
Subject: OpenGL example

Posted by [jobs](#) on Mon, 28 Nov 2005 12:41:25 GMT

[View Forum Message](#) <> [Reply to Message](#)

First, you done great job with Ultimate, congratulations!

I think it should be casting to (Point) in next line of
/geom/Draw/plotter.cpp

Quote: ImageMarker::ImageMarker(const AlphaArray& srcimg, ...)
{
 hotspot = (ignore_hotspot ? (Point) srcimg.GetSize() >> 1 : srcimg.GetHotSpot());

Otherwise it wouldn't compile.

But then I have linking errors:

Quote:20 undefined symbol(s):
_glBegin@4 (referenced from c:\devel\ultimate\out\opengl\mingw.blitz.gui.main\\$.blitz.o:4 4;
CameraCtrl::GLPaint(v
oid); CameraCtrl::GLPaint(); .text\$_ZN10CameraCtrl7GLPaintEv)....

I compile and link with MingW.
Any suggestions what's going wrong?

Thanks!

Subject: Re: OpenGL example

Posted by [gprentice](#) on Mon, 28 Nov 2005 23:34:29 GMT

[View Forum Message](#) <> [Reply to Message](#)

jobs wrote on Mon, 28 November 2005 07:41First, you done great job with Ultimate,
congratulations!

I think it should be casting to (Point) in next line of
/geom/Draw/plotter.cpp

Quote: ImageMarker::ImageMarker(const AlphaArray& srcimg, ...)
{
 hotspot = (ignore_hotspot ? (Point) srcimg.GetSize() >> 1 : srcimg.GetHotSpot());

Otherwise it wouldn't compile.

But then I have linking errors:

Quote:20 undefined symbol(s):
_glBegin@4 (referenced from c:\devel\ultimate\out\opengl\mingw.blitz.gui.main\\$.blitz.o:4 4;

```
CameraCtrl::GLPaint(v  
oid); CameraCtrl::GLPaint(); .text$_ZN10CameraCtrl7GLPaintEv)....
```

I compile and link with MingW.
Any suggestions what's going wrong?

Thanks!

I believe the error GCC gives at line 1719 in plotter.cpp is a GCC bug as both Point and Size have non explicit constructor that allows implicit conversion between each other and the compiler is required to apply implicit conversions to rvalues of class type in ?: operator. You should probably write

```
hotspot = (ignore_hotspot ? Point(srcimg.GetSize() >> 1) : srcimg.GetHotSpot());
```

to keep GCC happy.

I don't get the linker errors you mention but I do get an error at line 9 of OpenGL.H in the examples/OpenGL folder

```
#include <GL/glaux.h>
```

- the error is "no such file or folder"

I'm puzzled, because there is no glaux.h file nor is there a GL directory/package - yet it builds and runs fine with VC7.1 ???

Graeme

Subject: Re: OpenGL example

Posted by [gprentice](#) on Mon, 28 Nov 2005 23:55:04 GMT

[View Forum Message](#) <> [Reply to Message](#)

Quote:

I don't get the linker errors you mention but I do get an error at line 9 of OpenGL.H in the examples/OpenGL folder

```
#include <GL/glaux.h>
```

- the error is "no such file or folder"

I'm puzzled, because there is no glaux.h file nor is there a GL directory/package - yet it builds and runs fine with VC7.1 ???

ok, forget that. It's in the platform SDK. I didn't have paths setup correctly for GCC/ MingW as I haven't used it in U++ before.

Now I get a bunch of linker errors too.

e.g. undefined reference to glLoadIdentity - which is psdk function, - probably the other errors I have are too, so probably I have some path still not setup right or something. I'll try and investigate further, later.

Graeme

Subject: Re: OpenGL example

Posted by [jobs](#) on Tue, 29 Nov 2005 07:13:17 GMT

[View Forum Message](#) <> [Reply to Message](#)

thanks Graeme for answering!

I forgot to include OpenGL libraries in this example,
(that's missing in OpenGL example also)

So, there is no linking errors now.

Of course, casting to Point should be done as I wrote before.

Subject: Re: OpenGL example

Posted by [jobs](#) on Tue, 29 Nov 2005 07:44:37 GMT

[View Forum Message](#) <> [Reply to Message](#)

and you don't need glaux.h (I put comment there in OpenGL.h) and libglaux.a in this example

Subject: Re: OpenGL example

Posted by [gprentice](#) on Tue, 29 Nov 2005 07:47:43 GMT

[View Forum Message](#) <> [Reply to Message](#)

jobs wrote on Tue, 29 November 2005 02:13 thanks Graeme for answering!

I forgot to include OpenGL libraries in this example,
(that's missing in OpenGL example also)

So, there is no linking errors now.

Of course, casting to Point should be done as I wrote before.

It sounds like you know more than I do. I tried adding the opengl libraries into the package setup for the opengl example but couldn't figure out what to put in the "when" column (I tried MingW) - until I stole from the GICtrl package

library(WIN32 GCC) "glaux glu32 opengl32";

I'm curious to know how you figured out how to do this? Are you an experienced U++ user ??

Graeme

Subject: Re: OpenGL example
Posted by [jobs](#) on Tue, 29 Nov 2005 08:17:16 GMT
[View Forum Message](#) <> [Reply to Message](#)

Quote:I'm curious to know how you figured out how to do this? Are you an experienced U++ user ??

same way as you find out, by example
unfortunately, I'm not experienced user in U++, but I will try hard to become that

Subject: Re: OpenGL example
Posted by [rylek](#) on Tue, 29 Nov 2005 17:31:38 GMT
[View Forum Message](#) <> [Reply to Message](#)

Sorry for the missing (Point) cast; MSC is much more permissive in these situations and I'm normally releasing most of my applications for Windows, so I just didn't notice. I've already fixed that, you should see it in your next UVS sync or weekly snapshot.

Regards

Tomas