# Lab 3 Summary

We started the lab by modifying the socket application and removed the buttons for movement other than ‘Stop’. To Android application we added the following:

* A text field for entering a command
* A button to send the command to Romo
* A button to activate Speech to Text and enter the command into the aforementioned text field

For speech to text, we used the existing RecognizerIntent library. The commands that our Romo recognized were forward, back, left, right, stop, and laugh. Although the left and right commands are flipped around, we understand the concept and it is a quick fix. For the Romo device, we made it act as a server for receiving commands from the Android phone using the GCDAsyncSocket library. We created the listen socket and accepted connections on port 1234. We wrote a method to retrieve the IP Address of the iOS (Romo) device and logged that out to the console so we could enter the IP and port on our Android phone to connect to the Romo. With the Android phone, we then click Connect to connect to the Romo, which accepts the socket request and calls readDataWithTimeout to receive commands. Once commands are received, we process them and instruct the Romo to perform one of the actions listed above. In addition to text-to-speech, we can enter commands directly into the command text box.

