15-112 PROJECT DESCRIPTION

My project is basically a billiards/pool game. It will be shown in a general user interface. The code will be written fully in Python 2.7 and will have implemented a lot of features. The libraries used to develop the code will be “pygame”so as it is possible to design and work on the graphics. However, it will be implemented also the “Numpy” library which will be used to work on the physical collisions, elasticity, vectors, directions and angles. The rules of the game are universal so it will be following all of them.

The user interface will be composed of a first page which lets you choose between multiplayer or single player. It will also have an instruction page. Directions will be given by mouse pointer. The game screen will consist of the pool table, the balls with their own designs, the pockets, and the cue. It will also give directions of the white ball if feature checked or not. The game will also have sound effects. The game will be capable of distinguishing right shots from fouls, turning the white ball in and giving GAME OVER message in the end. It will also have a menu where new game, quit game, restart and sound effects will be implemented.

In the first milestone I intend to have finished:

1. Defining the right laws of physics attached to the game and implementing them in a code.
2. Having the main game screen shown in the GUI in the single player mode.
3. Having the basic new game, instructions, end game, restart, sound effects implemented.

In the final set features I intend to have will be included:

1. The versus Computer mode implemented (can have two levels).
2. Realistic rotations of the balls.
3. Improved game screen design and sound effects.

The project being an example of entertainment and catchy behavior, related to the tough physical and mathematical laws will give the project a better background.