

2020-01-02

| Task | Details | Picture(s) |
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| Alliance Marker Holder | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Rishi: Created a flyer and wrote a message to send out to other teams.<ul style="list-style-type: none">▪ Why: So teams would be able to join our meeting.• Learning• Next Steps<ul style="list-style-type: none">◦ Rishi: Keep planning and organizing event. | |

2020-05-18

| Task | Details | Picture(s) |
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| Learning Tools | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: I participated in the team builders and helped explain slack and clickup. <ul style="list-style-type: none"> ▪ Why: To give a tour to new members for slack and clickup essentials. Did team builders to get to know new members better. ◦ Philip: Taught New members how to use slack and clickup <ul style="list-style-type: none"> ▪ Why: It's important that our new members understand how to use essential tools ◦ Nikhil: Learned about Slack and Clickup. <ul style="list-style-type: none"> ▪ Why: To get better communication skills with team mates (digitally). To organize work, etc. ◦ Eric: talked about slack and clickup ◦ Preeti: taught the new members how to navigate clickup and slack <ul style="list-style-type: none"> ▪ Why: to help integrate them into our team ◦ Nithya: I showed Ryan slack and Onshape, worked with Nikhil on the gm0 and came up with team builders with Arjun <ul style="list-style-type: none"> ▪ Why: for team builders and introduce the new team builders to different things we do • Learning <ul style="list-style-type: none"> ◦ Chirag: I learned that gm0 doesn't like claws even though it can be useful. ◦ Philip: I Learned that to go as in-depth as I wanted, we needed more time ◦ Nikhil: I learned the purpose/features of Slack and Click Up and was amazed at ClickUp's progress and assignment tools. ◦ Eric: how hard it is to come up with team builders for video calls ◦ Preeti: clickup has gantt boards ◦ Nithya: about the new members and got to talk to a few of them • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Do some more team builders and start teaching/learning things like Fusion360 and Android Studio. ◦ Philip: Continue training with other programs ◦ Nikhil: Use the tools, ◦ Eric: do more team builders | |
| | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nikhil: 1. Find something in your room that is described by a word 2. Making a story sentence by sentence. <ul style="list-style-type: none"> ▪ Why: Both seem interactive and | |

Come Up With Team Builders

- number 2 especially is very team oriented.
- Chirag: I came up with team builders, one was to build a story where each of us say a sentence in an order. The other was to find something in our rooms that describes a certain word.
 - Why: We did that to have more team builder ideas to do in future meetings.
 - Ryan: I came up with two possible team builders.
 - Why: Because coach Alan told us to.
 - Nithya: came up with two team builders, the first one was you have two groups and one had to draw while the other group explained the item they had to draw
 - Why: for our next meeting to get to know the new members
 - Andrew: we came up with 2 team builders one was two truths and a lie and the other was where we split a group into two groups. One group is given an item to describe to the other. Then the other group has to draw that item based on the other groups description.
 - Philip: came up with 2 team builders: jackbox games .com which has a bunch of games and then reverse pictionary where someone has to describe the thing and someone else has to draw
 - Teja: Came up with a team builder: a coach gives a one word prompt and one team member says a sentence about it. The next member needs to start their sentence with the last word of the other team member.
 - Why: It challenges you to think about different words and it is a fun activity.
 - Andrew: Helped create 2 new team builders. 1. Pictionary+Charades Draw it and describe it. 2. 2 truths and a lie
 - Why: I did this so we could have possible team builders for next meeting, so I can better know my teammates.
 - Izaak: We came up with 2 team builders 1) you say one word and the next person says another word and so on and you create a story 2) one person has a picture and they have to explain how to draw it without giving it away
 - Why: To use them in the next meeting
 - Preeti: came up with 2 team builders: jackbox games.com which has a bunch of games and then reverse pictionary where someone has to describe the thing and someone else has to draw

- Learning
 - Chirag: That the 2nd team builder idea has been used and been proven successful by PT.
 - Ryan: Philip is color blind.
 - Nithya: I learned more about the new team members
 - Andrew: I relearned how important it is to talk with other people to get more opinions to further and better ideas
 - Philip: i learned that Ryans team last year had to do a lot of online team builders last year
 - Teja: You can learn new ways to say the same thing but in different ways.
 - Andrew: Today, I learned about Slack Channels and how to use ClickUp.
 - Izaak: That coming up with team builders that you can do online is really hard
 - Preeti: i learned that Ryans team last year had to do a lot of online team builders last year
- Next Steps
 - Nikhil: Implement it!!!!
 - Chirag: Use them in future meetings.
 - Ryan: Jackbox games and Reverse Pictionary should be shared with group.
 - Nithya: talk to the team about the team builders we came up with
 - Andrew: utilizing said team builders and getting feedback on them from people
 - Philip: do the team builders with our team
 - Andrew: I'd want to start meddling with ClickUp to learn how to use it better.
 - Preeti: do the team builders with our team

2020-05-25

| Task | Details | Picture(s) |
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| Worked On Website | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Ryan: Worked on first paragraph of about page. <ul style="list-style-type: none"> ▪ Why: It needed to be edited to the new team. ◦ Arjun: I helped my group work on the website and we wrote down changes on the clickup doc. <ul style="list-style-type: none"> ▪ Why: I did that so we could have an updated website for the new season. ◦ Nikhil: We looked at the website and decided which parts are outdated. Then, we attempted to create a copy of the website (as a backup), but we couldn't, so we started a ClickUp Doc for website changes and started creating edits. <ul style="list-style-type: none"> ▪ Why: The website is better updated as soon as possible for sponsors, etc. ◦ Izaak: We made a doc on ClickUp where we wrote down some things that we wanted to change and started to change some of the about page <ul style="list-style-type: none"> ▪ Why: So that it would be updated for the new season • Learning <ul style="list-style-type: none"> ◦ Ryan: I learned that weekly is hard to use. ◦ Arjun: I learned how to make a clickup doc and how to use Slack calls. ◦ Nikhil: I learned how to make ClickUp documents. ◦ Izaak: I learned how to make a doc in ClickUp • Next Steps <ul style="list-style-type: none"> ◦ Ryan: We should add the updated version to the weekly ◦ Arjun: Next steps would be to implement the changes we listed, and to have an updated website. ◦ Nikhil: Finish edits through ClickUp, then update the real site (after creating a successful backup). ◦ Izaak: Finish the changes on the about page | |

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| Update Sponsor Flyer | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Eric: Finished the sponsor flyer <ul style="list-style-type: none"> ▪ Why: We can now start sending them out to companies ◦ Chirag: I worked on updating the sponsor flyer from last year. <ul style="list-style-type: none"> ▪ Why: The information on the flyer was outdated and we need to update it and improve it to send to our possible sponsors for this season. ◦ Rishi: Updated information on the flyer and added contact information. <ul style="list-style-type: none"> ▪ Why: To let our sponsors know the updates for this information. • Learning <ul style="list-style-type: none"> ◦ Eric: How to do motion studies in fusion 360 ◦ Chirag: I learned that the flyer didn't even have our team website on it despite referencing it numerous times. ◦ Rishi: That we didn't have a contact section and that the pictures need to be updated. • Next Steps <ul style="list-style-type: none"> ◦ Eric: Send out flyers ◦ Chirag: Have other members go over and review it. Update team pictures asap. Once approves, send to possible sponsors. ◦ Rishi: Take and update team pictures, as well as sending out the flyers to potential and past sponsors. | |
| Come Up With Team Builders | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2020-06-01

| Task | Details | Picture(s) |
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| Training - Programming | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Andrew: Working with Android Studio on Coach Alan's book. ◦ Andrew: I learned some Java. The small group finished chapter 3, and reviewed some important concepts. <ul style="list-style-type: none"> ▪ Why: To use it in the actual season. • Learning <ul style="list-style-type: none"> ◦ Andrew: I learned about gamepad controls and how to code them. ◦ Andrew: Java, Data types, condition, loops, init, gamepad (and related stuff). • Next Steps <ul style="list-style-type: none"> ◦ Andrew: Learn more!, Go through more of the book. | |
| Training - CAD | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Ryan: Did half of a phone case. <ul style="list-style-type: none"> ▪ Why: I helped us learn it. ◦ Chirag: I worked on the CAD training. <ul style="list-style-type: none"> ▪ Why: To learn how to use Fusion 360 better. ◦ Arjun: I learnt how to use Fusion 360, and its many tools. <ul style="list-style-type: none"> ▪ Why: I did that so I could learn how to CAD and help design the robot in the future. ◦ Eric: Talked about Fusion with Ryan, Chirag, and Arjun <ul style="list-style-type: none"> ▪ Why: CAD training • Learning <ul style="list-style-type: none"> ◦ Ryan: How to use sketch in fusion 360. ◦ Chirag: I learned about rectangular patterns and how to use them. ◦ Arjun: I learnt how to use sketch based CAD, how to use the fillet, extrude, and many more tools. ◦ Eric: How tough teaching a workshop effectively is over Zoom • Next Steps <ul style="list-style-type: none"> ◦ Ryan: Continue learning ◦ Chirag: Finish the example product we were working on. ◦ Arjun: Next steps would probably be to attend the potential CAD workshop, and learn more of the features. ◦ Eric: Start a new workshop for 5-6 people per session | |
| Come Up With Team Builders | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

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| FLL Videos | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: Started to doc and came up with different sections and ideas for those sections <ul style="list-style-type: none"> ▪ Why: To start on our videos to help FLL teams ◦ Andrew: Brainstormed video ideas and sorted them out • Learning <ul style="list-style-type: none"> ◦ Nithya: We need to make sure we go in depth and think about what we wish we knew during our first years in FLL ◦ Andrew: That a lot of fll principles transfer over to ftc more than I realized • Next Steps <ul style="list-style-type: none"> ◦ Nithya: Add more tips and start scripting videos ◦ Andrew: Having more people go over the list and give ideas then take all the ideas and write scripts for videos on these ideas | |
| Worked On Website | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Izaak: Started editing <ul style="list-style-type: none"> ▪ Why: Because some of the information on our website only applies to last year ◦ Preeti: updated the website about and home page + added a contact, history and team spirit page <ul style="list-style-type: none"> ▪ Why: so our website is more relevant to our team and this season ◦ Philip: Cleaned up and updated text on the website <ul style="list-style-type: none"> ▪ Why: So that we had all the right info on it ◦ Rishi: I worked in updating the website. <ul style="list-style-type: none"> ▪ Why: There were a few changes and updates to be made. • Learning <ul style="list-style-type: none"> ◦ Izaak: That our website really needs an update ◦ Preeti: there was a lot of stuff that still needed to be fixed ◦ Philip: I learned how to embed ClickUp docs and boards into weebly ◦ Rishi: The clock needed to changed. • Next Steps <ul style="list-style-type: none"> ◦ Izaak: Keep on editing! ◦ Preeti: finish the history and team spirit page ◦ Philip: Finish going through site and publish ◦ Rishi: Keep updating the website. | |

2020-06-08

| Task | Details | Picture(s) |
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| Adrienne Meeting | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Philip: Learned from Adrienne, a leadership expert, important facts and characteristics of high performing teams <ul style="list-style-type: none"> Why: Knowing how to become high performing is an important skill for an FTC team to have, so that we can accomplish a lot Ryan: I learned about successful teams and how they do what they do. <ul style="list-style-type: none"> Why: To hopefully make this team one of them. Chirag: I went through the slideshow on what makes an effective team. <ul style="list-style-type: none"> Why: To frame our team's season around the values and ideas that we learned. Teja: Talked with Adrienne about ways to be a successful team. Nithya: Listened to Adrienne talk about how to make a strong team <ul style="list-style-type: none"> Why: It is always helpful to have someone with expertise in an area talk to the team Nikhil: Learned a lot of stuff about teams, and things that can tie into making a great team, like pressure level and how you react. <ul style="list-style-type: none"> Why: To interact with my FTC team, and other teams in the future, better. Andrew: attended the meeting Arjun: I listened to the advice and the tips that we got, and how they would help. <ul style="list-style-type: none"> Why: I did that so I could be better at interacting with teams. Eric: Attended the workshop <ul style="list-style-type: none"> Why: To learn how to start forming a better team Izaak: We talked about teamwork skills Rishi: Viewed a presentation on high performing teams. <ul style="list-style-type: none"> Why: This will be beneficial for us becoming a high performing team. Learning <ul style="list-style-type: none"> Philip: I learned a lot about Steps of learning, (UI, CI, CC, UC) and the steps of change Ryan: I learned the equation (if we call it that) E+R=O Chirag: I learned and relearned many things. The one I found the most useful was E+R=O. This can completely change the outcome of a situation which in turn can even change your life. Teja: I learned about different ways to support your team members and | <p>Change is hard but needed to build strong teams!</p> |

ways to be successful while having fun.

- Nithya: R+E=0 Your response to an event can heavily impact the outcome
 - Nikhil: I learned that to make a good team, there are a couple key things you want to do as a team, as well as things you can do as an individual.
 - Andrew: to remember how differently everyone thinks in how everyone had a different first thought on high performing teams
 - Arjun: I learned about what successful teams do that make them successful.
 - Eric: About the levels of competences
 - Izaak: That it's really important to have common goals
 - Rishi: There is this theory about the steps of learning, in which it is important to know where you are, and where others are. It will allow you to better yourself as well as help others.
- Next Steps
 - Philip: To take what we've learned and apply it to become a high performing team
 - Ryan: Continue learning.
 - Chirag: Implement the ideas introduced to us in all our meetings and work as an efficient team!
 - Teja: Implement.
 - Nithya: Make FII scripts
 - Nikhil: Use some techniques in real life!!!!
 - Arjun: My next steps would be to start implementing these tips in my daily life so I can interact with others, and be more successful.
 - Rishi: Strive to become a high performing team, using the information given to us in the presentation.

