Work Completed

The major task this week was to secure the wooden block to the base of the game (the plastic box). On Friday, April 13, 2007 the initial screws were inserted into the base of the game. Washers were also added to prevent the screws from slipping into the plastic due to wear and tear over an extended amount of time. Figure 1 shows the attachment.

By looking carefully one can see that the two screws do not provide the proper stability. The wooden block wobbled around when anyone tried to move it. This means that more actions needed to be taken to ensure that the block did not move around. However, the wheel cannot be attached to the box itself because if it was then it would not spin. What this meant was that another trip to the machine shop was in order. On Wednesday, April 18th we went to the machine shop to create the base more stable. The situation was analyzed during the lag time. We decided that pieces of wood would be attached to the sides of the plastic box. The wood was then press fitted into the space to ensure that they stayed in place. The boards we used were just your basic 2x4 boards with lengths of 7.5” and 9.5”. Once they were the correct size they were attached to the bottom of the plastic box using the same screws as before. Figure 2 shows the completed attachment plan.
By using this complete attachment system one could feel that it was completely secured. We took it back to the lab to test with the wheel and the shaft attached. When everything was attached and power given to the wheel the base of the game and the wooden block did not move at all. However, the wheel moved around slightly while it was spinning. We believe that this will not happen once the wheel is press-fitted onto the shaft. Figure three shows the complete system with the wheel attached.
The questions and answers book was also worked upon after hearing back from Dr. Brooke Hallowell. She informed us that some of the adults cannot spell so we had to switch some of our previous questions. She recommended that we replace our spelling questions with ones similar to this: “Name a piece of furniture.” Questions similar to this one will help the adults to answer the questions. The new questions were emailed to Dr. Hallowell and we are still waiting to hear back from her. Hopefully everything will be all set and we will be able to complete our questions and answers book.

Future Work

The total base of the game was pretty much completed this week. During our final week we will be able to put the finishing touches on our game. Everything will be press-fitted and completely secured in the upcoming week. Testing will also commence of the entire project put together.

Project Review

We finished the construction of the game this week. This means that in the final week major work will not have to be completed. This is a very good thing for our entire group. The finishing touches such as applying stickers, paint, colors, and LED’s will be added to the game. We anticipate that our project will be completed and working by next Friday.

Hours Worked
12 hours