Week #4
February 14\textsuperscript{th}, 2006
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Work Completed:

This week our team was very successful in splitting up the work into specific tasks, and therefore we got a lot accomplished in preparation for our 80/20 materials. We ordered our 80/20 materials last week and they are yet to come in, however every member of our group is prepared with a specific task for when they do come in. This Friday while in lab I was finally able to successfully complete the order of the PVC cross members from Modern Plastics. We ended up ordering a 1” square PVC bar, and I was able to talk down the price from $4.60/ft to $3.40/ft. In lab on Friday Bhavin was able to order the aluminum necessary for the sidemembers from MSC. We decided on ordering two pieces of aluminum each being 6’ x .500” x 1.00”, and we plan on attaching this directly under both sides of the transfer board. Also in lab this Friday Christen and Ashley went to Mansfield Supply and bought necessary bolts, PVC glue and primer, and plastic knobs. The purchase of these supplies was very necessary for once our 80/20 material comes in we will be able to assemble it right away and be sure it is sufficient for our design, before we order the more expensive attachment materials.

Also this week Christen priced out silicon bronze bolts, and he and Bhavin took the PVC to the machine shop and cut out the arm and leg stabilizers. Once they cut out these bases we then attached them to the board using the aluminum knobs which we ordered from MSC and the steel bolts which we had purchased at Mansfield Supply; a digital image of these bases on the transfer board appears as follows:

Arm Stabilizer Base:
Leg Stabilizer Base:

This week I was also able to successfully order a free sample of a handgrip to put on the hand bar. I ordered a grip which is a continuous 16” long from GripWorks, and since it is a continuous length we had to hold off on assembling the hand bar until this piece comes in. Even though it causes us to hold off on the assembly of the hand bar, it was a good idea to order a grip which is a full continuous length because it will both last longer on the hand bar as well as be more sanitary than a grip which is compiled of smaller lengths.

Future Work:

The most important task for this week is to assemble the 80/20 hardware. We plan on getting to work on this right when the material comes in, and once this is assembled we will be able to attach it to the arm and leg stabilizer bases using the nuts and bolts that we purchased from Mansfield Supply. Once we do this we then have to finalize the order of the actual nonferrous hardware that we are going to use.

We also need to attach the PVC cross members and aluminum sidebars to the transfer board as soon as they come in. Once these pieces are attached and they work properly we can then move even further forward into the assembly of the arm and leg stabilizers and perfecting the track system which we plan on using with the slots that we cut into the transfer board.

Bhavin also still needs to cut the piece of HDPE for the leg stabilizer in the machine shop, and Christen needs to finish the slots on the arm stabilizer bases in the machine shop as well. I have spent a lot of time brainstorming handle ideas for carrying the transfer board and I need to make a final decision on which to use.
Project Review:

Each week our group gets better and better at assigning specific tasks for each member, and each group member is completing his/her assigned task. The project as a whole is still right on schedule with our timeline, and once we receive the 80/20 material and PVC and aluminum for the cross members and sidebars the project will start to become much more appealing. Once the rest of our material comes in I do not forecast any major hang-ups.

Hours Worked:

Thursday – 1.5 hours
Friday – 4 hours
Weekend – 2.5 hours
Monday – 3 hours
Total – 11 hours