2020-06-22

| Task | Details | Picture(s) |
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| Come Up With Team Builders | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Ryan: Came Up With some super cool team builders. <ul style="list-style-type: none"> ▪ Why: We need two team builders per day ◦ Teja: Think of team builder ideas ◦ Eric: Brainstormed team builders for <ul style="list-style-type: none"> ▪ Why: Needed more team builders for the 2 team builder per meeting goal ◦ Arjun: I helped generate Team builders <ul style="list-style-type: none"> ▪ Why: So we could accomplish a common goal, and get to interact more ◦ Andrew: came up with teambuilders to use in future meetings <ul style="list-style-type: none"> ▪ Why: because we set a goal to have 2 team builders every meeting ◦ Preeti: Thought of some team builders for future meetings <ul style="list-style-type: none"> ▪ Why: So our team can get to know each other and bond better ◦ Rishi: Came up with ideas for team builders. <ul style="list-style-type: none"> ▪ Why: To improve team bonding and team spirit. ◦ Philip: Helped make a list of team builders <ul style="list-style-type: none"> ▪ Why: so that we can keep up with the amount of team builders we wanted to do ◦ Nikhil: We (my breakour room) came up with some team builders • Learning <ul style="list-style-type: none"> ◦ Ryan: it is super hard to find cheap team builders ◦ Teja: you can communicate and have fun with your team in many different ways. ◦ Eric: what quizbreaker is ◦ Arjun: I learned about watch party, and how we could do hat ◦ Andrew: theres a lot of different things you have to think about when coming up with effective team builders ◦ Preeti: I learned that there are lots of ways we can turn in person team builders into online team builders ◦ Rishi: That our members are creative and talented. ◦ Philip: there are lots of options and not enough at the same time • Next Steps <ul style="list-style-type: none"> ◦ Ryan: Spinnny things! Use a wheel per practice ◦ Teja: Test! ◦ Arjun: Accomplish our other goals ◦ Andrew: utilizing the team builders we made | <div style="background-color: #f0f0f0; padding: 10px;"> <p>Breakout 1</p> <ul style="list-style-type: none"> • Quiz Breaker (Paid with Free Trial) (So Like Do It once) • Jackbox Games (max 10 unless two accounts(can be a spectate mode)) • Special Surprise! (Unlikely) • Talent Show • Apples to apples • Mad libs • Creating a small structure out of Legos and then telling ppl the instructions, they have to build it without seeing </div> <div style="background-color: #f0f0f0; padding: 10px;"> <p>Breakout 2</p> <ul style="list-style-type: none"> • mafia • reverse pictionary • pictionary • trivia - beat shazam • Apples to apples but with objects in room • watch party(outside of meeting) </div> <div style="background-color: #f0f0f0; padding: 10px;"> <p>Breakout 3</p> <ul style="list-style-type: none"> personal facts guessing game most used emoji guessing game scavenger hunt goosechase open mic time! jackbox games music trivia general trivia FTC trivia </div> |

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| | <ul style="list-style-type: none"> ◦ Preeti: Choose team builders for future meetings and do them ◦ Rishi: Do the team builders to improve the team spirit. ◦ Philip: plan and run them ◦ Nikhil: Do some team builders, set up | |
| Preseason Goals | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: created some goals to work on <ul style="list-style-type: none"> ▪ Why: we needed goals for this preseasong ◦ Chirag: Came up with multiple preseasong goals. <ul style="list-style-type: none"> ▪ Why: To have set goals that help us decide whether the season was a success or not. ◦ Nikhil: We (My breakout room) came up with goals <ul style="list-style-type: none"> ▪ Why: It's important to set goals, and also so that we knew what we had to get done before kickoff. ◦ Andrew: came up with goals <ul style="list-style-type: none"> ▪ Why: to measure how successful our preseasong is and have a goal to shoot for • Learning <ul style="list-style-type: none"> ◦ Chirag: We have 12 weeks until kickoff!!! ◦ Nikhil: Goals should be specific with numbers. ◦ Andrew: i realized how much i miss physical building during preseasong to try out new ideas • Next Steps <ul style="list-style-type: none"> ◦ Philip: create a plan of action and turn into clickup tasks ◦ Chirag: Hopefully complete all these goals! ◦ Nikhil: Execute those goals ◦ Andrew: taking steps to complete these goals | <ul style="list-style-type: none"> <input type="radio"/> more workshops (>12) (no number, instead a skill checklist) <input type="radio"/> Cad <input type="radio"/> Programming <input type="radio"/> team builders (>12) <input type="radio"/> outreach <input type="radio"/> FLL videos (>6) <input type="radio"/> at least half the team has helped script <input type="radio"/> FTC Zoom workshops (>x) <input type="radio"/> FLL Zoom workshops (>x) <input type="radio"/> Other workshops (>x) <input type="radio"/> experts (>4) <input type="radio"/> helping/interacting with 10 teams <input type="radio"/> building basics <input type="radio"/> odo chassis |

2020-06-29

| Task | Details | Picture(s) |
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| Training - CAD | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Ryan: We faked a valor cadathon brainstorm process. Learning <ul style="list-style-type: none"> Ryan: How to do the brainstorm process and some useful ftc info. Next Steps | |
| Preseason Goals | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: Come up with CAD preseason goals. Learning <ul style="list-style-type: none"> Teja: Different ways to complete the CADathon challenge. Next Steps <ul style="list-style-type: none"> Teja: Implement! | |
| Supershot (Last Years Vcc) | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Chirag: Worked on strategy for the 2019 VCC as practice. <ul style="list-style-type: none"> Why: To gain experience in how participating in a CADathon works. Philip: worked on brainstorming a strategy for the supershot game Arjun: I helped come up with the strategy for the cadathon. <ul style="list-style-type: none"> Why: So we can practice for the upcoming season and cadathon. Nikhil: My breakout room (Izaak, Nithya and Chirag) looked at some potential attachments for our robots. <ul style="list-style-type: none"> Why: We're trying to do the Valor CAD challenge to help us learn CAD. Izaak: We created a strategy for Supershot <ul style="list-style-type: none"> Why: So we could practice for this year's vcc Andrew: talked in a smaller group about what we would do for it <ul style="list-style-type: none"> Why: to simulate how a cadathon would work Nithya: Came up with what we want our robot to have and do <ul style="list-style-type: none"> Why: to get ready for cadathon Philip: worked on brainstorming a strategy for the supershot game Learning <ul style="list-style-type: none"> Chirag: I learned that the robot couldn't touch the high goals in last year's Challenge. Arjun: I learned about different types of mechanisms. Nikhil: FTC robots can actually hang from a metal loop! Izaak: That the frisbees in Supershot are scattered over the field at the start of the start of the match | |

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| | <ul style="list-style-type: none"> ◦ Andrew: theres a lot you can overlook but those things are still important to remember when you actually work on a robot ◦ Nithya: playing apples to apples at home version we played was kinda hard • Next Steps <ul style="list-style-type: none"> ◦ Chirag: CAD some of the ideas my group had on Fusion 360. ◦ Philip: start cadding ◦ Arjun: Review mecanum chassis ◦ Nikhil: CAD some of the ideas and parts ◦ Izaak: Finnish up the strategy and work on CADing some of the parts ◦ Andrew: cad ideas we had ◦ Nithya: know if you can participate in cadathon ◦ Philip: start cadding • Notes: <ul style="list-style-type: none"> ◦ Philip: Importance: <ul style="list-style-type: none"> 1) Climbing 2) becons 3) frisbees <p>we'll intake frisbees and shoot them out with dual flywheels climbing will be with a custom hook and the goBILDA actuator kit https://www.gobilda.com/linear-actuator-kit-1120-series-201mm-stroke-8mm-lead/</p> ◦ Philip: Importance: <ul style="list-style-type: none"> 1) Climbing 2) becons 3) frisbees <p>we'll intake frisbees and shoot them out with dual flywheels climbing will be with a custom hook and the goBILDA actuator kit</p> |
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2020-07-06

| Task | Details | Picture(s) |
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| FLL Videos | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: Started script for rubrics and why they are useful video <ul style="list-style-type: none"> ▪ Why: to make progress on fll videos ◦ Eric: Finished practicing your runs script and started with game strategy script <ul style="list-style-type: none"> ▪ Why: Prepare the for shooting ◦ Teja: Decide what the FLL video topic was going to be ◦ Philip: Worked on scripting for "Moving from Ev3 G to ev3dev python" <ul style="list-style-type: none"> ▪ Why: its a high profile script because FLL teams are gonna need them soon ◦ Nikhil: Come up with topics/script for the rubrics FLL video ◦ Arjun: I helped script FLL videos for practice runs, and game strategy <ul style="list-style-type: none"> ▪ Why: So teams can learn about fll strategies ◦ Izaak: Made most of an outline for a ev3dev python video <ul style="list-style-type: none"> ▪ Why: Because we want to help out as many FLL teams as possible • Learning <ul style="list-style-type: none"> ◦ Nithya: we have a lot more work to do with the fll videos ◦ Eric: How to use a auto-pocketing tool ◦ Teja: I learned about ev3g ◦ Philip: I learned that in google docs you can make a task thing ◦ Nikhil: That it's going to be hard next year for FLL team presentations. ◦ Arjun: I learned that we had a video scripting template ◦ Izaak: I learned a lot of things about my team members like how they can make their dog high five them or that they have eaten octopus • Next Steps <ul style="list-style-type: none"> ◦ Nithya: finish script for rubric and why they are important ◦ Eric: finish game strategy video ◦ Teja: Make the video ◦ Philip: continue scripting and then film ◦ Nikhil: Finish the script, work on others ◦ Arjun: Finish game strategy template ◦ Izaak: Finish the video and record it | |

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| Training - CAD | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: Went through an Assembly basics class <ul style="list-style-type: none"> ▪ Why: To use in the future and the 2020 VCC CADathon ◦ Nikhil: Made a test assembly <ul style="list-style-type: none"> ▪ Why: To learn • Learning <ul style="list-style-type: none"> ◦ Chirag: Learned how to use assemblies and import parts. ◦ Nikhil: How to make an assembly/making joints • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Implement these skills in the CADathon. ◦ Nikhil: Do VCC | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2020-07-13

| Task | Details | Picture(s) |
|----------------|---|------------|
| Training - CAD | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Ryan: I learned more about assemblies. <ul style="list-style-type: none"> ▪ Why: So I can insert them into cad. ◦ Ryan: I learned more about assemblies. <ul style="list-style-type: none"> ▪ Why: So I can insert them into cad. ◦ Arjun: I learned about assembly, and the rules for the CAD Challenge. <ul style="list-style-type: none"> ▪ Why: So I could be prepared for VCC. • Learning <ul style="list-style-type: none"> ◦ Ryan: I learned about the many ways to show your cadded item off. ◦ Ryan: I learned about the many ways to show your cadded item off. ◦ Arjun: I learned about the types of chassis. • Next Steps <ul style="list-style-type: none"> ◦ Ryan: I should make sure my account on Fusion 360 is education. ◦ Ryan: I should make sure my account on Fusion 360 is education. ◦ Arjun: Cad our entry | |
| VCC | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Andrew: brainstormed for our strategy and ideas for our robot <ul style="list-style-type: none"> ▪ Why: so we can prepare and get a general idea of how and what we want to cad on our robot ◦ Nikhil: Started on a lift mechanism <ul style="list-style-type: none"> ▪ Why: To make a CAD robot for VCC ◦ Izaak: Worked on strategy for our VCC team #86 <ul style="list-style-type: none"> ▪ Why: Because this week is the CADathon week!! ◦ Chirag: Worked on our strategy and designing for VCC 2020 <ul style="list-style-type: none"> ▪ Why: To improve our cad skills along with practice in strategy • Learning <ul style="list-style-type: none"> ◦ Andrew: i relearned how much fun it is to brainstorm new robot ideas ◦ Nikhil: How to rotate components over an axis ◦ Izaak: That that the hexagons weigh 2 lbs ◦ Chirag: How to import parts into fusion 360 • Next Steps <ul style="list-style-type: none"> ◦ Andrew: working more on the cad challenge and planning out times to work during the week ◦ Nikhil: finish the robot ◦ Izaak: Start CADing!! ◦ Chirag: Build/Assemble rest of the robot | |

**Minutes I
Forgot Lol**

- Accomplished
- Learning
- Next Steps

2020-07-20

| Task | Details | Picture(s) |
|-----------------------------|---|------------|
| Learning Tools | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Ryan: I worked on a Kahoot to learn names of items and other important names with FTC <ul style="list-style-type: none"> Why: This will help our team learn Learning <ul style="list-style-type: none"> Ryan: I learned how hard teachers work to create Kahoots, it takes forever. Next Steps <ul style="list-style-type: none"> Ryan: Continue working after the test goes through. | |
| BAE Grant | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Nithya: Answered the questions for the BAE grant <ul style="list-style-type: none"> Why: To get started with the grant Learning <ul style="list-style-type: none"> Nithya: Coming up with an answer to challenges are team faces was difficult. Next Steps <ul style="list-style-type: none"> Nithya: Finish the BAE grant | |
| FLL Videos | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Nikhil: Did myBlock vid scripting <ul style="list-style-type: none"> Why: To make a FLL video to help FLL teams Arjun: I helped script fll videos <ul style="list-style-type: none"> Why: So we could help other teams Chirag: Worked on markings on the field script. <ul style="list-style-type: none"> Why: For our youtube channel. Learning <ul style="list-style-type: none"> Nikhil: That myBlocks are kinda complex if you dive deep down inside Arjun: I learnt about different types of wheels Chirag: New ways that other team members used markings on the field. Next Steps <ul style="list-style-type: none"> Nikhil: Finish the script, film Arjun: keep scripting Chirag: Record and edit it. | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |

