Name(s)	Project Number
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Project Title

Skip That Pill and You'll Be Ill

Abstract

Objectives/Goals

The purpose of this project is to help patients that take a selection of daily medications, mainly focusing towards the elderly, in remembering to take their medicine. I built a medicine cabinet to keep track of how many doses of that medicine they took that day, when its time to take the next medicine, and to make sure the patient doesn't take a medication that isn't prescribed to be taken at that time. If a medicine bottle was taken off a shelf during a time when no medicine is to be taken, or if a medicine bottle was picked off the wrong shelf, the cabinet will beep constantly until bottle is placed back onto the shelf. This should widely decrease the chances of the patient taking the wrong medicine, and or over/under taking it.

Methods/Materials

1. CBC2 controller
2. Touch Sensor for the controller
3. Lego Parts
4. Kiper C Software
5. Laptop

Results

Medicine Cabinet consistently prompted user to take medicine at the right time from correct shelf.
Medicine Cabinet consistently alerted patient when taking medicine from the wrong shelf.
When it was not time to take any medicine, cabinet alerted user when any shelf is opened.

Conclusions/Discussion

The medicine cabinet worked consistently to alert the user as designed. There are a few enhancements that I am working on to add to the project:
1. Adding a voice alert when time to take medication, in addition to message display.
2. Program cabinet to message display instructions on how the medication should be taken, for example to prompt the patient to take it with food or lots of fluids
3. Create a phone application that communicates with the medicine cabinet to send updates to patient, doctor, and pharmacy.

Summary Statement

The purpose of this project is to help patients that take a selection of daily medications, mainly for the elderly, in remembering to take their medicine.

Help Received

Mom helped in learning codes;