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Student Name: Jeremy Greene
TAs : Adam Barnet
William Otto Goethals
Instructors: A. A Arroyo
E. M. Schwartz

University of Florida
Department of Electrical and Computer Engineering
EEL 5666 Intelligent Machines Design Laboratory

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Over the break I did manage to get some work done on my robot. My robot's body is constructed. I was also able to mount my platform on top so that it will be able to pivot in 2 dimensions. This movement can now be controlled by 2 servos, although I can tell that they will be too weak to move my heavy cue-ball. I'm going to go get some ping-pong balls today and see if they will work. If not then I will need to order some stronger (more expensive) servos.

I also mounted the camera on a arm and positioned it over the platform. Originally I was worried about the small viewing angle of the camera, and how that was going to make me have to mount it over 3 ft above the platform in order to see the entire area. I might of fixed this problem by purchasing a very wide angle door peephole. When I place this directly in front of the camera I can reduce the height to only 1.5 feet. This allows for a much stabler camera. Some people expressed concern over the fact that the peephole lens would give my camera a "fisheye" effect and that this would be an undesirable effect. I was concerned about this too, but I think it might work to my advantage. If the ball is moving at a constant speed from the center of the platform to the edge, the camera views it moving at a somewhat accelerating pace. This will make my platform give a greater reaction when the ball is closer to the edge. I hope that this works like I think it will.

Today I plan getting the platform moving based on where the camera thinks a ping-pong ball is. I still don't have any obstacle avoidance or movement done yet. I know that these things are very important and I will try to get them done as soon as possible, but right now I'm starting to get a little nervous about the performance of the actual ball balancing, the main function of my robot.