**Project Identity**

Shampoo-Conditioner Identification Device/ Medicine Reminder

Week 10: 4/1 - 4/8

Kenta Umetsu

**Work Completed**

*Medication Reminder:*

This week, a lot of research went into finding affordable lumber for our medication cabinet. We found out that a lot of companies do not offer the dimensions we preferred so the ordering of the wood got delayed more than expected. We did find a website where affordable mahogany wood was found if we can cut it to the dimensions we desired. I’ve discussed with Sheldon and it seems like the machine shop will be able to cut our wood into the dimensions we need. The website we found allowed us to purchase our total mahogany needed for roughly $100. This was a significant improvement over many other websites we were searching. Homedepot and Lowe’s as well as some other websites were not even offering mahogany wood and alternatives on their sites such as maple and oak were costing for over $300 for the dimensions needed.

The ABS plastic for the casing has been measured and marked so it is now ready for Sheldon to bring to the machine shop to be cut. Once the cuts are made the final adjustments will be made and then assembled.

*Shampoo-Conditioner Identification Device:*

For this week Sheldon and I spent most of our time planning ahead for this coming week. The 3x12x12” polypropylene plastic has arrived so carving will be done as soon as we have our prototype cut out. We took one of our sample plastics and have made measurements as if it was the real casing. We are going to cut this model out and see how it is first before we got ahead we our final plastic slab. This is to test how well all the components will fit in our casing as well as making it easy to trace the measurements on our polypropylene slab. If this is successful we can use this sample
plastic as a stencil. The main focus was on reducing the casing area as much as possible so that we reduce the weight of the entire device. The hook design and location of the casing has been changed several times as well to adjust for some of the compartment changes. Visio drawings are being worked on we have a visual record of our measurements made.

**Future Work**

In the upcoming week, a lot of time needs to be spent in the machine shop getting everything cut. Once the medication casing is cut and set I will immediately need to mark the window measurements and then assemble the casing. The mahogany once it arrives will also be marked as soon as possible so that machining can take place to give us the dimensions we want. Once that is done all assembly will be done and other minor parts will be acquired.

For the medication reminder the big part is getting the casing done. Sheldon and I will be working on the prototype cut and then once that is finished we will go into marking the polypropylene slab and start the milling and cutting of that piece. Several Visio drawings will need to be made to show the 3-D dimensions of our casing. Several things need to also be discussed with the machine shop staff such as our machining plans so that we do not miss anything critical before actually cutting the plastic.

Budget updates on both of our projects will be made for next week as several orders have been made and come in.

**Project Review**

Progress inspections are coming up this week and for the most part we should have a working device for both projects. Sheldon has the main components of the shampoo-conditioner device already working and Karla has been making huge progress in our program. A lot of what still needs to be done is the visual aspects of the device which are the casings because we were not able to work on some of it until several things were done first. Overall things are starting to come together and the upcoming weeks will
be busy. We are encouraged by our progress in both projects and we are working hard to deliver a great device.

**Hours Worked:** 16