December 2, 2022

building

focus:
Limit switch

summary:
Brainstormed ways to attach limit switch to lift, ended up with some challenges with the switches breaking so needed to create a new pair of limit switches

challenges:
The pair of limit switches that we were working with broke, so we had to solder a new pair, set us back as we didn't get to work on the attachment

next steps:
Start back at making the attachment for limit switches

focus:
New claw

summary:
I CADded and printed out a new claw for 20409

challenges:

next steps:
attach and test it out!

coding

focus:
Auton draft

summary:
We worked on a simple, workable, auton strategy (just parking). We also finalized starting places for the robots and wrote some strafing code (no encoders yet)

challenges:
wrote it for the wrong location

next steps:
Make simple auton for other locations, test strafing code, add encoder code once that's written, potentially add to auton strategy,

focus:
Driving encoders

summary:
We worked on writing encoder code for the wheels (to make driving more precise during auton)

challenges:
Have not been able to test it out to find actual encoder values yet

next steps:
test out encoder code to find how many revolutions are in a certain distance and use this to write auton code

focus:
arm encoders

summary:
We started out by pushing code and fixing the MULTITUDE of errors that popped up. Next, we measured the different yellow things in cm, hoping to figure out how to teach the robot arm to go to a specific level of yellow thing. We also had some issues with imu (so we commented it all out) and strafeBias (so Kenna just deleted that). We then went through last year's code, trying to understand how encoders worked in the past, and Kenna wailed for Abby for a while. We tried to calculate the ratio of cm to rotations, but we couldn't find an empty whiteboard. Super fun day!!

challenges:
we didn't know how to initilze encoder, but we figured it out. We also had to re add the construct method into the auton library

next steps:
we need to do the math to convert cm to position of arm, write encoder function to move the arm, and test

focus:
OpenCV

summary:
Tried to test webcame code but didn't work

challenges:
Missing Property Exception error (don't know how to fix it)

next steps:
Google error and try to find issue [there was an instance of "Pattern" in the build.common.gradle]

business

focus:
Engineering portfolio brainstorm, vlogs, november newsletter

summary:
We spent a long time brainstorming for both engineering portfolios, singling out what parts of our story this year are most important to each team/robot. We finished the november meetings vlog and posted it, and also sent out the

novemeber newsletter to our very *dedicated* fans.

challenges:
Hard to start from scratch with the portfolios instead of editing old ones from previous years, but it will be worth it in the end because each year is so completely unique!

next steps:
engineering portfolio = priority!