Project 3

CS 320

75 points, due Apr. 10 at noon

The main focus of this project is to add interactivity to your pool simulation. The user should be able to:

1. Rack up the balls.
2. Break.
3. Take shots.
4. Place the cue ball should it be pocketed, or to begin a game.

You'll need some new features for the pool table. Implement pockets. You should do this by extending the file format. In other words, you'll read number of pockets, pocket positions, etc. from the file. You'll need to add an object parameter that says, in effect, "If a ball collides with me it is removed from the table." Remember that a pool ball doesn't drop into a pocket as soon as it overlaps the pocket. It drops when its point of contact with the table is within the area of the pocket. You'll also need to add those two "dots" that define where the balls are racked and behind which the cue ball may be placed after being pocketed.

I'm not specifying the nature of the user interface. Let's see how you employ your imagination, creativity, and experience with other games to design an effective user interface for pool. If you'd like to run ideas by me, I'd be happy to comment on them.

Add a feature or two to your game that I haven't mentioned here. Some sort of scoring, two player games, etc., for example.

Submitting Your Project

We will follow this procedure for all projects this semester. Your project files are to be emailed to me at kelliher[at]goucher.edu. All source files necessary for building and running your program (C++ source(s), .h files, vertex shader, fragment shader, and pool data file) and any documentation files you've created should be sent as a single zip archive attachment in a single email. One documentation file is required — a README.txt file that explains how to play your game and describes what additonal feature, or features, you added to your game. I will build your program from the source files provided and test the resulting program.