# README

## Layout

1. Simulations: contains files for Optimal Control Simulation and Results.
2. Physical System: contains program code for navigation system.
3. Motor Testing: contains codes used to test and verify motor performance.
4. Presentation: Powerpoint presentation showing project overview and demo.

## Simulation Instruction

* To run simulation results, first enter the directory containing **install.m** and run it from there.
* To see mpc results for a random feasible trajectory, run **mpc.m**
* To see MPC results for a sine function path, run **SampleMPC.m**
* To see MPC performance with noise (i.e demonstrating concept of explicit MPC), run **SampleMPC\_noise.m**
* To generate nicely looking random feasible trajectories, run **dispRandomPath.m**