CS550 Foundations of Computer Graphics

Homework 3

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This program have been created, compiled and tested on a **Ubuntu 14.10** computer using the **g++ compiler** AND **Microsoft Visual Studio 10** on **Windows 7**.

Header guards are included to use the appropriate header files for either Windows or Linux as you will see at the top of the header files. If for some reason the header guard does not work for your machine you can refer to the following website for the appropriate naming convention for your OS.

http://sourceforge.net/p/predef/wiki/OperatingSystems/

If all else fails you can also comment out the sections labeled `linux headers` in the two files mentioned above.

If you are compiling with g++ the following command will work:

```
g++ *.cpp -o robotgame -lGL -lGLU -lglut
```

and to execute:

```
./robotgame
```

If you are using Visual Studio, copy the files into an empty project and build and run using the gui menu options.

How To Play

The object of the game is to move the two silver objects to the silver table and to move the two gold objects to the gold table. Once both objects are on their appropriate table, the table will flash red to indicate a winning state, do that for both tables and you are a mighty claw master!

Meanwhile, there are two *baddies* out to get you. Baddies of course are no match for your claw, to defend yourself you must attack the baddies with your claw. If you miss the baddies with your claw and the baddy gets you, you will take damage. Ten damage, and you're dead. Luckly, you are much stronger than the baddies, the mighty claw only has to hit a baddy twice to be rid of it forever.

Controls

To navigate your robot around the room use the `WASD` keys for forward, left, backward, and right movement. To rotate the robot arm use the `left` and `right` arrow keys. To raise and lower the claw

use the `up` and `down` arrow keys. Lastly, to close the claw use the `spacebar`. To restart at any time press the `esc` key.