Reflection Blog

My experience in designing the robot controller for this project involved a lot of uncertainty both in how the controller should be implemented and how to determine whether it works. I was constantly questioning whether or not I had created sufficient membership functions and if the value of the force and angular velocity components that were to be weighted were values that would allow the robot to efficiently reach its destination. I also questioned how close the robot should be before considered "at its destination". The uncertainty was, for me, the most difficult part of this project as I was never sure if what I had was correct.

What was easy, however, was using MATLAB's built-in tools to help in the design of the project. By using functions such as fplot() and peicewise(), I could easily make piecewise functions and plot graphs.

One element of this project that could be improved upon is the amount of 100ms intervals the robot takes to get to its target could be shortened. This could be done by changing the membership functions or adjusting the force or angular velocity weight components.