Work Completed:

This past week I took the easel home to paint it. I took the frame and the clamp part of the easels first and started to paint them. Every piece of the easel had intricate pieces that we didn’t desire to be painted. This led me to tape off each little piece of the easel before painting it. Pieces that I needed to tape off were the actuators, tracks, some nuts and bolts, and some slides. The main reason for neglecting these pieces for paint is because the easel depends on them for motion. If we were to paint them, the motion might be offset and may cause the easel not to move correctly. We want the paint to add to the presence of the easel not take away from it. Taping off these parts required many hours and using little pieces to be sure none of the paint gets through. The next parts that had to be painted were the floating base and the base. These were a little trickier to paint because they are heavier and the paint takes a long time to dry. The temperature of the air was a big set back for the paint process. I had to get a heater to make the paint dry in a reasonable amount of time. Since both sides of these structures had to be painted flipping it was a delicate process. I had to be sure that I didn’t scratch any of the pieces that I already painted.

Once all the paint was completed the easel was brought back to the lab. This was the time for us to put it all together and be able to look at it as a finished product. We were able to see the problems that occurred after the fabrication. We noticed that the frame wiggled a little when we pretended to paint. We needed to come up with a way to fix the wiggle so that there was no unintended motion on the easel. We ordered other
parts from 80/20 with the budget of another group since we already went over budget. Once we receive these parts we will be able to fix this problem. The power supply is another issue that we will have to address. Currently it is resting on the table without support on its underside. This is not an applicable for the function of the easel. Adam is getting a piece of metal that will be able to be riveted onto the bottom of the base to hold the power supply up.

The easel was also field tested this week. We brought in an individual to test out the easel and we gathered a lot of important information on how a new person uses and sees the easel. This will be very helpful in our final report to note all that we learned. The final report and the user’s manual was completed this week as well. This took numerous hours and a ton of writing.

**Future Work:**

The future work of the easel will be to create a powerpoint presentation and a poster for the senior design presentation day. We will also try to fix any last minute problems with the easel and make sure that all of it is painted the way that we like it. We will fix up any spots that may have been rubbed off. We will also make sure all the end caps that we ordered are affixed and everything is working the way we planned.

**Project Review:**

The project is now painted and is ready for final testing and presentation. This is exciting that we finished on time and that the project is working correctly.

**Hours Worked:**

The hours worked this week were 30 hours.