**Prototype Delivery Plan**

*Andino Rochon, Karan Shah, Rishi Patel*

We plan to have the following components in our prototype---

* Arduino Micro
* Wires/Cables
* Flexible RGB smart LED matrix 8x8
* Button
* 3 Micro Servo Motor
* 3D printed components
* Vibrating mini motor disk
* Micro speaker
* Computer Software for doctor/pharmacist

The Arduino micro will connect to all the other components to make the product run altogether. Once we have everything working together perfectly we will figure out how much space is needed in the shell of the product and then design and 3D print a prototype to hold all of the components. The RGB LED Flex matrix, vibrating mini motor disk, and micro speaker will all be connected to the Arduino to inform the user when it is time for them to take the medicine. The LED matrix will be on the front of the product for a display to the user with the button under it, also connected to the Arduino, for the user to press when it is time to dispense the medicine.

The 3 servo motors will be used for 2 different functions. First, one of the servos will be used for the lock mechanism on the top that can only be accessed by the doctor or pharmacist thru the USB connection with Arduino. The Arduino will need to be placed in a location to where it is possible to access the USB port easily. This will be the bridge that connects the device with the control software for the doctor to set dosage, time, and patient info so that the device operates best for that patient. The software will be able to set the vibration or sound over LED if the patient is blind or has other needs for those uses, and will set the time and dosage for the medicine. The other 2 servo motors will be used in the bottom of the device to be used to sort out the number of pills that need to be dispensed. We will need to 3D print what will be hooked to the servos so it can know how many pills it is getting from the container.

First, in our prototype build, we will start with testing the functionality of all of our components to make sure we know how we will use them in the product. Second, we will integrate all of these parts together and work on making a functioning and compact system. Then finally, we will work on the design for the 3D shell that houses all of these components and the medicine.