

Week 10 Status Update

Team D1 – Isabel Murdock

Work Accomplished:

- Experimented with variety of speeds and timing combinations in order to find what made the robot move as slowly and reliably as possible
 - o Changed turning algorithm so that instead of turning continuously, the robot completes a small rotation and then waits for the next turn command
 - o Tested out a variety of speeds for both the turning and moving forward to find the best maximum speeds and the appropriate time and rate at which to ramp up the speed
- Debugged communication between Arduino and raspberry pi
 - o Still have a few issues left but discovered and tested out solutions to handle the buffering of incoming communication to Arduino and the asynchronous sending and receiving of signals
 - o Changed some of the constants so they are more easily sent and parsed by the
- Debugged and successfully rewired the ultrasonic sensors so that the raspberry pi could collect meaningful data from them
- Submitted part request and received tartan plaid print fabric

Schedule:

- For the next week, we will work on debugging our communication between the raspberry pi and Arduino
- Since the robot is fairly stable and we can already manually adjust the height of the tennis balls on the supports, we will not be adding the mechanism for adjusting the height of the supports. If there is extra time this week, we may add them but right now they are not the top priority
- Also, adding the fabric to the robot will be on the schedule for this week

Upcoming Deliverables:

- Final presentation due midnight tomorrow
- Reliable communication between raspberry pi and Arduino
- Fabric covering for the robot