

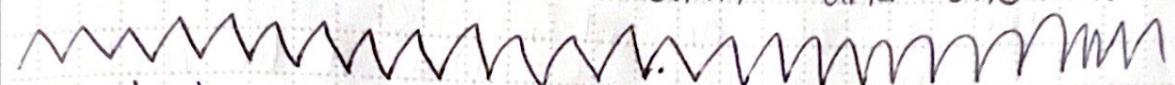
✓Ex

Project Management: Explanation of how and when this project is going to be completed. Who will be involved? What materials are needed? What is the time frame?

1

10/2/22

We received our toolbox and Vex components. Aarav and Malhar mainly focused on the drive train. Suhrit on the other hand worked on the arm and the claw.


We had a presentation on the rules and competitive basics of this years Vex Robotics tournament game, Spin Up.

This week: Malhar Suhrit Aarav

project

designed by:

witnessed by:

date:

10.9.22

Drivetrain

This weeks presentation was about the drive-train. In the presentation we learned about some strategies, capabilities of the robot, gear ratios, and finally the drivetrain.

Capabilities:

- Size: 18x18x18 inches
- 8 Motor limit
- Max 3 discs can be held at once
- Pick up discs quickly from the ground
- Spin color rollers
- Can expand for points

Drive trains

- There are basic drive-trains (our build)
- and advanced drive-trains

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This week we finished the clawbot & drove it around a bit. We also had a new teammate come, Allan.

This week: Malhar, Smit, Aarav, Allan

project .....

designed by: .....

witnessed by: .....

date: .....

✓Ex

Game Theory: Having a thorough understanding of all of the game objectives and rules.

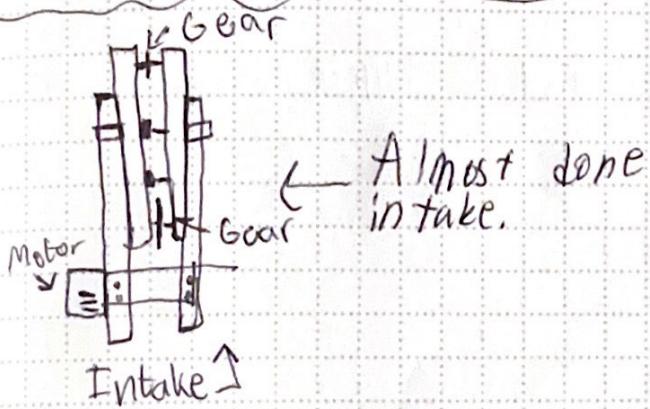
3

10-16-22

## Intake

This weeks presentation was about the intake. We learned how to make a engineering notebook entry, how the intake works and how to make it, finally, we learned how to cut parts.

We finished the intake. We also tried to implement gear ratios.



Suhrit & Allan: Finishing drive train

Malhar & Aarav: Started intake

This week: Malhar, Suhrit, Aarav, Allan

project

designed by:

witnessed by:

date:

10.23.22

### Flywheel + Mounting

In this weeks presentation we learned how to make a flywheel & how to mount all our components onto the drivetrain main frame.

We learned about projectile motion, friction and why greasing is important for the flywheel to move.

project

designed by:

witnessed by:

date:



6

11.6.22

In today's presentation we learned about autonomous coding. We planned our strategy, and fixed some major issues with our robot. We finished the initial design.

project .....

designed by: .....

witnessed by: .....

date: .....

✓Ex

Initial Design: A design that comes about from discussion of the game theory. This will include the features that were developed during the brainstorming session.

7

11.13.20

In today's class, we learned about pneumatics. We decided to use them for expansion. However, they are backordered, so we will have to wait.

project

designed by:

witnessed by:

date:

11.20.22

We began to work on the code for driver control in C++.  
We fixed some major issues, such as a loose motor and  
the polycarb.

Final Code at the end

```
int intakeDirection = 0;  
void intake() {  
    if (Controller 1. Button R1. pressing () = true) {  
        intake. spin
```

project

designed by:

witnessed by:

date:

✓Ex

Testing: Taking your prototype out and trying the design in a game situation to see if it can be successful.  
You will collect data to determine if your design meets its objectives.

9

11.20.22 (cont)

We started to test our code. We are taking a day tomorrow to practice, so we brought the robot home. We will prep for the competition on December 3rd. Next week we will work on string shooters and rollers (tomorrow)

This Week: Malhar, Suhrit, Ishan, Aarav, Allen

project

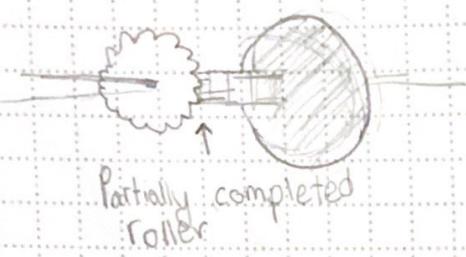
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witnessed by:

date:

11.21.22

Today we did a day-long practice. Before we went to ICC we did some maintenance. One of our motors broke, and it took us a long time to replace it. When we went to ICC we began work on the roller, as well as driving practice. Ishan added speed change to the code.



Partially completed  
Roller

Today: Maltbar, Ishan, Aarav

project

designed by:

witnessed by:

date:

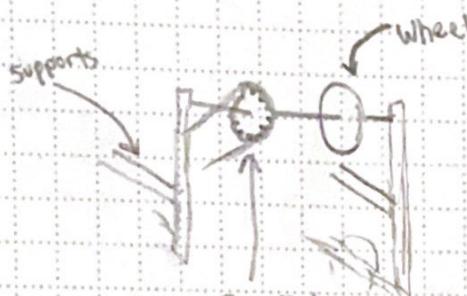
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Improvement Process: How do you plan to make improvements to your design based on your testing?

11

11.22.22

Today we had another day long practice. Before going to ICC at 3:00 we installed rollers. We attached it to the intake mechanism so we could save motors and parts. We did some driving practice and worked on auton.



Supports  
Wheel  
Spaced by  
Chain - connected  
to intake

Today: Malhar, Ishan, Anasai

project

designed by:

witnessed by:

date:

12

11.26.20

We did a short 3 hour practice. We finished working on auto  
This is the code:

project ..... designed by: ..... witnessed by: .....

PROPRIETARY INFORMATION all information is the property of, and solely owned by the Designer.

date: .....