2020-07-27

| Task | Details | Picture(s) |
|------------|---|------------|
| FLL Videos | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Andrew: worked on a script for a video about attachments <ul style="list-style-type: none"> ▪ Why: to help FLL teams learn about attachments and attachment systems ◦ Chirag: Worked on volunteering and Team Builders script. <ul style="list-style-type: none"> ▪ Why: For our youtube channel, to educate new FLL teams. ◦ Arjun: I helped script FLL videos ◦ Preeti: finished scripting legal parts, weighing pros and cons, contacting experts <ul style="list-style-type: none"> ▪ Why: to help fll teams :) ◦ Ryan: Worked on FLL Video GP and CP (Gracious Pro and Coopertition) <ul style="list-style-type: none"> ▪ Why: It will help teams with core values. ◦ Nikhil: I worked on the the choosing wheels and myblock video scripts. <ul style="list-style-type: none"> ▪ Why: To make FLL videos • Learning <ul style="list-style-type: none"> ◦ Andrew: how much the attachment system we used is ingrained in me because i really had to think back to my rookie year where i didnt use that system ◦ Chirag: Learned some different team builders. ◦ Arjun: I learned that we have a specific way to deal with pros and cons ◦ Preeti: i learned that spike prime parts are legal for fll and bricklink exists ◦ Ryan: Lots about the First website and its many links. Also that I cannot write while listening to the muffing song. ◦ Nikhil: That tires actually affect things in FLL robots. • Next Steps <ul style="list-style-type: none"> ◦ Andrew: have someone go over it to see if i missed anything ◦ Chirag: Record/ Edit it. ◦ Arjun: Keep scripting ◦ Preeti: film the videos and post ◦ Nikhil: Film, edit, upload. | |

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| BAE Grant | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: Started the script for the team challenges essay <ul style="list-style-type: none"> ▪ Why: To make progress on the BAE grant ◦ Philip: Writing second essay • Learning <ul style="list-style-type: none"> ◦ Nithya: How we are planning to address the challenges in the essay ◦ Philip: I learned a cool Neil Armstrong quote: "It's in the nature of the human being to face challenges. It's by the nature of his deep inner soul... we're required to do these things just as salmon swim upstream." • Next Steps <ul style="list-style-type: none"> ◦ Nithya: Finish up the body paragraph I was working on and finish up the essays in general ◦ Philip: Finish Writing | |
| Worked On Website | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: Go through the website and see what needed to be updated. <ul style="list-style-type: none"> ▪ Why: Website is outdated. ◦ Izaak: Looked over the website and moved around a few things • Learning <ul style="list-style-type: none"> ◦ Teja: Quantum Quacks has a long and interesting history. ◦ Izaak: How to edit the Website • Next Steps <ul style="list-style-type: none"> ◦ Teja: Implement ◦ Izaak: Take some pictures of the team on zoom and change them out for the ones on the website | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2020-08-03

| Task | Details | Picture(s) |
|--------------|--|------------|
| FLL Videos | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Ryan: I figured out how to use OBS to record videos. <ul style="list-style-type: none"> ▪ Why: This will help me make videos for the 16072 YouTube channel, shameless plug. ◦ Chirag: Finished script for Robot Design Rubric and Project Rubric <ul style="list-style-type: none"> ▪ Why: To help teach FLL students about them. ◦ Preeti: created the scripts for myblocks and first core values <ul style="list-style-type: none"> ▪ Why: to help fll teams ◦ Eric: Finished wheels And building a strong chassis <ul style="list-style-type: none"> ▪ Why: prepare them for filming • Learning <ul style="list-style-type: none"> ◦ Ryan: It is easier than I thought it would be. ◦ Chirag: Relearned the layout of the rubrics as I haven't looked at them in detail in 2 years. ◦ Preeti: i re-learned how to create myblocks ◦ Eric: movie reels are called wedge belt pulleys • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Record, edit, and publish. ◦ Preeti: film the videos ◦ Eric: shoot them | |
| Mattel Email | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: Drafted the mattel email <ul style="list-style-type: none"> ▪ Why: to ask them to donate ducks ◦ Rishi: We finished writing the email to Mattel. <ul style="list-style-type: none"> ▪ Why: We wanted a donation of the Duck and roll hot wheels so we requested for a donation. • Learning <ul style="list-style-type: none"> ◦ Nithya: how much community work mattel does ◦ Rishi: That this company supports the community with foundations such as their Disaster Relief foundation and Brave Barbie program. • Next Steps <ul style="list-style-type: none"> ◦ Nithya: send email ◦ Rishi: Send the email out and hopefully receive a donation. | |

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| Worked On Website | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Arjun: I helped update the website by fixing grammar issues, and changing the color scheme to match our team better.<ul style="list-style-type: none">▪ Why: To prepare our website for the upcoming season.• Learning<ul style="list-style-type: none">◦ Arjun: I learned that we have a Facebook.• Next Steps<ul style="list-style-type: none">◦ Arjun: Update photos and fix html plugin | |
|--------------------------|---|--|

2020-08-04

| Task | Details | Picture(s) |
|------------|---|------------|
| FLL Videos | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Izaak: Finished scripting for a wheel video and a chassis video• Learning<ul style="list-style-type: none">◦ Izaak: That the green wheels that we used in FLL were called znap wheels• Next Steps<ul style="list-style-type: none">◦ Izaak: Film the videos | |

2020-08-10

| Task | Details | Picture(s) |
|-------------------------------|--|------------|
| Nutanix Planning | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Ryan: I and the Wednesday group worked on a slide to show to Nutanix<ul style="list-style-type: none">▪ Why: to teach code• Learning• Next Steps | |
| Alliance Marker Holder | <ul style="list-style-type: none">• Accomplished• Learning• Next Steps | |

2020-08-17

| Task | Details | Picture(s) |
|-----------------|--|------------|
| Preseason Goals | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Ryan: Worked on coming up with goals for a grant<ul style="list-style-type: none">▪ Why: This fills out one of the questions on it• Learning• Next Steps | |

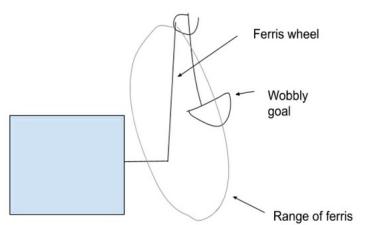
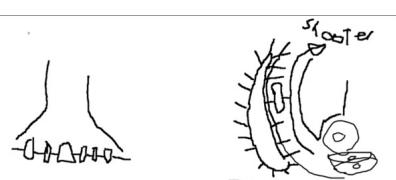
2020-08-24

| Task | Details | Picture(s) |
|-----------------------------|---|------------|
| LearningDotGraphs | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: Learned How to use Dot ◦ Arjun: I learned about dot graphs <ul style="list-style-type: none"> ▪ Why: So we can make awesome diagrams on our eng notebook entries ◦ Chirag: Tutorial of dotgraphs. <ul style="list-style-type: none"> ▪ Why: So I could illustrate my point clearly. Learning <ul style="list-style-type: none"> ◦ Philip: T O N S about dot ◦ Arjun: I learned about the different commands. ◦ Chirag: Basic commands for it. • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Memorize commands ◦ Chirag: Expand my knowledge and actually use it. • Diagrams: | |
| | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps • Diagrams: | |
| Engineering Notebook | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: discuss using the engineering notebook vs google docs vs Lyx <ul style="list-style-type: none"> ▪ Why: To decide which platform was best for the engineering notebook. • Learning • Next Steps <ul style="list-style-type: none"> ◦ Teja: Decide which platform | |

Training - Programming

- Accomplished
 - Nikhil: Learned the basics of Git.
 - Why: Because Git is an important tool for a lot of version control and collaboration.
 - Nithya: Jordan Liggit gave a presentation on Git
 - Why: to learn how to do commits and how Git works
 - Eric: attended the git presentation
 - Andrew: learned more about github and git from mr liggit
 - Why: to get a better understanding of github and git
 - Philip: Talked with mr. Liggit from Google about git and GitHub
 - Why: so that we understand how it works and can use it to industry standard
 - Preeti: I learned the basics of git and how to use it(Jordan Liggit from google taught us)
 - Why: to be able to use version control on my programs more efficiently
- Learning
 - Nikhil: The basics terms of Git (Repo, etc.), Basic concepts of Git (Branches, etc.) and other stuff.
 - Nithya: how important it is to commit regularly to not run into issues
 - Eric: what the git work flow should be
 - Andrew: i feel like i understand more about github and how it works as well as how to use github more effectively
 - Preeti: I learned what tags are and how they can be useful and how to make them
- Next Steps
 - Nikhil: Use it.
 - Nithya: none
 - Andrew: implementing what ive learned
 - Philip: Apply learning
- Notes:
 - Preeti: The diagram is how branches work with commits
- Diagrams:

2020-09-14

| Task | Details | Picture(s) |
|---------------|--|--|
| Brainstorming | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Ryan: I worked on brainstorming ideas for the wobbly goal endgame score. <ul style="list-style-type: none"> Why: it is 20 points per goal Eric: came up with intake mechs <ul style="list-style-type: none"> Why: prepare for prototyping Chirag: Worked on brainstorming ideas for our shooter outtake mechanism. Decided wheeled shooter is probably the best idea. <ul style="list-style-type: none"> Why: To implement on the robot in the future. Izaak: brainstormed ways to get the wobbly goal over the wall <ul style="list-style-type: none"> Why: so that we would have some ideas to prototype and use Nikhil: Brainstormed for shooter methods. <ul style="list-style-type: none"> Why: So that we have ideas of what to do. Preeti: outlined a possible game strategy, brainstormed ideas for possible wobbly goal grabbing and lifting mechanisms. <ul style="list-style-type: none"> Why: to start planning our robot design and strategy for competing, and having a lot of ideas to fuel future mechanism ideas Andrew: brainstormed ideas about an intake for this season <ul style="list-style-type: none"> Why: to get ideas for what we want to do for an intake Philip: Worked on brainstorming the ultimate goal game -- specifically the Wobbly goal mechanism <ul style="list-style-type: none"> Why: We want ideas to be able to start prototyping Learning <ul style="list-style-type: none"> Eric: long robotics has a new slide kit Chirag: Learned about different types of shooter like the arc shooter which has a guide in the shape of an arc, so the thing being shot shoots in an arc. Izaak: that if you add a duck to the idea it instantly gets a lot better Nikhil: That there are multiple types of shooters. Preeti: you cannot hold two wobbly goals at the same time, and you cannot launch them over the wall Philip: I learned that Ryan is very good at coming up with interesting ideas Next Steps <ul style="list-style-type: none"> Eric: prototype intake concepts Chirag: How well does the wheeled shooter work with the intake we decide with? How can it shoot from multiple points of the field easily? How can we go from intake to outtake? It also has to actually be |   |

| | | |
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| | <p>CAD'd, planned out some more, and implemented on the robot.</p> <ul style="list-style-type: none"> ◦ Izaak: start planning and prototyping some of the ideas ◦ Nikhil: Refine the brainstorming to a design then build it. ◦ Preeti: go more in-depth on some mechanism designs and prototype ◦ Andrew: pick ideas to prototype ◦ Philip: Prototype <ul style="list-style-type: none"> • Notes: <ul style="list-style-type: none"> ◦ Preeti: the picture is a diagram of one of our ideas (ferris wheel) | |
| Strategy | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: I helped draft a potential game strategy. <ul style="list-style-type: none"> ▪ Why: I did that so building the robot would be more clear. ◦ Nithya: come up with how we will go about this year's game and what we want to accomplish in auto teleop and end game <ul style="list-style-type: none"> ▪ Why: to get started on the season ◦ Teja: Discusses strategy and ideas for the high goal shooter. <ul style="list-style-type: none"> ▪ Why: To prepare our team to build the chassis ◦ Rishi: I worked on game strategy. <ul style="list-style-type: none"> ▪ Why: To ensure that we have a plan of approach for the robot game. • Learning <ul style="list-style-type: none"> ◦ Arjun: I learnt that the rings were made out of foam. ◦ Nithya: the point values for the different actions ◦ Teja: I learned that the programming can make the mission more accurate if the attachment is not ◦ Rishi: The rules of the game and penalties. • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Finalize mechanisms ◦ Teja: Implement ◦ Rishi: Continue working on the strategy. | |

2020-09-15

| Task | Details | Picture(s) |
|-----------------------------|--|------------|
| Engineering Notebook | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Philip: Got nithya up to speed on how lyx was setup and cloned repo◦ Nithya: Worked on setting up the lyx engineering notebook<ul style="list-style-type: none">▪ Why: to start the engineering notebook• Learning<ul style="list-style-type: none">◦ Nithya: how to set it up the sections• Next Steps | |

2020-09-16

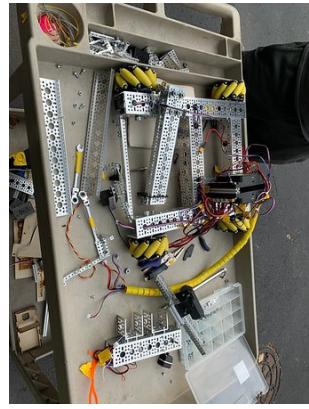
| Task | Details | Picture(s) |
|----------------------|--|------------|
| Engineering Notebook | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Nithya: Did the second section of the engineering notebook on lyx<ul style="list-style-type: none">▪ Why: to get the engineering notebook layout• Learning<ul style="list-style-type: none">◦ Nithya: how to do input files into Lyx• Next Steps | |

2020-09-17

| Task | Details | Picture(s) |
|----------------------|---|------------|
| Engineering Notebook | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Nithya: Did the last section on Lyx<ul style="list-style-type: none">▪ Why: to layout the engineering notebook• Learning<ul style="list-style-type: none">◦ Nithya: how to use github desktop• Next Steps | |

