

December 10, 2022

building

focus:

new claw

summary:

used CAD to create a new version of the claw. Printed them in the purple filament and the blue ninja flex

challenges:

The printer was having trouble with the blue ninja flex

next steps:

attach them once they're printed and test them out

focus:

Attaching Color Sensors

summary:

We screwed the color sensors onto the bottoms of both robots.

challenges:

next steps:

Wire and code the color sensors

focus:

Altering and attaching webcams

summary:

We began to disassemble the webcam and brainstormed how to attach.

challenges:

There are no holes to screw screws into to attach the webcams to the robots.

next steps:

Come up with a contraption (maybe 3d print) to mount the camera.

focus:

Resoldering and attaching the limit switches

summary:

the limit switches were wired wrong, so i rewired them (which involved attaching two new limit switches bc of the hot glue).

challenges:

I accidentally messed up how the wires interact with the fishing line. RIP.

next steps:

maybe at some point resolder top limit switch depending on how big an issue it is

focus:

Color Sensor

summary:

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.

challenges:

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.

next steps:

Merge colorsensor. Continue testing and get RGB values for tape and cones.

focus:

Limit switches + control hub issues

summary:

tried to run any code with limit switches but it didn't work and we don't know why

challenges:

no code run at all and we don't know why

next steps:

give up on limit switches / postpone

focus:

Driving encoders

summary:

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.

challenges:

There were some cryptic constants that were difficult to figure out.

next steps:

Test driving encoders next meeting and start calibration process

focus:

Video tutorials

summary:

Made tutorials for how to write a simple auton and a simple teleop and uploaded them to a shared coding resources folder.

challenges:

Required a good knowledge of the driving library, which took some time to figure out.

next steps:

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)