**AVC Weekly Progress**

**Week 1**

What we did this week:

1. Discussed needed roles and sorted out who would take what.
2. Worked on AVC planning document.
3. Went over all the parts and attempted to figure out the basic configuration we would work with in abstract.
4. Worked out everybody's schedule(work times and such)

Roles:

Hardware - Dylan,

Software - Shaun and Rachel ,

Testing - Stella,

Documentation - Ashton

Team leaders: Shaun and Rachel.

Dylan works Thursday and Sunday and Ashton works Friday, Saturday and Sunday

**Week 2**

What we did this week:

1. Once we had all the parts for the robot Shaun with some help from Dylan started to put it together.
2. Got group communication sorted out in the form of IM service slack
3. Started basic code for opening the gate and turning but encountered problems. This caused us to refocus onto the hardware side for the time being
4. One of the motors broke so we had to get a new one and re solder it.

**Week 3**

What we did this week:

1. Fixed most of our issues with the code excluding the gate opening code which still had issues.
2. Figured out battery positioning so that the robot would balance correctly.
3. Reconfigured the robot to be more effective by moving the wheel back and the PI up off the baseboard more with spacers to make it more stable and safe.
4. Decided to change people's roles based on who appeared to have more experience in or were doing more of a certain task:
   1. Shaun became head of hardware
   2. Rachel became head of software

**Week 4**

What we did this week:

1. Moved the camera up and changed the angle so it was more effective.
2. Fixed the gate code(Shaun had used the wrong variables).
3. Rachel amalgamated the code snippets she had written with the now fixed gate code to get a moving robot that followed the line and opened the gate.
4. Wrote the code for the robot to back track if it lost the line.
5. Rachel and stella attempted derivative response.
6. Set the code to stop the wheels when turned off.
7. Dylan spent some time working on the robot on friday.
8. Shaun made a 3D printed camera mount that upon testing the back screw was exactly 1mm to far left and there was not enough room to fit a screw from it into the rest of the arm.

**Week 5**

What we did this week:

1. Shaun 3d printed a camera mount the after a bit of filing worked
2. Rachel with some help with stella wrote code for handling the 3rd quadrant with the 90 degree turns, and made it so when it lost the line it turned in the direction of the most recent error value until it found the line again(rotating on the spot).
3. Shaun did wire management and made a battery mount out of spacers.
4. Reached B+.

**Week 6**

What we did this week:

1. 3 hours before testing robot started going of the line in quadrant one after no changes.
2. Managed to get it to B 50% of the time by the time testing started and then managed a 70% grade by altering the code during down time between each marked test.