December 10, 2022

FOCUS

building (Group 1): attaching claw onto arm

building (Group 2): Attaching Color Sensors

building (Group 3): We made a little basket for the battery

building (Group 4): attaching hubs, attaching/taking off deadwhee

coding (Group 1): Color Sensor

coding (Group 2): Driving encoders

coding (Group 3): Video tutorials

SUMMARY

building (Group 1): we first had to reattach the servo onto the claw, and then adjust its position around until the pulley was tiight enough. we then used hex cap screws to mount the claw onto the churro axles of the arm.

building (Group 2): We screwed the color sensors onto the bottoms of both robots.

building (Group 3): We made a little basket with a little door. It's not artsy he's to the robot yet because we need the shorter right angle bracket

building (Group 4): Attached the control and expansion hub bunk bed thing to the robot. Attached the third dead-wheel, then found that the first two on the outsides were attached incorrectly and did not touch the ground. Attempted to attach them correctly, but due to the two different branding names, the holes did not line up and were unable to attach within our parameters. Removed the deadwheels completely from the robot

coding (Group 1): Integrated color sensor conditionals into auton library. Wrote code to test the color sensor (just getting RGB values). Fixed configuration, then tested a few times, then made the code able to identify colors. All of this was on a new color sensor branch.

coding (Group 2): Figured out some ambiguous constants and edited the variables to be less cryptic. Figured out how to use encoders without deadwheels. Figured out how to convert inches travelled to revolutions to ticks.

coding (Group 3): Made tutorials for how to write a simple auton and a simple teleop and uploaded them to a shared coding resources folder.

CHALLENGES

building (Group 1): screwing the hex cap screws in was very difficult – we had to do it using pliers.

building (Group 3): The saw was broken and we had to fix it.

building (Group 4): existence

coding (Group 1): Configuration was tricky because accidentally deleted the imu in the configuration. Additionally, had trouble with uploading. Also had trouble with the values being too high because of the excessively bright LED on the color sensor.

coding (Group 2): There were some cryptic constants that were difficult to figure out.

coding (Group 3): Required a good knowledge of the driving library, which took some time to figure out.

NEXT STEPS

building (Group 1): attach entire claw+arm apparatus onto the robot

building (Group 2): Wire and code the color sensors

building (Group 3): We need to attach it to the robot,

building (Group 4): n/a

coding (Group 1): Merge colorsensor. Continue testing and get RGB values for tape and cones.

coding (Group 2): Test driving encoders next meeting and start calibration process

coding (Group 3): Assign different team members to make different videos in the off-season (this is not a priority; just something captains have decided will be a good idea for future seasons)