**ME 461 Homework 4**

**Choosing your Final Project and Preparations**

Check Off #1: Talk with Dan by Wednesday November 22nd Lecture

Box Submission: Project Proposal due Wednesday November 29th at 1:00 PM

# Introduction

For this project, I want your group of four thinking about your final project and talking to me about your ideas and gathering parts and code to be used in your final project.

Then by the due date, I want each of you to submit at least three lengthy paragraphs, explaining what your group will be attempting to accomplish in your final project. I am making this an individual submission because each partner in the group will be “in charge” of a certain aspect of the final project. Your individual explanation of the final project should give the same overview of the entire project but then give more detail on the portion of the project you will be “in charge” of.

Also, include any drawings and other pictures that will help convey what you would like to accomplish. Similar to Homework #1, a good amount of this work is on me getting you the parts and starter code you need to use the items you pick. Your job is to keep on reminding or pushing me to get your items.

Also, your job is to come to office hours (or other times you can find me) so you can help me find or develop you starter code and find or build the mechanical parts for your project.

# Final Project Preparation

Complete the following by the submission date.

* Read through the ME461 Final Project Document.
* Discuss with your partners what kind of project you would like to complete.
* Talk with me about your ideas for the project. Also talk to me about what part of the project you will be “in charge” of.
* Choose if you will be using along with the F28379D (red board) a Raspberry Pi 4, Raspberry Pi Zero W, ESP32, Raspberry Pi that you own or the second CPU (CPU2) of the F28379D.
* Make sure I have approved your project ideas.
* Get from me all the parts and code needed for your project.
* One check off item for this project is that you demonstrate your F28379D’s CPU1 communicating data to and from your second processor board. For example if you choose the RPI4, you could get source code from me that communicates using the UART serial ports of the F28379D and the RPI4. I will discuss with you the best way to communicate back a forth to your second processor.
* Submit your individual project proposal by the due date.
* Do not procrastinate. Get your ideas to me soon so we can go back and forth and come up with a project that I approve and so I can make sure you have all needed components.
* Many of the points for this assignment will be based on how soon and often you communicate to me about your project ideas. Also make it obvious to me that you have put thought into your decisions for the project. If you wait until the last minute, you will not score as well on this assignment.