Progress as of 1/29 3pm:

Right now:

* Program functionality is pretty good. By default when the program is ran the servo is moved to an initial position and the front sensor is constantly searching for an object to be within 10 cm of it.
* When this happens, the servo goes up and back down – these motions will obviously have to be adjusted when it actually capable of pressing down the lever on the trash bin
* After the arm goes back to its original position, the inside sensor scans and measures how close the closest trash is to the top of the bin. It converts this distance into a percentage full and displays both the percentage and the gap from the top in a GUI which is currently too big for the size of the pi screen.
* After the gui is closed out, the front sensor goes back to its constant state of searching for a close object.

Next steps:

* Permanently mount the inside sensor
* Permanently mount the front sensor
* Figure out how to mount the servo, then actually do it
* Adjust the servoDown function accordingly
* 3D print an extension for the servo and attach to the servo.
* Make the gui into a class so that it can occur simultaneously with the servo and sensors.
* Actually write comments for things
* Make the gui look nice
  + Make it take up the whole screen of the pi
  + Make the percentage the largest thing on the GUI and make it in a cool font
  + Make an exit button that will completely close out the GUI
* Figure out how we’re going to situate the breadboard and pi on our table