

Individual Report, Milestone 2

Group 8 - Infinity

Chris Davie s0939281

Allocation

For the second milestone, I was again in the sub-team responsible for Robot Design & Construction, our task to design a new robot with holonomic wheels.

Contribution

We started with building a base that ensured that the wheels were equal distances apart and built it up from there. The issues we encountered were that we initially wanted a lightweight and compact design that could move quickly but with only three motor ports available on the NXT, we had to look into the use of the motor multiplexer. Once the first design completed and the multiplexer was ready to be tested, a small segment of code was written with the I2C communication protocol. After working around problems with the multiplexer such as identifying the addresses needed to communicate properly and some faulty wiring it was very apparent that the weight of the additional motormux battery pack made our design top heavy and quite unstable.

After experiencing these issues with what could be a very problematic design, it was decided that we would use our previous robot from milestone one and adapt it accordingly: remove kicker for a dribbler and make sure that we would pass the swipe test prior to the milestone.

Performance Review: 2