This week consisted of securing the wooden block to the overall base of the game. On Friday April 13, 2007 the initial screws were inserted into the base of the game. A washer was added in between the base of the game and the screw so as the screw does not slip into the plastic over time. Please see Fig. 1 for this initial attachment.

Figure 1: Initial Attachment of Wooden Block

One could easily tell that these two screws did not provide proper security. The wooden block easily wobbled when one would try to move it around. More precautions needed to be made to secure the block properly. It is not optimal to have to wheel not be properly secured due to the fact that it will not spin properly. Thus a visit to the machine shop took place on Wednesday April 18, 2007. The situation was analyzed over the week and it was decided that wooden boards needed to be attached to the sides of the wooden block. These wooden boards would be press fitted in to hold the block in place. Thus each side was measured out. The wooden boards to be used were basic 2x4 boards with lengths 7.5” and 9.5”. The boards were sanded down so they would be just the size to slide them into the proper place. These boards were then secured to the base of the game by using the same washer and screw mechanism as used in the wooden block. Please see Fig. 2 for this new attachment.
The security could easily be felt when one would try to manually wiggle the wooden block. This was taken back to the lab to test with the wheel and shaft attached. The shaft was attached and the lid was put on the top of the base. The wheel was then attached to the shaft. Using the power supply the wheel was activated to spin. Both the base of the game and the wooden block did not move when the wheel spun thus proving the support system to function properly. The wheel had slight wobble motion when spinning. This was due to the fact that it was not press fitted onto the shaft and still had a ways to move down on the shaft. This wobbling is believed not to happen once the wheel is press fitted. Please see Fig. 3 for the entire attachment.

The new size of the shaft applied better security to the system. It is not hovering over the box at a large distance. This distance will also decrease once the wheel is press fitted.
The questions and answers were also worked on after hearing a response from our client Dr. Brooke Hallowell. We were informed that the adults are not able to spell thus some questions needed to be replaced. She recommended that maybe we replace these questions with questions such as:

Name a piece of furniture.
Name a season.

These questions would be easy for the adults to answer. They would be able to use the questions many times also because they do not have one set answer. The new set of questions was sent back to Dr. Hallowell, and we are awaiting a response.

Future Work

Construction of the total base of the game was basically completed this week. Thus as the final week is approaching finishing touches will be made. Everything will be press fitted and completely secured. Testing will begin with all components together. Basically all finishing touches need to be made on the complete project.

Project Review

This week helped to finish construction. This proves great success for the overall product. Thus in the final week not much work needs to be done on putting the game together. Finishing touches such as adding visual appeal and such to the base of the game will be completed. The projects looks to be done and working in the next week.

Hours Worked
13 hours