Jacob Wise October 26, 2018 EECS 373 Dr. W. Newman

Assignment P5

Robot push a gear part?

The framework for the node used in this assignment was pulled from the example reactive task commander accompanying the irb120 robot files in Part_5. Most of the code is identical, however I adjusted the goal positions for each trajectory to allow the robot to push the gear part to a location, rather than just touch it.

The robot first found the gear part and positioned itself above. Then it positioned itself slightly to the inside of the gear, virtually on the ground. Next it pushed the gear outwards a distance, and finished by raising vertically. The final position is dependent on the original location of the gear part rather than hard coded, so it can be repeated for any position within the reach of the robot without recompiling.

A .mp4 file was recorded demonstrating this.

Link to source files on github: https://github.com/jswise23/EECS 373/tree/master/jsw107 p5/src