

Compiling the Source Code of multi-dimensional Brickout Matt Jordan

The main challenge for compiling the source code to Brickout is making sure you have OpenGL set up correctly. As such in this document I will explain how to do so two ways. The first will cover how to compile the code using Eclipse for Ubuntu 12.04 (and potentially other Unix based operating systems, though I have not tested those personally), and the second method will be for Microsoft Visual Studio Express 2012 for Windows (though other versions of Visual Studio should be similar).

Eclipse in Ubuntu 12.04

First and foremost you have to have Eclipse installed in order to use it. This differs depending on the version of Linux you are using, but for Ubuntu you will want to open a command line and run the following command:

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sudo apt-get install eclipse eclipse-cdt g++
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This should install Eclipse (and g++ if you haven't already) on your system. If it doesn't you're going to have to look up how to do so on your own as this is all I had to do.

Now then, open a new project in Eclipse and copy in all of the source/header files of the version of Brickout you're trying to compile. After this is the most important part. In the project explorer, right click the project containing Brickout and go to "Properties". Navigate to "C/C++ General", then "Paths and Symbols". Go to the "Libraries" tab. Now click Add and type "GLU". Do the same for "glut". This should be all you have to do to get the code working on Ubuntu. Other Unix distributions should be somewhat similar to set up so long as they have the glut libraries installed.

Microsoft Visual Studio for Windows

Getting this to work in Windows is a little more difficult. You are going to need three things before you'll be able to compile the code in Windows.

1. A copy of Microsoft Visual Studio. I used Express 2012, available at <http://www.microsoft.com/en-us/download/details.aspx?id=34673>
2. The Microsoft Visual C++ Redistributable for your version of Visual Studio. <http://www.microsoft.com/en-us/download/details.aspx?id=30679>
3. The MSVC freglut package, available at <http://www.transmissionzero.co.uk/software/freelut-devel/>

You can use a different version of Visual Studio so long as you have the proper redistributable installed.

Now comes the fun part. First of all you need to set up freglut. Extract the zip file to somewhere on your computer. It doesn't matter where really but I personally put it in C:\dev and shall refer to the path as such from here on out, just remember to replace it with your own path.

Now make a new project. It should be a Win32 application and should be an empty project. Import the source/header files. Now select your project and go to the project properties. In "Configuration Properties" select "VC++ Directories". In the includes field add "C:\dev \freglut \include" and in the libraries field add "C:\dev \freglut \lib". Then go to "C/C++" and then "Command Line". In the additional options add " /ENTRY:"mainCRTStartup" ". Finally, go to "Linker" and under "Input". The first field should have a bunch of "xxx32.lib" entries in it. Add "opengl32.lib" to those entries. With this you should be able to compile the code.

I'd also like to point out it's important to use the Windows source code when compiling in Windows because there are differences in the two. It's usually small things like commenting out a couple lines of codes or using a line loop instead of a line, but the consequences range from objects disappearing to the ball just flying through walls and it's better to just use the already working code.