Jibebe Navigation Group

Week 10 Progress Report

Auto Control of the Robot

We had a meeting with Dr. Aoki on Friday where we went through the logic of our code to which he made several suggestions.

The program was to be tested upon purchase of several items such as the gps and the motor driver modules.

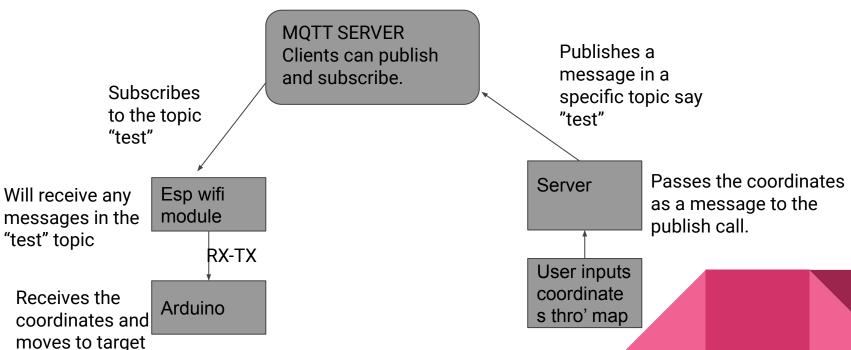
The purchase of the said items was to be conducted yesterday.

We haven't yet tested the program yet but we aim to do so tomorrow.

Instruction Flow Diagram

location

Lightweight messaging protocol



Actuators

We communicated with the mechanical team and we agreed on the ratings for the specific actuators to be bought.

Two electromechanical actuators. One for the braking and the other for the clutch.

Both with an Operating Voltage of 12VDC

Stroke Length: 200mm

Static Load: 300N

Speed: 30mm/s

Actuators

One Hobby Porter Servo Motor. rated at 300KG-cm which translates to 0.3KG-m. By approximation, this translates to 30N-m.

The actuators are to be included in the next list for subsequent purchase.

Next week's objectives

By next week we aim to at least have a controllable robot that can move to a desired location.

Work with the electrical team on how we'll integrate the electromechanical and servo actuators with the tractor.

The End