

**My Engineering Notebook: name1, name2**

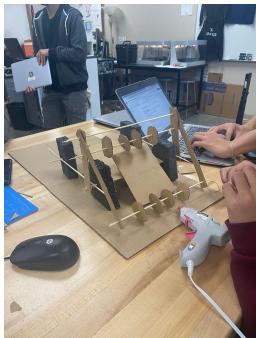
**Date Range: 9/20/2022 - 10/5/22**

**Today's Date:** 9/19/2022

**People working:** Adam Kennedy, sri

**What we did today:** We made a rapid prototype of our robot for the VEX 2022-23 Spin Up game.

**Picture of robot, parts made, code, scratch work, etc:**



**Today's Date:** 9/20/22

**People working:** Adam Kennedy, Sri

**What we did today:** Took off the claw and the brain, modified the robot so it is able to compete in the vex games, which includes having the ability to store disks and to shoot them into the score.

**Picture of robot, parts made, code, scratch work, etc:**

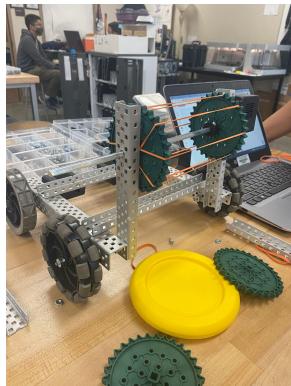


**Today's Date: 9/21/22**

**People working: Adam Kennedy, Sri**

**What we did today:** Drilled holes into the support beams just so the motor rod can fit, using rubber bands with the wheels in order to have a basic intake system, and stabilized the support beams so it isn't prone to move around when it is supposed to be still.

**Picture of robot, parts made, code, scratch work, etc:**



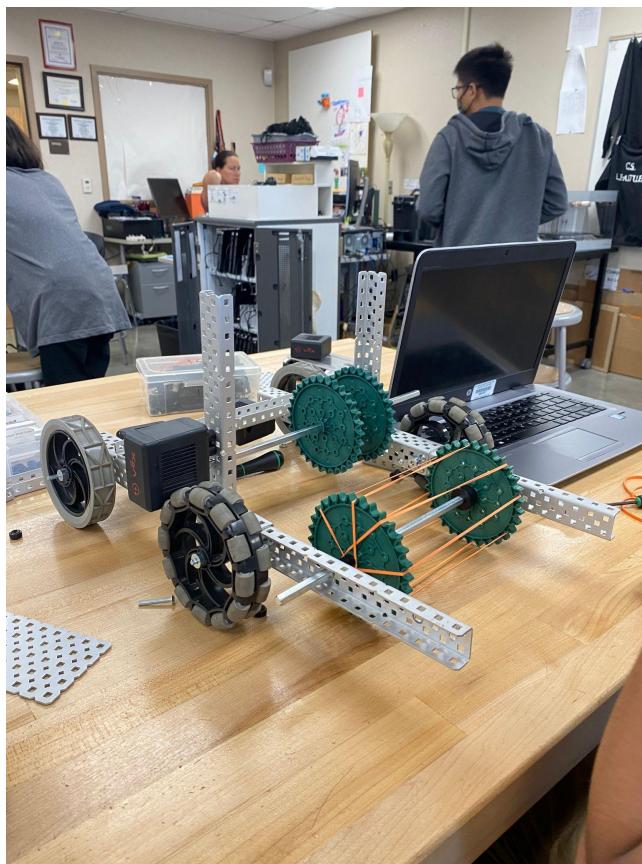
Reference: [Vex robotics rubber band roller prototype \(Change Up\)](#)

**Today's Date: 9/22/22**

**People working: Adam Kennedy, sri**

**What we did today:** Attempted to improve intake and found an error related to the angle, which proved to be too steep to the point the disks cannot be loaded into the system, flipped the support beam so it can actually pull disks up and ended up rearranging the driveshaft.

**Picture of robot, parts made, code, scratch work, etc:**

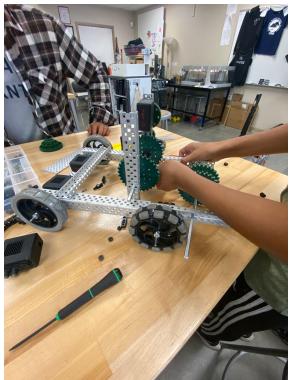


**Today's Date: 9/23/22**

**People working: Adam Kennedy, sri**

**What we did today:** Moved the wheel to the back, added more gears to the main beam in hopes of eliminating the use of chains all together, and moved the back gear even further, back.

**Picture of robot, parts made, code, scratch work, etc:**



**Today's Date: 9/26/22**

**People working: Adam Kennedy, sri**

**What we did today:** Added a ramp to the robot, and added the rubber bands to the gears, and the chain back on. Changed a motor to a blue gear box. Intake test successful.

