Work Completed

The beginning of this week focused on programming the speech recognition kit. The maximum number of total words that can be programmed is 40, however, since we wanted to make the product speech independent I selected a twenty-word vocabulary. The first set of twenty is recorded in a female voice and the other is twenty-word set is expected to be recorded in a male voice. This will give a female and male version for each word. If there is still some problems with recognition, code can be written into the program that will request the user to repeat a given word approximately three times in order for the voice recognition chip to acknowledge it.

Figure 1: SR-06 Speech Recognition Kit by Images SI, Inc.

Also this week I was able to design the bottle holder unit. This unit will be able to hold the two possible insulin bottles. Figure 2 shows the actual sizes of the bottles against the holder unit. The parts were purchased from Sears Hardware and any parts not bought are expected to come from scrap. Figure 3 shows an actual representation of how the two different sized bottles will fit into the device. In addition to designing the unit, I was able to build it. Figure 4 is a picture of the finished bottle holder unit with the insulin bottles.
Figure 2: Bottle holder and two insulin bottles (dimensions in mm)

Figure 3: Insulin bottles shown in bottle holder

Figure 4: Assembled bottle holder unit containing insulin bottles
Future Work

Next week I intend on assembling the bottle holder unit to a gear system. Scott will set up a chip that will allow me to practice my design with the stepper motor we planned to use for this unit.

Project Review

This week I successful in accomplishing everything I set out to do. With time left for the project winding down, I have made sure to finish my tasks in a timely manner. I look forward to beginning the assembly of the gear system on the bottle holder unit along with the testing of the stepper motor.

Hours Worked

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