2020-09-19

| Task | Details | Picture(s) |
|-----------------------------------|---|------------|
| Engineering Notebook | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Philip: Worked on setting up the engineering notebook Learning Next Steps | |
| Come Up With Team Builders | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |
| Auto Planning | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: Discussed strategy for autonomous <ul style="list-style-type: none"> Why: The team could have a better understanding of what we need to program Rishi: We planned out the autonomous. Nithya: came up with 2 auto plans <ul style="list-style-type: none"> Why: To ensure that we have a plan in which we can maximize efficiency during autonomous. Learning <ul style="list-style-type: none"> Teja: Wobble goals can earn points in two ways - delivering and stacking rings Rishi: Due to the current situation of the pandemic, we will not have an alliance or live competition. Instead we will be judged on the points we attain vs other teams. Nithya: the power shots are scored only after auto is over Next Steps <ul style="list-style-type: none"> Teja: Finish strategy and code Rishi: Plan out the path the robot will take to score points. | |

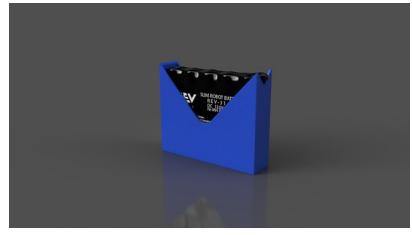
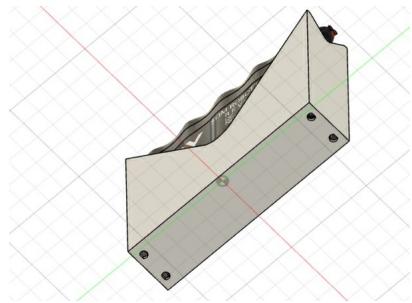
| | | |
|--------------------------|--|---|
| Robot Disassembly | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: Disassembled robot <ul style="list-style-type: none"> ▪ Why: So parts are available ◦ Andrew: Disassembled last years robot <ul style="list-style-type: none"> ▪ Why: To use the parts • Learning <ul style="list-style-type: none"> ◦ Philip: Our lift took a lot of abuse last year ◦ Andrew: The rings are much more dense than I previously thought • Next Steps <ul style="list-style-type: none"> ◦ Philip: Finish ◦ Andrew: Finish disassembling the chassis |   |
| Shooter | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: Brainstormed and prototyped the shooter. <ul style="list-style-type: none"> ▪ Why: To see how we could make the shooter on the actual robot. ◦ Izaak: Started prototyping a shooter <ul style="list-style-type: none"> ▪ Why: So that we could try out some ideas for the shooter • Learning <ul style="list-style-type: none"> ◦ Chirag: What rhino and gecko wheels are. ◦ Izaak: That the brackets for gobuilda are the same thing as the channel • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Finish the prototype ◦ Izaak: Finish the prototype and test it out | |

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| What People Worked On | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps |  |
| Intake | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Eric: worked on prototyping a intake using gecko wheels <ul style="list-style-type: none"> ▪ Why: gecko wheels seem to work well as intake wheels • Learning <ul style="list-style-type: none"> ◦ Eric: gecko wheels are a tiny bit squishier than 35a compliant wheels • Next Steps <ul style="list-style-type: none"> ◦ Eric: get the wheels in the d shaft | |
| Wobbly Goal Mechanism | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Preeti: Made a prototype for a claw that holds the wobbly goal <ul style="list-style-type: none"> ▪ Why: So we can grab the wobbly goals • Learning <ul style="list-style-type: none"> ◦ Preeti: I learned the wobbly goals are a lot smaller and lighter than I imagined • Next Steps <ul style="list-style-type: none"> ◦ Preeti: Program the servo and add a stopper at the end so the wobbly goal doesn slip out | |

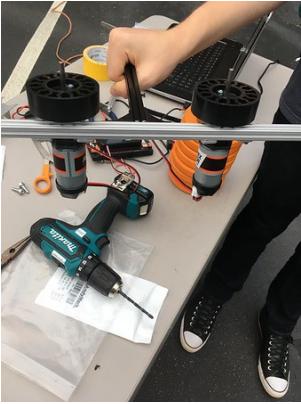
2020-09-21

| Task | Details | Picture(s) |
|----------------------|---|------------|
| Intake | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Ryan: Worked on intake designs Learning Next Steps | |
| Shooter | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Ryan: Came up for designs for a shooter and brainstormed an image of a shooter. Chirag: Looked at different shooters and different iterations of specific shooters. <ul style="list-style-type: none"> Why: To see how we could make our shooter. Nikhil: I brainstormed ideas for the shooter mechanism. <ul style="list-style-type: none"> Why: So that we could start building it Izaak: Researched different shooter ideas <ul style="list-style-type: none"> Why: So that we would have some more ideas to prototype and work with Learning <ul style="list-style-type: none"> Chirag: That some team's wheeled shooter only had wheels on one side to introduce spin to try and make it more stable and accurate. Nikhil: I learned that there are multiple shooter types. Izaak: That if you continue driving after the ending buzzer goes off you get a minor penalty Next Steps <ul style="list-style-type: none"> Chirag: Test prototypes out and decide on one. Nikhil: Get some specifics of the design, and start creating a prototype. Izaak: Cad some shooter ideas | |
| Auto Planning | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |

| | | |
|-------------------------------|---|--|
| Programming | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: Programmed QQ_Test, QQ_TestDistance and QQ_TestAnalogSensor <ul style="list-style-type: none"> ▪ Why: To get ready for the season ◦ Nithya: Added the QQ_Test, motor and servo <ul style="list-style-type: none"> ▪ Why: to start the programming that will be needed in the other codes ◦ Philip: helped teja and nithya through making some QQ_Tests <ul style="list-style-type: none"> ▪ Why: so that the tests get done, and so they learn more about programming • Learning <ul style="list-style-type: none"> ◦ Teja: I learned about variables and the meaning of abstract. ◦ Nithya: what an abstract was ◦ Philip: I need to figure out a better way to help teach people programming • Next Steps <ul style="list-style-type: none"> ◦ Teja: Finish the pure programming tasks on ClickUp. ◦ Philip: build a mechanism interface | |
| Alliance Marker Holder | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: I worked on the alliance marker holder <ul style="list-style-type: none"> ▪ Why: So we can compete legally and sucessfully ◦ Andrew: Worked on cading alliance marker holders <ul style="list-style-type: none"> ▪ Why: So that we would have alliance markers to put on our robot • Learning <ul style="list-style-type: none"> ◦ Arjun: I learnt about the fillet option. ◦ Andrew: That cad is harder to work together on one thing unless itâ€™s separate pieces of the robot so it should be a more one person job • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Make sure there are no imperfections ◦ Andrew: Finishing mounting holes and cleaning up the model | |

| | | |
|-----------------------------|---|---|
| Battery Holder | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Eric: finished the battery holder <ul style="list-style-type: none"> ▪ Why: so we have a simple version available for most robots ◦ Preeti: used CAD to create a holder on the robot for the battery <ul style="list-style-type: none"> ▪ Why: so the battery is secure on the robot • Learning <ul style="list-style-type: none"> ◦ Eric: having more than 1 person working on a cad file at the same time is not efficient ◦ Preeti: working together on fusion360 is very weird, you don't see other peoples edits until you save it and it will get rid of changes if 2 people are working at the same time • Next Steps <ul style="list-style-type: none"> ◦ Eric: print |   |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2020-09-26

| Task | Details | Picture(s) |
|---------|---|--|
| Intake | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: I worked on developing the intake and dismantling the robot. ▪ Why: I dismantled the robot so we could have more parts to work with and I worked on the intake so we could properly bring in rings. ◦ Eric: Finished the intake prototype <ul style="list-style-type: none"> ▪ Why: To answer 4 questions ◦ Eric: Finished the intake prototype <ul style="list-style-type: none"> ▪ Why: To answer 4 questions • Learning <ul style="list-style-type: none"> ◦ Arjun: I learnt what gecko wheels are ◦ Eric: Put the intake axle 6cm from the ramp 5cm up gecko wheels work great for intake the intake works with just one wheel ◦ Eric: Put the intake axle 6cm from the ramp 5cm up gecko wheels work great for intake the intake works with just one wheel • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Finish dismantle ◦ Eric: Start cading some intake designs ◦ Eric: Start cading some intake designs • Notes: <ul style="list-style-type: none"> ◦ Eric: The lip of the ramp needs to be less than 2.5mm ◦ Eric: The lip of the ramp needs to be less than 2.5mm | |
| Shooter | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: Worked on the two motor shooter prototype <ul style="list-style-type: none"> ▪ Why: To answer whether one or two motors is a better plan • Learning <ul style="list-style-type: none"> ◦ Philip: How to assemble ultraplanataries • Next Steps <ul style="list-style-type: none"> ◦ Philip: Build despensor mechanism and one wheel bearing |  |

| | | |
|------------------------------|---|--|
| Wobbly Goal Mechanism | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Izaak: Put some rubber bands on the part that grabs the wobbly goal and built an arm for it <ul style="list-style-type: none"> ▪ Why: We put the rubber bands so that it would have more grip and built the arm so that we could actually pick the wobbly goal up • Learning <ul style="list-style-type: none"> ◦ Izaak: That the barrier is 12 inches tall which is about the same height as a wobbly goal • Next Steps <ul style="list-style-type: none"> ◦ Izaak: Test the motor to see if it's too fast and how much we need to turn it | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2020-09-27

| Task | Details | Picture(s) |
|------------------------------|--|--|
| Wobbly Goal Mechanism | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Preeti: Attached the servo and motor to the claw, added rubber bands to make the claw more secure around the wobbly goal<ul style="list-style-type: none">▪ Why: To make the claw more robust and to be able to lift the wobbly goal• Learning<ul style="list-style-type: none">◦ Preeti: There is a part called rev C channel which is like rev extrusion combined with a U channel• Next Steps<ul style="list-style-type: none">◦ Preeti: Mount the wobbly goal and test the motor speed |  |

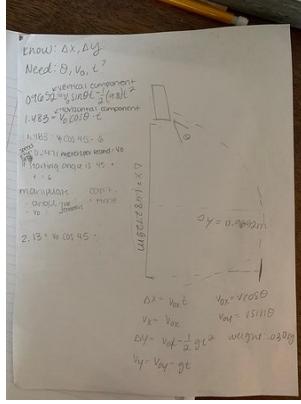
2020-09-28

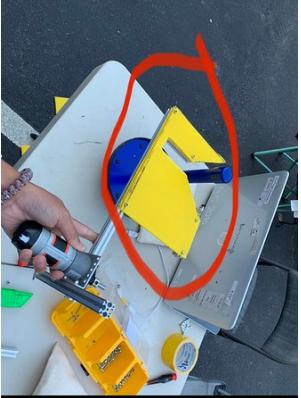
| Task | Details | Picture(s) |
|------------------------|--|--|
| Goals | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Arjun: I helped brainstorm goals <ul style="list-style-type: none"> Why: I did that so we could define a successful season. Philip: helped come up with goals for our team <ul style="list-style-type: none"> Why: we need goals to know what to shoot for Rishi: Help define and brainstorm goals Learning <ul style="list-style-type: none"> Arjun: I learnt that I can assign myself to a breakout room. Philip: I learned that jam board is a cool tool for doing things like this Rishi: That a lot has changed because of the pandemic, which has caused us to create an altered set of goals from last year. Next Steps <ul style="list-style-type: none"> Arjun: Code and describe mecanum chassis Philip: Go after them Rishi: Get them done Notes: <ul style="list-style-type: none"> Philip: Final Goals Philip: Starting Goals | <p>The first Jamboard screenshot shows a grid of yellow sticky notes under three columns: 'Successful', 'Great', and 'Amazing'. The 'Successful' column includes notes like 'Robot scores 100% in auto', 'Everyone votes', and 'WE HAVE FUN'. The 'Great' column includes notes like 'Robot scores 90% in auto', 'Robot scores 80% in auto', and 'Robot scores 70% in auto'. The 'Amazing' column includes notes like 'Robot scores 100% in auto', 'Robot scores 90% in auto', and 'Robot scores 80% in auto'. The second Jamboard screenshot shows a similar grid with additional notes such as 'Use the cric', 'concentrate shooter', 'Robot scores 100% in auto', 'Robot scores 90% in auto', and 'Robot scores 80% in auto'.</p> |
| Alliance Marker Holder | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |
| Goals | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Preeti: created goals for this season <ul style="list-style-type: none"> Why: to have a definition of what we want to accomplish Learning <ul style="list-style-type: none"> Preeti: We can assign ourselves to breakout rooms Next Steps | |

2020-09-29

| Task | Details | Picture(s) |
|-------|--|------------|
| Goals | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Eric: Chose goals for this season◦ Eric: Chose goals for this season• Learning<ul style="list-style-type: none">◦ Eric: What we want to achieve for this season◦ Eric: What we want to achieve for this season• Next Steps | |

2020-10-03

| Task | Details | Picture(s) |
|------------------------|--|---|
| Alliance Marker Holder | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |
| Shooter | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: coming up with angles and velocity for the shooter <ul style="list-style-type: none"> Why: It makes it easier to program the shooter if the math is done. Preeti: Created a mechanism that lets one of the gecko wheels spin freely and the other uses a motor, then tested it <ul style="list-style-type: none"> Why: To compare the accuracy when using one free spinning wheel and 2 motorized wheels Philip: made a dead wheel sub and brace for the shooter prototype <ul style="list-style-type: none"> Why: To help answer the question of double live wheel or one live and one dead wheel for the shooter Ryan: I worked on building a shooter prototype. <ul style="list-style-type: none"> Why: This will answer the question, is it good to have two wheels on motors. Nithya: came up with the math for the shooter the velocity and angle of where it should start <ul style="list-style-type: none"> Why: to get started on the plans for the shooter Eric: Finished the prototype for the 1 and 2 wheeled shooter <ul style="list-style-type: none"> Why: So we can determine which is better Eric: Finished the prototype for the 1 and 2 wheeled shooter <ul style="list-style-type: none"> Why: So we can determine which is better Learning <ul style="list-style-type: none"> Teja: I learned about different physics equations and initial velocity. Preeti: I learned that standoffs have to be used to even out the area in between two pieces of channel and that we have every size of standoff but 15mm Philip: that you have to be careful sticking screws through u channel so you don't over tighten screws and warp the channel Ryan: More about extrusions. Nithya: how to do projectile motion Eric: What to expect from a shooter in terms of accuracy Eric: What to expect from a shooter in terms of accuracy Next Steps <ul style="list-style-type: none"> Teja: Continue creating solutions for velocity and angles. |    |