**Picture of robot, parts made, code, scratch work, etc:**



**Today's Date:9/27/22**

**People working: Adam Kennedy, sri**

**What we did today: We made a flywheel, and mainly tested the intake and the flywheel.**

**The flywheel needs more work to be done, so we made a prototype(or basically the platform for the flywheel) so we can experiment with it more tomorrow and hopefully install it by tomorrow.**

**Picture of robot, parts made, code, scratch work, etc:**



**Today's Date:9/28/22**

**People working: Adam Kennedy, sri**

**What we did today: Experimenting many ways for the flywheel to work, involving many different types of wheel sizes and gears, concluded that we can't make a double flywheel actually efficient.**

**Picture of robot, parts made, code, scratch work, etc:**



**Reference(s):**[https://www.youtube.com/shorts/gNs56uY7U\\_A](https://www.youtube.com/shorts/gNs56uY7U_A)

<https://www.youtube.com/shorts/t1nM7esEPLY>

**VexV5 Spin Up Flywheel Disk Launcher**

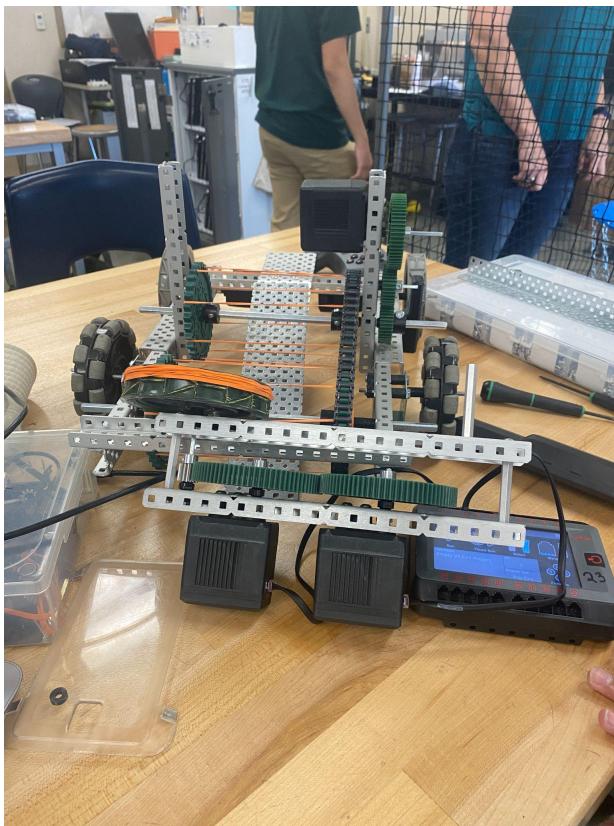
**VEX Spin Up shooter building instructions | 17022A**

**Today's Date:9/29/22**

**People working: Adam Kennedy, sri**

**What we did today:** After multiple attempts to fix the rattling noise on the flywheel, at first we tried to use a double motor for a single gear, then we tried two gears, followed shortly with a smaller gear we figured out that's the best gear ratio. And after fixing the rattling issue using the bearing flat we attempted to use the flywheel to get into the goal which at first failed then we just used a rubber band and figured out that's more effective.

**Picture of robot, parts made, code, scratch work, etc:**

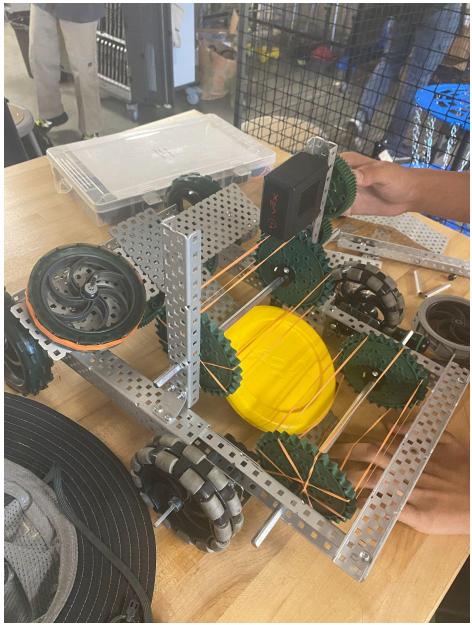


**Today's Date:9/30/22**

**People working: Adam Kennedy, sri**

**What we did today:** Removed the ramp in order to figure out how to mount the flywheel. The first attempt involves using a curved iron in order to mount it. We ended up taking off the main support beam so we can mount it higher just so we can mount the flywheel properly with no complications from the ramp. Then we compressed the flywheel to have a better chance at mounting it properly. After assembling the main support beam into the robot again, we managed to mount the flywheel back into place properly.

**Picture of robot, parts made, code, scratch work, etc:**

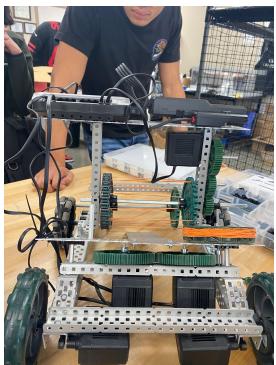


**Today's Date: 10/3/22**

**People working: Adam Kennedy, sri**

**What we did today:** Tested the robot, and found out the issue is the bot doesn't have the velocity and the angle, so we've decided to make the angle for the disk intake to be higher, and lifted the main beam and the flywheel in order to do that. We also programmed it to be controller controlled, added a platform on top for sake of stability, and it works...barely.

**Picture of robot, parts made, code, scratch work, etc:**



**Today's Date:10/4/22**

**People working:** Adam Kennedy, sri

**What we did today:** Competed in the competition, won once lost once, things that went bad with the robot is that we noticed that the rubber band and the fact bunch of screws seems to be very loose which had stability issue and the fact the ramp seems to be getting caught on the floor, good things about the robot is it moved, it can shoot, and it mainly score tile points. We can improve by lifting the ramp, somehow securing the rubber bands so it doesn't get caught into the flywheel and effectively jamming it, and lastly practice on accuracy.

**Picture of robot, parts made, code, scratch work, etc:**



**Today's Date:10/5/22**

**People working:** Adam Kennedy, sri

**What we did today:** Lost the competition mainly because of our ability to aim which led to the disk bouncing off the basket and into the low score, and when it was rammed it caused the ramp to get caught completely which made our robot as good as a tile bot. The thing that went well is that it shoots and moves. Way to improve, honestly I don't even know other than getting better at aiming.

**Picture of robot, parts made, code, scratch work, etc:**

