bool CtrlKeyHook(Ctrl* ctrl, dword key, int count) { if(key == K_CTRL_HOME && ctrl == &myctrl) // here goes the intercepting function or method... // ; return true; }
```

```
}
```

As You can see in the above declaration, you can identify the "Ctrl" which sends the message too.

in the class implementation:

```
foo::foo()
{
    InstallKeyHook(&foo::CtrlKeyHook);
}

foo::~~foo()
{
    DeinstallKeyHook(&foo::CtrlKeyHook);
}
```

(Two things: don't forget to return true (and dont forget to "Deinstall" hook...)

You can find more info about other hook types (mouse, state) in CtrlCore/Src/Ctrl section of the Help Topics of TheIDE

Ps: I don't know why your code didn't work (I should work), but I uploaded a Key() virtual function version below. I Hope It'll help...

File Attachments

1) [KeyTest.rar](#), downloaded 383 times

Subject: Re: How to catch and overwrite child control event?

Posted by [zsolt](#) on Mon, 21 Jan 2008 08:56:42 GMT

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Quote:I tried also derive my own control from DocEdit - compiler returns an error from lay file:
error: 'MyClassX' does not name a type

Before including the layout file, create a line in your sourcefile:
class MyClassX;

Subject: Re: How to catch and overwrite child control event?

Posted by [kompotFX](#) on Mon, 21 Jan 2008 23:38:34 GMT

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Ok guys, thank you for quick response.

1. I have tested including class MyClassX; before .lay lines. Same errors. I'm using upp 712-dev1. I included code in TestUpp.zip file, you can try to review it. I'm try to derive DocEditEx class from DocEdit control.

Compiler says:

In file included from C:\upp\uppsrc/CtrlCore/lay.h:22,
from C:\upp\examples\TestUpp\TestUpp.h:11,
from C:\upp\examples\TestUpp\main.cpp:1:

C:\upp\examples\TestUpp\TestUpp.lay:2: error: field 'editTest' has incomplete type

C:\upp\examples\TestUpp\TestUpp.lay: In function 'void InitLayout(Upp::Ctrl&, L&, D&, TestUppLayout__layid&)

[with L = TestUpp, D = TestUpp]':

2. 2Oblivion:

Yes your suggestion in KeyTest code works, but gives no result, I expected. I need to control user input, not only observe changes.

I uploaded TestMfc_bin.zip - simple example made using MFC which changes user input "z"->"y" and "y"->"z" letters during typing.

Here also source in TestMfc_src.zip Check the CTestMfcDlg::PreTranslateMessage method which doing this functionality.

How can I achieve the same effect in UPP?

File Attachments

- 1) [TestMfc_bin.zip](#), downloaded 378 times
- 2) [TestMfc_src.zip](#), downloaded 380 times
- 3) [TestUpp.zip](#), downloaded 378 times

Subject: Re: How to catch and overwrite child control event?

Posted by [mirek](#) on Tue, 22 Jan 2008 06:42:03 GMT

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```
#ifndef _TestUpp_TestUpp_h
#define _TestUpp_TestUpp_h
```

```
#include <CtrlLib/CtrlLib.h>
```

```
using namespace Upp;
```

```
class DocEditEx : public DocEdit
```

```
{
    virtual bool Key(dword key, int count) {
        return DocEdit::Key(key < 65536 ? ToUpper((wchar)key) : key, count);
    }
};
```

```
#define LAYOUTFILE <TestUpp/TestUpp.lay>
#include <CtrlCore/lay.h>

class TestUpp : public WithTestUppLayout<TopWindow> {
public:
    typedef TestUpp CLASSNAME;
    TestUpp();
};

#endif
```

The problem is that class you use in .lay has to be defined before including .lay file.

Note that there is another workaround possible too: leave type field in .lay empty, then add the field in the final class, as public member. Of course, perhaps you do not need a .lay at all, for such simple case...

Mirek

Subject: Re: How to catch and overwrite child control event?
Posted by [kompotFX](#) on Tue, 22 Jan 2008 09:04:08 GMT
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Yes! It works!
Thanks for great support!