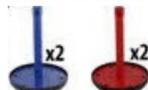
| | | |
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| | <ul style="list-style-type: none"> ◦ Preeti: Test the accuracy with two motorized gecko wheels ◦ Philip: Test the two live wheels on the setup and watch the distribution pattern ◦ Nithya: continue making more scenarios ◦ Eric: Test 2 wheels ◦ Eric: Test 2 wheels • Notes: <ul style="list-style-type: none"> ◦ Teja: Nithya will upload the diagram of our work | |
| Robot Disassembly | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: Took apart robot and sorted pieces. <ul style="list-style-type: none"> ▪ Why: to use the pieces this season. • Learning <ul style="list-style-type: none"> ◦ Chirag: That some pieces still had the grease residue from last year. • Next Steps <ul style="list-style-type: none"> ◦ Chirag: sort the last few pieces. | |
| Wobbly Goal Mechanism | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Andrew: Created a passive wobbly goal picker upper <ul style="list-style-type: none"> ▪ Why: To save the use of a servo and also make it less complicated ◦ Arjun: I helped test out how we can use servos to lift wobbly goal <ul style="list-style-type: none"> ▪ Why: So we can score more points at the competition • Learning <ul style="list-style-type: none"> ◦ Andrew: To remember to check other groups if they have boxes with parts you need ◦ Arjun: I learnt about rev brick interface and how to use it • Next Steps <ul style="list-style-type: none"> ◦ Andrew: Testing it ◦ Arjun: Finish mechanism |   |

Engineering Notebook

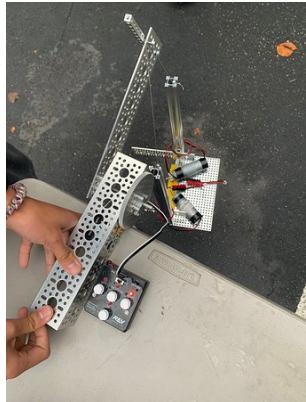
- Accomplished
 - Rishi: Worked on the ballistic math for our shooter attachment.
 - Why: To know what parts we need to use, what angle we need to shoot from and to improve accuracy.
- Learning
 - Rishi: That my physics class came in handy. I had to use equations from concepts I was learning in school and apply them in real life.
- Next Steps
 - Rishi: Finish the calculations.

2020-10-05

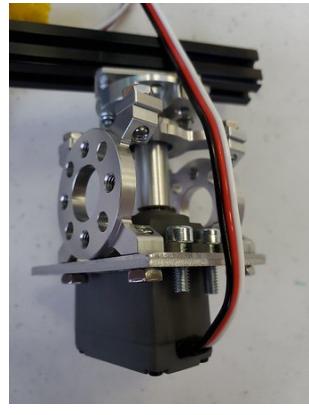
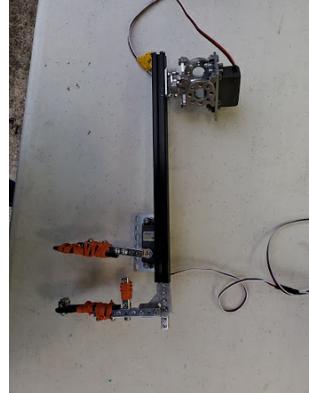
| Task | Details | Picture(s) |
|------------------------|--|------------|
| Prototyping | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: Worked on making questions to answer through our prototypes in the future. <ul style="list-style-type: none"> ▪ Why: To see how our mechanisms could be more efficient, which we would find out through testing with prototypes. ◦ Andrew: Brainstormed and wrote down questions we had about different parts of the robot <ul style="list-style-type: none"> ▪ Why: So that we know what we want to find out on Saturday ◦ Ryan: I prototyped an intake device in cad ◦ Izaak: Came up with prototype questions we needed to answer <ul style="list-style-type: none"> ▪ Why: So that when we are prototyping we will know what we are trying to get done • Learning <ul style="list-style-type: none"> ◦ Chirag: A conveyor system that takes the disks in a u-shaped path from intake to outtake so that they are both on the same side. ◦ Andrew: That robot space might be an issue this year with our intake and transfer to our shooter ◦ Izaak: That there won't be any scouting this year :(• Next Steps <ul style="list-style-type: none"> ◦ Chirag: Test and answer our questions with prototypes for each mechanisms. Have group discussions for the topics that need some. ◦ Andrew: Testing out questions we had ◦ Ryan: Continue cad-ing ◦ Izaak: Start prototyping! | |
| Intake | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Eric: I did a lot of the brainstorming for how everything will fit together <ul style="list-style-type: none"> ▪ Why: so it can be caded • Learning <ul style="list-style-type: none"> ◦ Eric: how everything will fit together on the intake • Next Steps <ul style="list-style-type: none"> ◦ Eric: cad the intake | |
| Alliance Marker Holder | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

| | | |
|-----------------------------|---|---|
| Convert To Lyx | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: Convert documents from Google Docs into Lyx <ul style="list-style-type: none"> Why: The engineering notebook is easier to read in Lyx Arjun: I converted Auto planning into lyx <ul style="list-style-type: none"> Why: So we have a better engineering notebook Learning <ul style="list-style-type: none"> Teja: I learned how to push a Lyx file to git. Arjun: I learnt how to import graphics into lyx Next Steps <ul style="list-style-type: none"> Teja: Finish converting all the documents into Lyx Arjun: Learn how to push to github | |
| Engineering Notebook | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Rishi: Converted shooter math to google doc. <ul style="list-style-type: none"> Why: In order to turn it into lynx document. Philip: Converted Google Docs to Lyx <ul style="list-style-type: none"> Why: So that we have Lyx files for notebook Nithya: converted the shooter math to lyx <ul style="list-style-type: none"> Why: to get stuff in the lyx Learning <ul style="list-style-type: none"> Rishi: How to create special symbols on google doc. Philip: I need to make a Clone new document change type save as add commit push video tutorial for people to be able to follow Nithya: how to use special characters in google docs Next Steps <ul style="list-style-type: none"> Rishi: Convert document to lynx. Philip: Finish converting and make the video | <p>0.0.1 Original Mechanism Ideas 0.0.1.1 Wobbly Goal Concepts</p>  <ul style="list-style-type: none"> • Claw + Lift Would grab the wobbly goal near the bottom? • One-way gate + Lift • Use a plunger to lift the wobble goal from the bottom. (or top) • Ramp • Claw + arm |
| Programming | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Preeti: started programming the mecanum drive <ul style="list-style-type: none"> Why: when we have a working robot we can start testing right away Learning <ul style="list-style-type: none"> Preeti: I learned how to set the speeds of the mecaum wheels so that they work together Next Steps <ul style="list-style-type: none"> Preeti: finish the mecanum code and add the encoder matrix code | <pre>import java.util.Arrays; import java.util.List; class MecanumDrive implements IQ_Mechanism { //motor variables private DCMotor frontLeft; private DCMotor frontRight; private DCMotor backLeft; private DCMotor backRight; private final static double GEAR_RATIO = 5.5; private final static double WHEEL_RADIUS = 5.0; //5 cm private final static double TICKS_PER_ROTATION = 400.0; //ticks per revolution ticks per rotation private final static double PI_TICKS = (2 * Math.PI * GEAR_RATIO * WHEEL_RADIUS) / TICKS_PER_ROTATION; //created so we can easily change code to lower the speed in the setSpeeds method private double _speed = 1.0; private int frontLeftOffset; private int frontRightOffset; private int backLeftOffset; private int backRightOffset; //creating a constructor for the mecanum drive, sets up the encoder matrix MecanumDrive() { //TODO put encoder matrix code back into here } }</pre> |

2020-10-10

| Task | Details | Picture(s) |
|------------------------|---|--|
| Alliance Marker Holder | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Andrew: Treated the strength of a geared servo to see if it can lift the weight of both motors for a shooting mechanism Learning <ul style="list-style-type: none"> Andrew: That the scooter is more powerful than I originally thought Next Steps <ul style="list-style-type: none"> Andrew: Implementing the geared servo into the design of our shooter |  |
| Auto Planning | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |
| Intake | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Chirag: Worked on intake prototype <ul style="list-style-type: none"> Why: To see how it could work on the robot. Eric: Coded and built a prototype <ul style="list-style-type: none"> Why: to test ideal placement for the rollers Learning <ul style="list-style-type: none"> Chirag: That there is no adaptor from d shaft to andymark compliant wheels. Eric: Fusion 360 has a component color cycling feature that assigns a color to a component and to any features that relate to the component Next Steps <ul style="list-style-type: none"> Eric: use wood panels and finish assembling the rollers | |
| | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: Looked at last year's Mecanum code and programmed this year's. <ul style="list-style-type: none"> Why: To have a mecanum drive programmed for this year. Learning <ul style="list-style-type: none"> Teja: I learned about Matrix math and matrix code. Next Steps Notes: <ul style="list-style-type: none"> Teja: <pre>private static final double CM_PER_TICK = (2 * Math.PI * GEAR_RATIO * WHEEL_RADIUS) / TICKS_PER_ROTATION;</pre> 1 wheel circumference = $2 \pi \times \text{wheel radius}$ Tick = each wheel rotation X motor ticks 1 motor rotations | |

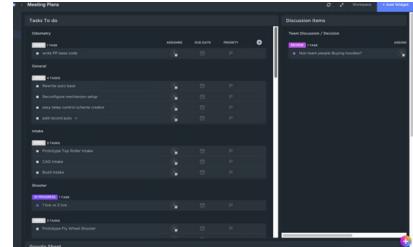
| | | |
|------------------------|---|--|
| Mecanum Drive | <p>5 wheel rotations 383.6 ticks 1 motor rotation</p> <pre>private MatrixF conversion; private GeneralMatrixF encoderMatrix = new GeneralMatrixF(3, 1); frontLeft = forward + strafe + rotate frontRight = forward - strafe - rotate backLeft = forward - strafe + rotate backRight = forward + strafe - rotate **backRight doesn't get accounted for because to find 3 unknown variables you only need 3 equations</pre> <p>float[] data = {1.0f, 1.0f, 1.0f, times (forward 1.0f, -1.0f, -1.0f, Strafe 1.0f, -1.0f, 1.0f}; rotate)</p> <p>First line is frontLeft second is frontRight and third is backRight</p> <pre>frontLeft = 1*forward + 1*strafe + 1*rotate frontRight= 1*forward + -1*strafe + -1*rotate backRight= 1*forward + -1*strafe + 1*rotate</pre> <p>How you multiply: (a b c) * (d e f)</p> | |
| Up/Down Shooter | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Izaak: Built and tested a prototype to see if we could lift the shooter mechanism with a servo <ul style="list-style-type: none"> Why: So that we could aim up and down when shooting and so that we can lift the mechanism with a servo Learning <ul style="list-style-type: none"> Izaak: Standoffs are super useful. We tried to mount the servo without them but it ended up uneven Next Steps |  |

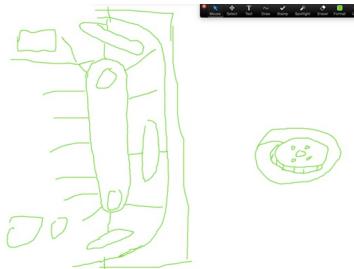
| | | |
|------------------------------|--|--|
| Wobbly Goal Mechanism | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: Added a servo block to a servo to see if it could pick up the wobbly goal. <ul style="list-style-type: none"> ▪ Why: So we could score more points • Learning <ul style="list-style-type: none"> ◦ Arjun: I learnt that a servo block increases the power of a servo • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Code mechanism |  |
| Shooter | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: Tested two more shooter configs: Dual live, and inline live <ul style="list-style-type: none"> ▪ Why: we had the 3 configs we wanted to test and so now we have tried them all ◦ Ryan: Worked on the shooter with Philip. • Learning <ul style="list-style-type: none"> ◦ Philip: dual inline live seems to be the most accurate. ◦ Ryan: This helps us figure out shooter prototypes and what works and what doesn't. • Next Steps <ul style="list-style-type: none"> ◦ Philip: CAD a shooter and test inline live with dead wheels not a wall | |
| Wobbly Goals | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nikhil: Arjun and I created an apparatus to test whether a servo could lift a wobbly goal along with another servo. It can only function when the servo is attached to a servo block. <ul style="list-style-type: none"> ▪ Why: To create a proto-prototype. ◦ Nikhil: Arjun and I created an apparatus to test whether a servo could lift a wobbly goal along with another servo. It can only function when the servo is attached to a servo block. <ul style="list-style-type: none"> ▪ Why: To create a proto-prototype. • Learning <ul style="list-style-type: none"> ◦ Nikhil: That a servo can in fact lift a wobbly goal. ◦ Nikhil: That a servo can in fact lift a wobbly goal. • Next Steps <ul style="list-style-type: none"> ◦ Nikhil: Create a better prototype/start designing. ◦ Nikhil: Create a better prototype/start designing. |   |

2020-10-11

| Task | Details | Picture(s) |
|---------------|--|------------|
| Mecanum Drive | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Nithya: add more code to the mecanum drive and read through it to get an understanding of the code<ul style="list-style-type: none">▪ Why: to get more code for the mecanum drive• Learning<ul style="list-style-type: none">◦ Nithya: about matrix math• Next Steps• Notes:<ul style="list-style-type: none">◦ Nithya: https://docs.google.com/document/d/16Vge5OoZz520M9CxW6y4AaOksUWgCy4usp=sharing | |

