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Week 10

Purpose:

The purpose of this report is to highlight the progress that our team has made towards initiating our production design for our senior design project (F10-19).

Progress:

Throughout week 10, our group has focused on continuing our schematic design and software implementation. We have been reading through design documents in order to ensure an appropriate design implementation. We are hoping to start a PCB design in the next two weeks. During this time, we have been preparing for another senior design class presentation demonstrating our design implementation. We have also started working on our design draft document due in 4 weeks.

Completed:

1. Confirmed speed, PWM, and direction control using L298N motor driver
2. Decided to use L298N instead of LMD18200T because of cost savings and met our functional requirements. LMD18200T had higher output current capability, but far exceeded our requirement and also was 4x more expensive than L298N.
3. Tested the range of our wireless devices to ensure it is appropriate in terms of project scope
4. Started software development using Atmel software libraries.
5. Started schematic design and implementation

Goals for next week:

1. Complete coding of motor control using L298N
2. Measure torque requirement using ordered torque screw
3. Select and order gear motor
4. Complete 50 % of the schematic design for the overall system
5. Complete 50 % of software development for basic functionality of the user interface system