Accessible Weight Scale for Seated Users

Week #7

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Gregory Whitehosue
**Work Completed**

Last week cut all the corners for the elevated toilet compartment and all the holes for the load cells. The load cells can now be installed in the elevated compartment. We also were able to drill holes for mounting the toilet seat on the top panel. We will hold off from mounting the handles since we may buy new handles. The handles that were purchased do not cover the screws. It should be relatively easy to purchase handles that will look better when installed.

Over Spring Break we received the text to speech device and have begun testing and programming for it. Next week we will continue with the text to speech device and incorporate it within the rest of our circuit that way we can begin to test the outputs on both the LCD and Text to Speech device at the same time.

We also redesigned the foot support slightly. We will be using 80/20 to build the foot support since it is light weight and easy to use in construction. We will still be using four channels screwed into the bottom panel to support the foot support. The upper foot support will slide into these channels and be secured by the holding pins. The fastening plate will then be used to hold the upper foot support and the lower foot support together. The fastening plate will be roughly triangular in shape with two screws for the upper support and two for the lower support. The lower foot support will not go all the way to the ground instead the foot support bracket will screw in to the lower foot support in four places. Because 80/20 is being used the foot support bracket can easily move up and down the length of the lower foot support. Instead of screws these will be held in place by easy to adjust knobs. The adjustable height of the foot support bracket will keep the foot panel off the ground or as much as 5 inches above the ground. The foot support plates will also be on a hinge so that they can fold up and allow for easy access to the toilet without the foot support in the way. Below is picture of the new foot support design.
**Future Work**

Since the mechanical construction of the accessible weight scale for seated users is nearly complete I will be working less on the mechanical construction of the weight scale and more on the computer programming. We need to begin altering our source code to meet the specific needs of the project.
Project Review

Ian has been having some trouble with the load cells that has caused the hardware and programming portions of the project to slow. Since we have previously had two people working on the construction of the elevated toilet compartment the mechanical construction has progressed to a point where we can shift some manpower to the programming and hardware aspect of the project.
**Hours Worked**

This week approximately 12 hours was spent in the construction of the elevated toilet compartment, the designing the foot support and helping with hardware and programming.