2020-10-12

| Task | Details | Picture(s) |
|----------------------|---|--|
| Clickup Work | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: Created a meeting plans dashboard and updated the programming tasks to reflect reality <ul style="list-style-type: none"> ▪ Why: We are considering switching how we do our beginning meeting debrief from a clickup doc to a dashboard that shows tasks so everything we are working on is a task • Learning <ul style="list-style-type: none"> ◦ Philip: How a clickup dashboard works • Next Steps <ul style="list-style-type: none"> ◦ Philip: Try it for a meeting |  |
| Mecanum Drive | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: fixed the mecanum code and tested it in the virtual simulation <ul style="list-style-type: none"> ▪ Why: to finish the mecanum drive • Learning <ul style="list-style-type: none"> ◦ Nithya: when testing the code the y value was switched and we had to go back into the navigation code to fix it (because in one line of code there was a -) • Next Steps | |

| | | |
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| | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Ryan: I worked on cadding a design for a transfer mechanism. <ul style="list-style-type: none"> ▪ Why: This will allow it to be easier for us to build in an in-person meeting. ◦ Chirag: Prototyping transfer mechanisms. <ul style="list-style-type: none"> ▪ Why: To see how they could be implemented in our robot. ◦ Andrew: worked on cadding transfer and thinking through what we need for it <ul style="list-style-type: none"> ▪ Why: so we don't have to think about it in person and we can just start working on it and potentially print out parts • Learning <ul style="list-style-type: none"> ◦ Ryan: I learned more about joints (in cad) and some business tips from coach alan. (People saying they will purchase doesn't always mean they will purchase.) ◦ Chirag: What a elevator transfer is (it works like a forklift). ◦ Andrew: that having extra rooms open is really helpful for splitting up when you are working on different parts of the same thing • Next Steps <ul style="list-style-type: none"> ◦ Ryan: Continue working on cadding. ◦ Chirag: Finish cad'ing our options and then try them in real life. ◦ Andrew: finishing cad of different components of a transfer |  |
| Up/Down Shooter | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: Coded the shooter to move up, down, left, and right and created multiple servos. • Learning <ul style="list-style-type: none"> ◦ Teja: I learned how to create 2 servos at the same time. • Next Steps <ul style="list-style-type: none"> ◦ Teja: Finish coding intake and shooter | |
| Wobbly Goals | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: I helped code the wobbly goal methods <ul style="list-style-type: none"> ▪ Why: So we can test out our mechanisms • Learning <ul style="list-style-type: none"> ◦ Arjun: I learnt how to clone from github • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Fine tune values | |

| | | |
|------------------------------|--|---|
| Wobbly Goal Mechanism | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Preeti: Programmed the code to lift the wobbly goal using 1 servo and grab/release it with another <ul style="list-style-type: none"> Why: So we can test the code on saturday and make any changes to the mechanism and code Learning <ul style="list-style-type: none"> Preeti: using final when declaring the variable locks the value so it cant be changed later, and it will throw a compiler error if you do try to Next Steps <ul style="list-style-type: none"> Preeti: test our code and finetune the servo values, we made an estimate but its not accurate | <pre> private Servo _rotator; private Servo _grabber; private final double ROTATOR_UP = 0.5; private final double ROTATOR_DOWN = -0.5; private final double GRABBER_OPEN = 0.1; private final double GRABBER_CLOSED = 0.2; @Override public void init(Helper helper) { rotator = helper.getServo("left", "description: \"rotator\""); grabber = helper.getGyro("tiny", "description: \"grabber\""); } @Override public List<QQ_Test> getTests() { return Arrays.asList(new QQ_TestServer("description: \"rotator\", ROTATOR_UP, ROTATOR_DOWN, rotator), new QQ_TestServer("description: \"grabber\", GRABBER_CLOSED, GRABBER_OPEN, grabber)); } public void closeGrabber() { grabber.setPosition(GRABBER_CLOSED); } public void openRotator() { rotator.setPosition(ROTATOR_UP); } </pre> |
| Programming | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Preeti: Created methods for the shooter and intake mechanisms, and declared and initialized the hardware needed(motors) <ul style="list-style-type: none"> Why: To set up the code so that when we want to code our mechanism, there is already a base Learning <ul style="list-style-type: none"> Preeti: using final when declaring the variable locks the value so it cant be changed later Next Steps <ul style="list-style-type: none"> Preeti: add the code into the program | <pre> class Shooter implements QQ_Mechanism { private DCMotor _shooterLeft; private DCMotor _shooterRight; @Override public void init(HardwareMap hwMap) { ShooterLeft = hwMap.get(DCMotor.class, "LeftMotor"); ShooterRight = hwMap.get(DCMotor.class, "RightMotor"); } @Override public List<QQ_Test> getTests() { return null; } //create methods to set angle up and down, left, right public void ShooterUp() {} public void ShooterLeft() {} public void ShooterRight() {} public void ShooterDown() {} } </pre> |

2020-10-13

| Task | Details | Picture(s) |
|---------------|---|------------|
| Mecanum Drive | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: Tested Mecanum Drive in the simulator <ul style="list-style-type: none"> ▪ Why: to know if it works • Learning <ul style="list-style-type: none"> ◦ Philip: The ticks per rotation and gear ratio are different between the real robot and the simulator • Next Steps <ul style="list-style-type: none"> ◦ Philip: Done | |
| Transfer | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Eric: Decided on an elevator and conveyor belt design <ul style="list-style-type: none"> ▪ Why: So the prototyping can start • Learning <ul style="list-style-type: none"> ◦ Eric: How to make a dashboard in ClickUp • Next Steps <ul style="list-style-type: none"> ◦ Eric: Finish cad | |

2020-10-15

| Task | Details | Picture(s) |
|----------------|--|------------|
| Shooter | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Philip: Trying different configurations<ul style="list-style-type: none">▪ Why: To find our favorite configuration• Learning<ul style="list-style-type: none">◦ Philip: I learned that ultra planateries will work themselves apart• Next Steps<ul style="list-style-type: none">◦ Philip: Cad shooter• Notes:<ul style="list-style-type: none">◦ Philip: Left - right - back Rhino - gecko - gecko Rhino - rhino - gecko Gecko - rhino - gecko Gecko - rhino - gecko• Diagrams: | |

2020-10-17

| Task | Details | Picture(s) |
|----------|---|--|
| Transfer | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Chirag: Made one of the prototypes for the transfer mechanism. <ul style="list-style-type: none"> Why: To possibly implement on the robot. Andrew: Prototyped a transfer <ul style="list-style-type: none"> Why: To learn more about a belt transfer Learning <ul style="list-style-type: none"> Chirag: That corrugated plastic can be used to make a belt. Andrew: It is mechanically much more simple than I initially thought Next Steps <ul style="list-style-type: none"> Chirag: Finish this prototype and choose between this one and the other one to actually use. Andrew: Motorizing and testing it with an intake to decide whether we want an elevator or belt intake | <p>SHOOTER L V TRANSFER • Elevator ERU • Belt thing AA Ch • Hobby goal things last N Elevator Pros: - main control - Sensors - Spinning - Gears - Belt - Pros: - easier - base to elevators - 3D printer - BTP - tool storage A photograph shows a yellow belt transfer prototype with two circular components and a yellow belt. A person's hand is visible adjusting the setup.</p> |
| Shooter | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Preeti: Tested out different configurations for the shooter mechanism Learning <ul style="list-style-type: none"> Preeti: I learned that adding weight to a wheel, even a small weight like a gear will make the wheel spin at a more stable rate in between testing each ring Next Steps <ul style="list-style-type: none"> Preeti: Do more testing, and cad it as our final prototype Notes: <ul style="list-style-type: none"> Preeti: Picture is of trials of spinning rhino wheel with gear, gecko wheel and free spinning rhino wheel | <p>A photograph of a black shooter mechanism with a yellow plate attached. The mechanism appears to be made of metal and plastic parts. Below the table, there is a whiteboard and a piece of paper pinned to a wall.</p> |

| | | |
|-------------------------------|--|--|
| Alliance Marker Holder | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps |  |
| Programming | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: Used JavaDoc to create comments on previously written code. ▪ Why: So that when the code is written in a pdf format it is easier to understand what is happening. ◦ Rishi: Made comments on programs using Java doc ▪ Why: To ensure that the code is in the correct format and viewers are able to understand the code. • Learning <ul style="list-style-type: none"> ◦ Teja: I learned what JavaDoc is and how to use it. ◦ Rishi: How efficient Java doc is. • Next Steps <ul style="list-style-type: none"> ◦ Teja: Finish the code so that we can use JavaDoc to finish comments. | <pre>package org.firstinspires.ftc.teamcode.mechanisms; import vix.*; class Intake implements QQ_Mechanism { private Behavior intakeMotor; /** * Initialize intake * @param hwMap hardware map from configuration */ @Override public void init(HardwareMap hwMap) { intakeMotor = hwMap.get(DcMotor.class, "Intake_motor"); } /** * Tests * @return a list of tests */ @Override public List<QQ_Test> getTests() { return null; } public void Conveyorbelt() {} public void intake() { } }</pre> |
| Wobbly Goal Mechanism | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nikhil: I got data for the servo positions of the wobbly goal prototype. ▪ Why: So that I could program the values in. • Learning <ul style="list-style-type: none"> ◦ Nikhil: I learned about the servo location values. • Next Steps <ul style="list-style-type: none"> ◦ Nikhil: Test out the prototype with code. | |

2020-10-18

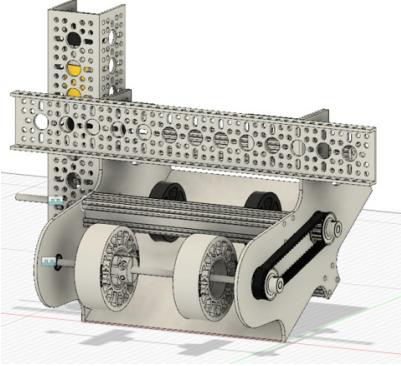
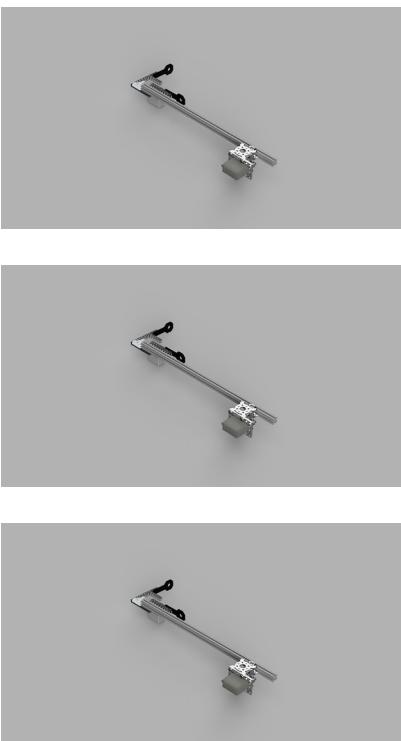
| Task | Details | Picture(s) |
|--------------------|--|------------|
| Transfer | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Eric: caded and built a prototype for an elevator style transfer<ul style="list-style-type: none">▪ Why: so it can be compared with the belted style• Learning<ul style="list-style-type: none">◦ Eric: how important downstring is• Next Steps<ul style="list-style-type: none">◦ Eric: test with an intake and choose a transfer | |
| Programming | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Philip: Cleaned up / created java doc and example functions for programming review<ul style="list-style-type: none">▪ Why: so we have stuff to give people• Learning• Next Steps | |

2020-10-19

| Task | Details | Picture(s) |
|----------|--|------------|
| Transfer | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Ryan: Worked on an elevator to transfer rings between shooter and intake. ◦ Nikhil: I helped Eric and Ryan complete the mechanical elevator option for the rings. <ul style="list-style-type: none"> ▪ Why: We were trying to see whether a mechanical design or a cyclic design for the elevator ◦ Andrew: CADing transfer and a model to lasercut the corrugated board so we don't have to cut it every time <ul style="list-style-type: none"> ▪ Why: so we can have a CAD model of transfer for the future to use to help with improving or making changes to it ◦ Chirag: Worked on the transfer CAD mechanism. <ul style="list-style-type: none"> ▪ Why: In order to show off in CAD review, for CAD of rest of the robot, and to use as a reference for finishing the actual model prototype. • Learning <ul style="list-style-type: none"> ◦ Nikhil: How to use bearings ◦ Andrew: that writing down measurements helps for CAD ◦ Chirag: That in order to use the press/pull function, you need to break the link of a part you have imported. • Next Steps <ul style="list-style-type: none"> ◦ Nikhil: Look at more prototyped parts to try to see which would be better. ◦ Andrew: finish up CAD for the transfer ◦ Chirag: Finish the laser cutting model and assembly. • Notes: <ul style="list-style-type: none"> ◦ Chirag: I realized that I didn't include some time from previous meetings (Didn't think we included debrief), so I added the extra 0.5 from Saturday. I may go back and add some of the hours I missed from past meetings later on. | |

| | | |
|-------------------------------|---|--|
| <h3>Engineering Notebook</h3> | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: added the team bio section with a layout for people to add their info and started the summary page <ul style="list-style-type: none"> ▪ Why: to add to the team section of the engineering notebook ◦ Izaak: Set up a bio outline and started working on a new summary page <ul style="list-style-type: none"> ▪ Why: So that we could have them ready for the engineering notebook ◦ Teja: During the first part of the meeting, I helped create the Bios and during the second part, I looked for pictures that can be used in the summary. <ul style="list-style-type: none"> ▪ Why: I did that so we are closer to completing the Engineering Notebook. ◦ Preeti: Team bios and Team Summary page <ul style="list-style-type: none"> ▪ Why: To start filling up our engineering notebook for scrimmage and competition • Learning <ul style="list-style-type: none"> ◦ Nithya: how to add columns and rows in lyx ◦ Izaak: How to disconnect your pages in google docs with view > print layout ◦ Teja: I learned how to enter a space while in a table in Lyx. ◦ Preeti: I learned how to create a table in lyx, and that we have 5 experts on our design panel • Next Steps <ul style="list-style-type: none"> ◦ Nithya: add everyone info into the team bios ◦ Izaak: Finish the summary page and get everyone to fill out their bios ◦ Teja: Finish the Engineering Notebook ◦ Preeti: complete everyone's bios- pictures and information, need to add in roles when appropriate. complete team summary page with pictures and convert to lyx | <p>This year, we used a tool called LyX or LaTeX to format our engineering notebook and give it a polished, cohesive look.</p> <p>Our cool engineering notebook form, hours</p> <p>We created a cool outreach form last year that we use to input our engineering notebook minutes! This year we upgraded the website to track our hours as well. Outreach online, started a youtube channel</p> <p>We have done many outreach events despite having an online season. Some of the things we have done are mentored an FLL Team(Team #225 the Quidditching Quetzalcoatl), and taught students basic FLL programming, and present at the FLL kickoff!</p>  <p>We have a youtube channel in which we create helpful videos for FLL teams. We are planning to grow this community.</p>  <p>Cool code fact math/intellectual fact Cool cad fact Our review team experts Our team contacted many experts within a wide range to review our code and our CAD at certain points in the season.</p> |
| <h3>Cad Wobbly Goal</h3> | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: I cadded the wobbly goal mechanism <ul style="list-style-type: none"> ▪ Why: So we would have a model of our prototype • Learning <ul style="list-style-type: none"> ◦ Arjun: I learnt that I could control someone else's screen in zoom. • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Finish CAD model | |

