WORK COMPLETED

A significant portion of the program was completed that included the adjustments made to the mechanical portion of the project. The portion of the program completed includes a time check, where each pill is permitted up to four times a day to be dispensed. Each of these times is checked within a timed loop every half an hour. If a match is detected then the waveform to move the servo motor to that particular container was passed through and the number of pills that will be dispense is subtracted from the total in the container. A sequence structure then dictates the order of motor functions. This portion of the program is being completed by Jackie. The final event in the sequence structure is the alarm that will continue to sound until the user hits ‘OK’. The user has the option to turn off the device by clicking the ‘OFF’ switch which is the only manner that the timed loop can be stopped.

The other portion of the program involved adding more pills and cutting them. If more pills need to be added the user simply clicks on the “ADD MORE PILLS” button, which will begin the sequence. The user is prompted to use the barcode scanner to bring up the information regarding the pills they are adding. They are then asked to input the quantity of pills being added and the new expiration date. The cutter then cuts the pills as indicated by the information in its cluster. Since the arm cannot distinguish between picking up an already cut pill and an whole pill, the user will only be allowed to add more pills when there are none left in the storage container.
Portion of program that checks barcode scan against reference #:

Portion of program that cuts the pill:
FUTURE WORK

Further adjustments need to be made to the program to make it more user friendly. Incorporation of Jackie's program of the motor controls also needs to be placed into the main program. New servo's will be used in the storage module that will allow for a greater range of motion. Then the rest of the mechanical portions can be assembled together.
PROJECT REVIEW

The programming of the device is well underway, the viewpanel has not yet been received and can prove to be a major setback if not received quickly. Once the new servo motors are received then the mechanical portion of the project should be nearing completion.

HOURS

Jackie: 12 hours
Kevin: 12 hours
Eva Marie: 15 hours