

Milestone 3 Individual Performance Report

Introduction

My contributions for the friendly and milestone have been in construction and strategy, I provided a pair of prongs at the front of the robot to control the ball whilst dribbling and helped to build an effective kicker that works around the front wheels. I also provided the strategy and command interface for penalty offence and defence.

Construction

- The prongs allow the robot to execute small radius turns whilst dribbling, without losing control of the ball. The kicker is more powerful as it has chance to rotate at full speed before making contact with the ball. The bump sensors were also lowered so they are triggered more often when in contact with other robots.

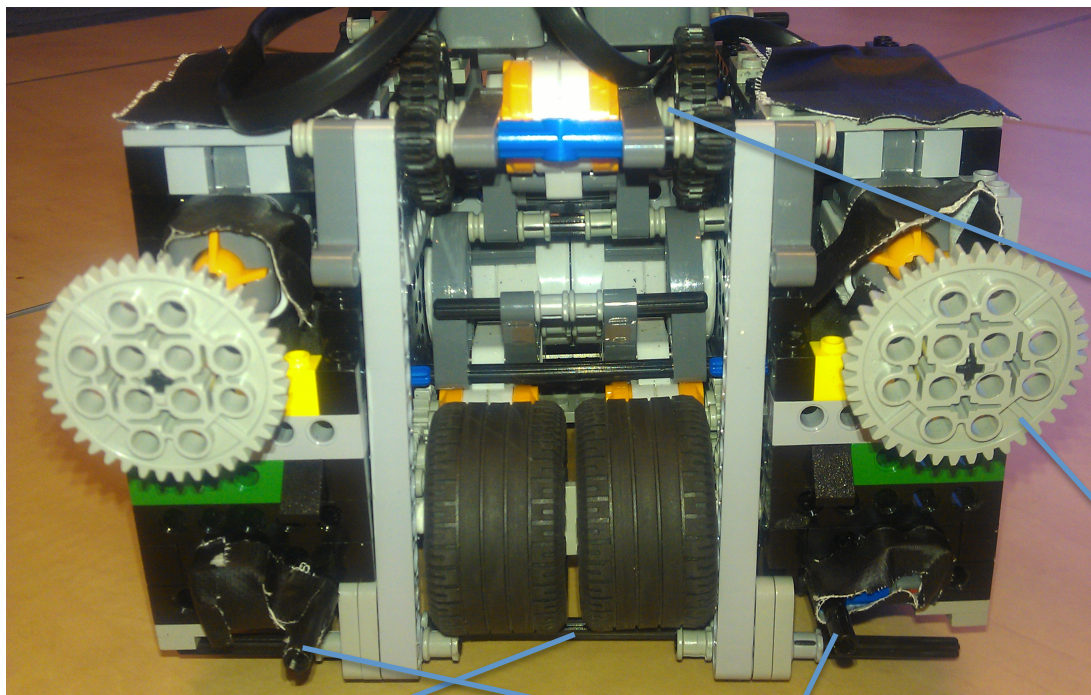
Strategy

- I have written the code to translate the generate plans of the plan types PENALTY_OFFENCE and PENALTY_DEFENCE, when the buttons are pressed in our GUI. I then translate these plan types into robot commands in the command interface. In testing the penalty offence worked well, but suffered from the range of the kicker.

To move forward from here A* needs adapting to so that nodes have an obstacle cost and obstacles are no longer binary, this will allow us to plot paths when the ball is within obstacles.

This milestone I feel I have earned 6 points, with a fair contribution to construction on strategy.

I would recommend Chris, Dale and Tom for 9 points.



Spacing here stops the gears rubbing against their placeholders

Bumpers lowered as much as possible

Middle of kicker set back so motor is at full speed before making contact with the ball

Prongs at the right height keep the ball in contact with the front wheels