2020-10-20

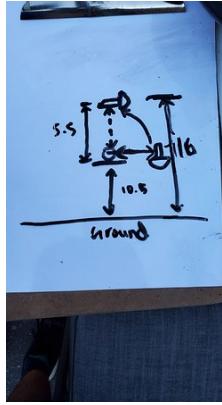
| Task | Details | Picture(s) |
|-----------------------------|---|---|
| Intake | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Eric: Caded the intake version for the cad review <ul style="list-style-type: none"> ▪ Why: So it's prepared for the review • Learning <ul style="list-style-type: none"> ◦ Eric: Copy pasting a component creates a link between them causing all edits to apply to both • Next Steps <ul style="list-style-type: none"> ◦ Eric: Cad bolts |  |
| Cad Wobbly Goal | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nikhil: CADed and assigned materials for the Wobbly Goal thing with Arjun <ul style="list-style-type: none"> ▪ Why: To model the wobbly goal mechanism ◦ Arjun: Finish cadding the wobbly goal prototype <ul style="list-style-type: none"> ▪ Why: So we have a design of our initial prototype ◦ Arjun: I finished cadding the wobbly goal prototype <ul style="list-style-type: none"> ▪ Why: I did that so we would have a model of our prototype. • Learning <ul style="list-style-type: none"> ◦ Nikhil: How to assign materials ◦ Arjun: I learnt how to assign materials to bodies in Fusion 360 ◦ Arjun: I learnt that I can assign materials • Next Steps <ul style="list-style-type: none"> ◦ Nikhil: attach it to the full robot thing ◦ Arjun: assemble final mechanism ◦ Arjun: Assemble final model |  |
| Engineering Notebook | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: Fixed the team bio and shooter layout <ul style="list-style-type: none"> ▪ Why: the header in the team bio was messed up and the math in the team shooter was no using lyx math controls • Learning <ul style="list-style-type: none"> ◦ Nithya: how to do subscripts in lyx • Next Steps <ul style="list-style-type: none"> ◦ Nithya: none | |

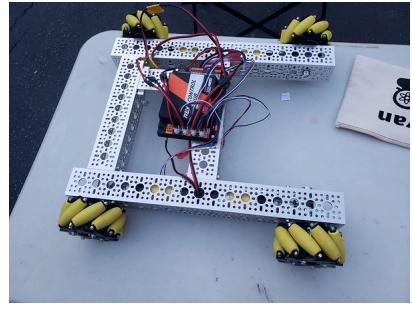
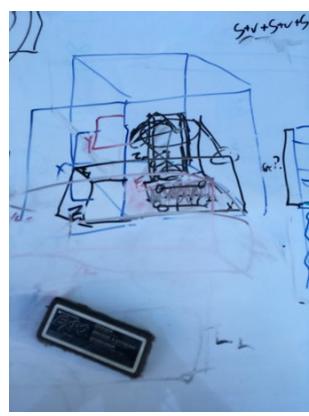
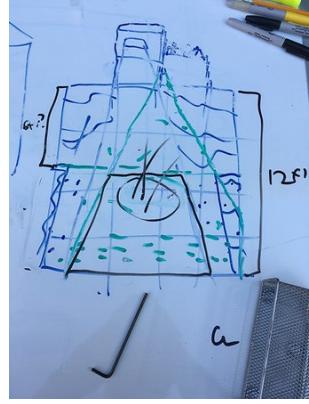
2020-10-22

| Task | Details | Picture(s) |
|-------------|---|------------|
| Programming | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: Went to Programming review session <ul style="list-style-type: none"> ▪ Why: To learn more about how experts would approach a problem. ◦ Arjun: I attended the programming review. <ul style="list-style-type: none"> ▪ Why: To hear inputs that experts had about our code ◦ Preeti: attended the programming review <ul style="list-style-type: none"> ▪ Why: to get feedback from experts surrounding our code • Learning <ul style="list-style-type: none"> ◦ Philip: I leaned a lots about small robot problems and how professionals deal with them ◦ Arjun: I learnt how professionals solve robot problems ◦ Preeti: a lot of the problems we have surrounding sensors are the same ones experts have • Next Steps <ul style="list-style-type: none"> ◦ Philip: implement their ideas ◦ Arjun: Take into account, their inputs. ◦ Preeti: use their feedback in our code • Notes: <ul style="list-style-type: none"> ◦ Philip: Halfway from Kaman filter is timers based off of last update sensor position <ul style="list-style-type: none"> Software architechture diagram Simple documentation is important esp for what non software people want Sanity check on sensor read What will fail? Make camera fail gracefully and still score points Ideally all sensors die gracefully, but sensors that can die should be bumped up ◦ Arjun: Make camera fail gracefully, still score all points, sensors should be elavated | |

2020-10-24

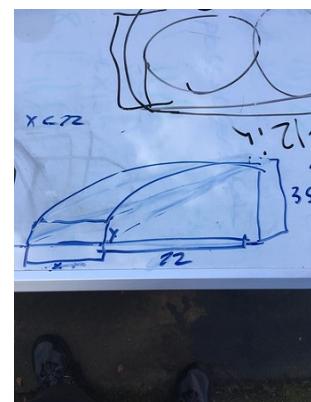
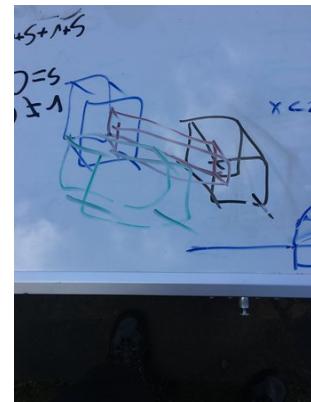
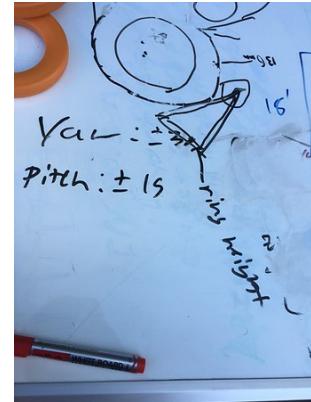
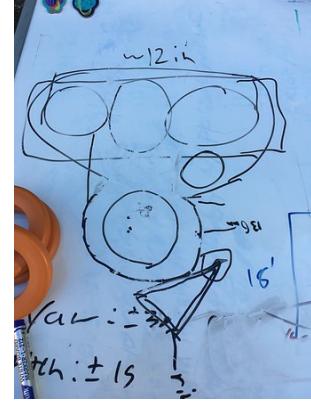
| Task | Details | Picture(s) |
|----------|--|---|
| Transfer | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: Worked on transfer CAD to update the chain to actually fit the structural part of it and I assembled them to be together. <ul style="list-style-type: none"> ▪ Why: To possibly use on our robot CAD and as a way to show what our prototype would look like via CAD. ◦ Izaak: Altered Andrewâ€™s old transfer design so it has a hole in the back <ul style="list-style-type: none"> ▪ Why: So that it would be easier to grab the rings ◦ Eric: Prototyped a belted vertical transfer <ul style="list-style-type: none"> ▪ Why: So it's designed to work with a pass-through robot ◦ Preeti: created a new prototype belted transfer <ul style="list-style-type: none"> ▪ Why: so we can have a better transfer method designed around our current shooter and intake • Learning <ul style="list-style-type: none"> ◦ Chirag: How useful project geometry can be when making sketches. ◦ Izaak: That corrugated plastic is pretty difficult to work with ◦ Eric: McMaster has a built in part library ◦ Preeti: duct tape is not as efficient as we credit it for • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Finish up some parts with the structure, maybe find a way to add the spokes? Maybe make the chain look more like corrugated plastic? ◦ Izaak: Switch out the corrugated plastic with surgical tubing or another material so that itâ€™s more reliable ◦ Eric: Compare with the zip tie transfer ◦ Preeti: compare it with the other transfer prototypes |   |

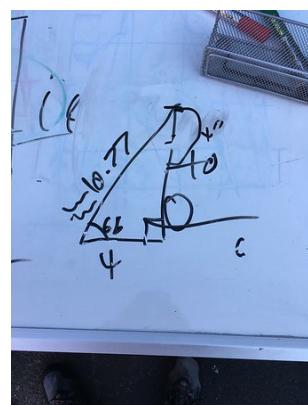
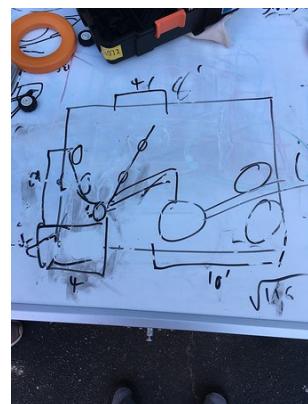
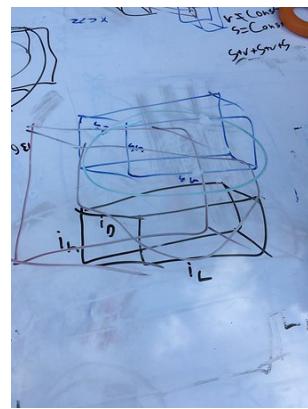
| | | |
|-------------------------------|--|---|
| Wobbly Goal Mechanism | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Nikhil: We worked on building a servo-less wobbly goal grabber, which we decided didn't work. We then started modifying an existing prototype to be more space-friendly. Arjun: I tested out the passive wobbly goal mechanism and then tried to make the active mechanism more space efficient. <ul style="list-style-type: none"> Why: To prototype for the real robot. Learning <ul style="list-style-type: none"> Nikhil: How to connect two extrusions. Arjun: I learnt how to link two pieces of extrusion together. Next Steps <ul style="list-style-type: none"> Nikhil: Put the modified version together. Arjun: Finish updating the active mechanism and put into cad |  |
| Cad Wobbly Goal | <ul style="list-style-type: none"> Accomplished Learning Next Steps |  |
| Shooter | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Nithya: worked on the shooter maths format and added descriptions, starting working on the diagram to show how the robot will shoot a ring <ul style="list-style-type: none"> Why: to show our full understanding of the shooter math Rishi: Gave a description of the variables and equations used. <ul style="list-style-type: none"> Why: To ensure that viewers will be able to understand what they are seeing. Learning <ul style="list-style-type: none"> Nithya: how to change the spacing in lyx Rishi: That a concept is easier to understand than to write about. Next Steps <ul style="list-style-type: none"> Nithya: finish the diagram Rishi: Finish the diagram for shooter math. | |
| Alliance Marker Holder | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |

| Mecanum Drive | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Chirag: Worked on making the robot chassis drive again. <ul style="list-style-type: none"> Why: To test things on the robot in the future and possibly some auto things. Ryan: Worked on making the chassis working! Learning <ul style="list-style-type: none"> Chirag: I learned that rev shaft collars work with d-shafts. Next Steps <ul style="list-style-type: none"> Chirag: Test our work with test wiring. |  | | | | |
|--|--|--|---------|-----|--|--|
| Lyx | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: Worked on the team bios so they look more uniform. <ul style="list-style-type: none"> Why: So that the bios are pleasing to look at and that they all look the same Learning <ul style="list-style-type: none"> Teja: I learned how to edit images inside a table in Lyx. Next Steps <ul style="list-style-type: none"> Teja: Finish other documents that need to be edited. | <div style="background-color: #f0e6d2; padding: 10px;"> <p style="text-align: center;">Team Bios</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Picture</th> <th style="text-align: center;">Bio</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">  dog.jpeg </td> <td> Name: Andrew Age: 15 Grade: 10th Team Role/Learning: First History: 4 Years FLL & 1 year of FTC First Future: I plan on continuing FTC and volunteering after I graduate. Outside of robotics: I run varsity XC and Track for GHHS outside of FTC. I also enjoy playing ping pong and hanging out with friends. What GP means to me: GP is being excited for others accomplishments and knowing that winning isn't the only measure of success. </td> </tr> </tbody> </table> </div> | Picture | Bio |  dog.jpeg | Name: Andrew Age: 15 Grade: 10th Team Role/Learning: First History: 4 Years FLL & 1 year of FTC First Future: I plan on continuing FTC and volunteering after I graduate. Outside of robotics: I run varsity XC and Track for GHHS outside of FTC. I also enjoy playing ping pong and hanging out with friends. What GP means to me: GP is being excited for others accomplishments and knowing that winning isn't the only measure of success. |
| Picture | Bio | | | | | |
|  dog.jpeg | Name: Andrew Age: 15 Grade: 10th Team Role/Learning: First History: 4 Years FLL & 1 year of FTC First Future: I plan on continuing FTC and volunteering after I graduate. Outside of robotics: I run varsity XC and Track for GHHS outside of FTC. I also enjoy playing ping pong and hanging out with friends. What GP means to me: GP is being excited for others accomplishments and knowing that winning isn't the only measure of success. | | | | | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Chirag: These are hours from past meetings I didn't realize I needed to put in. <ul style="list-style-type: none"> Why: I thought we didn't count debrief minutes. Learning Next Steps | | | | | |
| | |   | | | | |

