October 15, 2022

FOCUS

building (Group 1): Attaching lift to chassis

coding (Group 1): Bevel drive math in driving library

SUMMARY

building (Group 1): We first went over the two general robot design ideas so everyone is on the same page. Then, we attached the lift to the chassis. We needed to CAD and lasercut a special T-slot that would fit both of the pieces supporting the lift.

coding (Group 1): We went through the bevel drive funtion in the driving library line by line and explained what was happening and what each variable meant. We did the math out algebraically for each wheel and then did four examples (moving forward at half speed, moving forward at full speed, strafing to right front, just turning right).

CHALLENGES

building (Group 1): We were stuck on knowing whether or not this was going to be a final design or just a protoype, we're leaning towards prototype that can be taken apart later.

coding (Group 1): The fact that the joystick x values are negated messed us up when we started experimenting with more complicated movement patterns.

NEXT STEPS

building (Group 1): Finish attaching part to stabilize lift and attach motor with string

coding (Group 1): Test out strafing with the Virtual Robot Simulator, create TeleOp to move with the controller