Progress Report

MEDSense: A Portable Pill Dispensing Device
Week: #6
February 28, 2008
Timothy Coons

Work Completed

For this week I investigated a potential design change to the enclosure to the pill device. Previously, I was going to machine the enclosure out of a block of acrylic. But after further investigation, I thought that the uniformity of the structure might be compromised. This was due to the fact that the lathe machine might not be able to be accurate of the wall thickness of the enclosure. The solution to this problem was to go with a ¼ inch polyvinylchloride tube. The inner diameter of the tube is 6 inches, thus making the total diameter of the tube to be 6 ½ inches. This tube will allow for a clear visual inspection of the operations of the device.

This is the top view of the pill cap enclosure. As one can see the diameter of the enclosure and of the medication bottle are not too different. Trying to keep the scale of the project to a reasonable size is one of our main concerns.
This is the side view of the enclosure; from here the height of the enclosure is about the same size as the medication bottle. Again to secure to scale of the pill cap we need to increase the size of our medication bottle.

From here I can make cardboard cut outs that will resemble the actual platforms that the mechanical and the electronic parts will sit on. This is a useful tool so that when it comes to arranging all of these parts into the device we won’t have problems.

**Future Work**

For the next week the construction of the top and bottom pieces of the pill cap will be done. Also the inner platform where the systems motors and mechanical devices will be held will be constructed. From there the axis hole will be drilled out so that there will be a support for the rotating motor. The motors will be inserted into the machines holes to conserve space. The attachment of the pill cutting device will be added to the enclosure.

**Project Process**

This week we worked very well to move along the project.

**Hours Worked**

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