Brainstorming

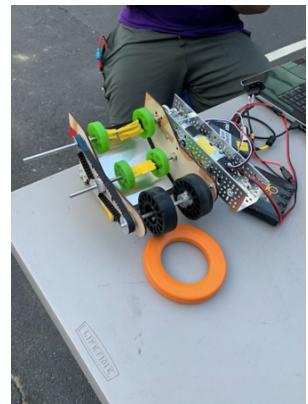
- Accomplished
 - Philip: Planned Robot layout
 - Why: so we have a plan
- Learning
 - Philip: I learned that we will have space for everything
- Next Steps
 - Philip: Cad





Intake

- Accomplished
 - Andrew: finished up the intake prototype based off the cad model
 - Why: to see what we needed to fix and adjust with the design
- Learning
 - Andrew: that the holes for the wheels make the timing belts too tight
- Next Steps
 - Andrew: fixing that on the cad model and adjusting to other problems we have



2020-10-26

| Task | Details | Picture(s) |
|------------------------|--|--|
| Alliance Marker Holder | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |
| Engineering Portfolio | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Nithya: created plan for portfolio and worked on page 8 <ul style="list-style-type: none"> Why: to have a portfolio for the scrimmage Preeti: created a plan for the engineering portfolio and thought of ideas for connecting with teams <ul style="list-style-type: none"> Why: so we can work towards finishing the portfolio by scrimmage Learning <ul style="list-style-type: none"> Nithya: how to make new docs in lyx Preeti: all of the requirements for the engineering portfolio Next Steps <ul style="list-style-type: none"> Nithya: start on other pages Preeti: to fill out the pages and convert to lyx | |
| Engineering Notebook | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: For the first hour, I worked on team summaries and for the second hour, I worked on shooter math in the Engineering Notebook. <ul style="list-style-type: none"> Why: So that the Engineering Notebook has all the team information in one place. Learning <ul style="list-style-type: none"> Teja: I learned how to add a hyperlink inside Lyx. Next Steps <ul style="list-style-type: none"> Teja: Finish explaining the shooter math in the Engineering Notebook. | <p>5.2 Shooter Math</p> <p>Shooter Math</p> <p>Horizontal Displacement:</p> $\Delta x = V_{0x}t \cos \theta_0$ <ul style="list-style-type: none"> The horizontal displacement is the horizontal movement of the projectile which in our case is the ring <p>Velocity for Horizontal Plane:</p> $V_x = V_{0x}$ <ul style="list-style-type: none"> The velocity for the horizontal plane is the horizontal motion <p>Initial Velocity for Horizontal Plane:</p> $V_{0x} \cos \theta_0$ <ul style="list-style-type: none"> The initial velocity for horizontal plane is the velocity before acceleration occurs and causes a change in the horizontal plane <p>Vertical Displacement:</p> $\Delta y = V_{0y}t \sin \theta_0 - \frac{1}{2}gt^2$ <ul style="list-style-type: none"> The vertical displacement is the vertical movement of the projectile (ring) <p>Velocity for Vertical Plane:</p> $V_y = V_{0y} - gt$ <ul style="list-style-type: none"> The velocity for the vertical plane is the vertical motion <p>Initial Velocity for Vertical plane:</p> $V_{0y} \sin \theta_0$ <ul style="list-style-type: none"> The initial velocity for the vertical plane is the velocity before acceleration occurs and causes a change in the vertical plane <p>Vertical Component:</p> $0.0022 < V_{0y} \sin \theta_0 - \frac{1}{2}gt^2$ <ul style="list-style-type: none"> The vertical component of acceleration, the forces acting against the vertical direction <p>Horizontal Component:</p> $1.83 = (V_{0x} \cos \theta_0)t$ <ul style="list-style-type: none"> The horizontal component of acceleration, the forces acting against the horizontal direction |
| Clickup Work | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Ryan: Worked on parts needed and also some basic work in clicker Learning Next Steps | |

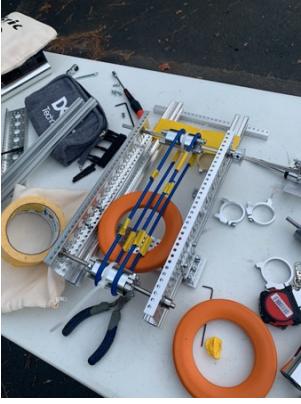
| | | |
|------------------------------|---|--|
| Transfer | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: Worked on updating CAD for transfer. <ul style="list-style-type: none"> ▪ Why: To have it reflect what we have in real life. • Learning <ul style="list-style-type: none"> ◦ Chirag: That we have the game elements in CAD. • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Update if needed in the future, maybe show at CAD review? • Notes: <ul style="list-style-type: none"> ◦ Chirag: Removed 0.75 hrs to compensate for putting extra before by accident. | |
| Cad Wobbly Goal | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nikhil: We re-CADed the wobbly goal mechanism to reflect the S-shaped changes. I also started assembling the real thing at home. <ul style="list-style-type: none"> ▪ Why: Because the CAD review is coming soon. • Learning <ul style="list-style-type: none"> ◦ Nikhil: How to properly extrude some parts. • Next Steps <ul style="list-style-type: none"> ◦ Nikhil: Finish the CAD | |
| Wobbly Goal Mechanism | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: I helped cad the updated version of the wobbly goal <ul style="list-style-type: none"> ▪ Why: I did that so we could have a model of our prototype for scrimmage. • Learning <ul style="list-style-type: none"> ◦ Arjun: I learnt how to extrude rev parts • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Finish cad model for the scrimmage | |
| Lyx | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: Setup and layout Portfolio <ul style="list-style-type: none"> ▪ Why: because we need a portfolio by scrimmage • Learning <ul style="list-style-type: none"> ◦ Philip: How to do fancy header to refer to the section • Next Steps | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2020-10-29

| Task | Details | Picture(s) |
|------------|--|------------|
| CAD Review | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: I attended the CAD review. <ul style="list-style-type: none"> ▪ Why: To learn where we can improve in CAD/ things we could implement. ◦ Arjun: I attended the cad review <ul style="list-style-type: none"> ▪ Why; I did that so we could receive feedback from experts about our design. ◦ Ryan: Asked experts about our cad ◦ Preeti: got feedback from experts on our current cad <ul style="list-style-type: none"> ▪ Why: to make our prototypes better and our cad more efficient • Learning <ul style="list-style-type: none"> ◦ Chirag: I realized how important it is to check dimensions with the game elements to make sure everything runs smoothly. ◦ Arjun: I learnt how to take a section analysis. ◦ Preeti: it is a good idea to round off corners because sharp corners are more likely to crack(in plywood) • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Try out the suggestions given. ◦ Arjun: Use feedback from the experts and improv our models ◦ Preeti: use feedback to make our cad and prototypes better | |

2020-10-31

| Task | Details | Picture(s) |
|----------------------|--|------------|
| Engineering Notebook | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: I completed Team Bios and Team Summaries. I also worked on Sponsorship Info. <ul style="list-style-type: none"> ▪ Why: I did this to be one step closer to finished the Engineering Notebook. • Learning <ul style="list-style-type: none"> ◦ Teja: I learned how to insert images into Git through Lyx. • Next Steps <ul style="list-style-type: none"> ◦ Teja: Add images to Sponsorship Info and convert it to a PDF. | |
| Mecanum Drive | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: Worked on legalizing robot and doing test wiring on it. <ul style="list-style-type: none"> ▪ Why: To make sure we could use it during the scrimmage and it runs smoothly. ◦ Preeti: Added a configuration and tested testwiring for the 4 mecanum wheels <ul style="list-style-type: none"> ▪ Why: Start being able to drive • Learning <ul style="list-style-type: none"> ◦ Chirag: How to reset a rev control hub. ◦ Preeti: A breakpoint is a point in code that when running will stop and you can go though and debug. • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Finish legalizing and then test driving. ◦ Preeti: Complete driving code, and test • Notes: <ul style="list-style-type: none"> ◦ Preeti: We encountered a major problem: the control hub(robot controller) would not connect to the driver station, turns out the reason for that was an extra gobilda opmode we didn;t need in our util | |
| Battery Holder | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Ryan: Attached battery holder to chassis and tested wiring. • Learning • Next Steps | |

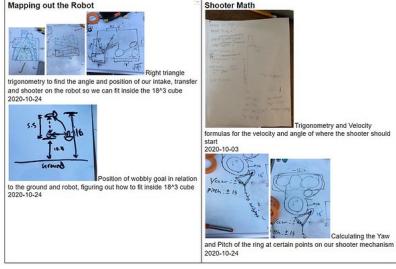
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|------------------------------|--|--|
| Wobbly Goal Mechanism | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: I assembled the wobbly goal in an S shape to save space. <ul style="list-style-type: none"> ▪ Why: I did that so we have more usable space on our robot. • Learning <ul style="list-style-type: none"> ◦ Arjun: I learnt that autodesk has a mobile app for fusion • Next Steps <ul style="list-style-type: none"> ◦ Arjun: cad updated mechanism | |
| Transfer | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Andrew: worked on jumprope transfer <ul style="list-style-type: none"> ▪ Why: to test the jumprope as an option for our belted transfer ◦ Eric: Worked on building the scrimmage intake with a jump rope <ul style="list-style-type: none"> ▪ Why: So we have a functioning transfer for scrimmage • Learning <ul style="list-style-type: none"> ◦ Andrew: the jumprope has a lot of elasticity ◦ Eric: McMaster has a built in feature that allows parts to be imported directly in to a design • Next Steps <ul style="list-style-type: none"> ◦ Andrew: adjusting prototype for robot ◦ Eric: Shorten the gorail and attach to robot |  |

2020-11-01

| Task | Details | Picture(s) |
|----------------|---|---|
| Shooter | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Philip: Started shooter using goBILDA<ul style="list-style-type: none">▪ Why: We need a shooter for scrimmage so we are doing it out of goBILDA instead of custom because it will be faster• Learning<ul style="list-style-type: none">◦ Philip: Supporting a shaft with bearings completely got rid of the horrid wobble and noise• Next Steps<ul style="list-style-type: none">◦ Philip: Finish building the other side |   |

2020-11-02

| Task | Details | Picture(s) |
|------------------------|---|------------|
| Teleop Code | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Philip: got field relative drive working <ul style="list-style-type: none"> Why: so drivers can drive more easily Learning <ul style="list-style-type: none"> Philip: I learned that you can set conditional breakpoints Next Steps <ul style="list-style-type: none"> Philip: add more things for drivers to do | |
| Alliance Marker Holder | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Andrew: worked on presentation <ul style="list-style-type: none"> Why: so that we have a presentation and can make sure we tell the judges what we need to Ryan: I helped Eric find problems with the robot in cad Learning <ul style="list-style-type: none"> Andrew: that we actually utilized CAD more than i thought we did Next Steps <ul style="list-style-type: none"> Andrew: either make it more precise bullet points or actual wording and divy up the points | |
| Cad Wobbly Goal | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Arjun: I finished the cad on the updated wobbly goal. <ul style="list-style-type: none"> Why: So we have a model of our updated prototype Learning <ul style="list-style-type: none"> Arjun: I learned that assembling joints needs to be done in a specific order. Next Steps <ul style="list-style-type: none"> Arjun: Keep testing | |
| Lyx | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Arjun: I helped work on the portfolio <ul style="list-style-type: none"> Why: I did that so we would have a neat engineering notebook Learning <ul style="list-style-type: none"> Arjun: I learned that uninstalling and reinstalling lyx helps me view properly because I installed LaTeX after I installed lyx Next Steps <ul style="list-style-type: none"> Arjun: Finish page | |

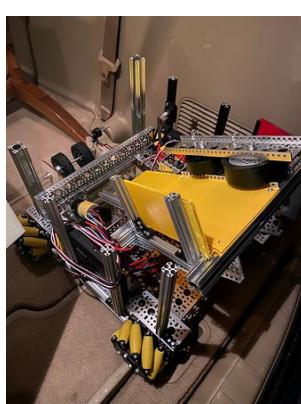
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|-------------------------------|---|---|
| Engineering Portfolio | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Nithya: Worked on the title page and helped people with lyx <ul style="list-style-type: none"> Why: To get more done in the eng portfolio Preeti: Completed the math page of our engineering portfolio <ul style="list-style-type: none"> Why: show the judges the math we did this year to help our design process Learning <ul style="list-style-type: none"> Nithya: That we have worked with 9 experts and how to put an image in lyx Preeti: the different concepts of math we used for our shooter this year Next Steps <ul style="list-style-type: none"> Nithya: finish up this page formatting and do more pages Preeti: convert to lyx and work on other pages |  <p>The image contains four separate screenshots from a LaTeX document, each showing a different mathematical calculation or diagram related to the team's engineering work:</p> <ul style="list-style-type: none"> Mapping out the Robot: A diagram showing a robot's path with various points labeled S, E, and G, with text explaining trigonometry to find angles and positions. Shooter Math: A diagram of a shooter mechanism with text about trigonometry and velocity. Position of wobbly goal in relation to the ground and robot: A diagram showing the robot's position relative to a wobbly goal. Calculating the Yaw and Pitch of the ring at certain points on our shooter mechanism: A diagram of a ring on a shooter arm with text about calculating yaw and pitch. |
| Presentation | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Philip: worked on laying out connect and motivate bullet points <ul style="list-style-type: none"> Why: so we can try out the format for scrimmage Learning <ul style="list-style-type: none"> Philip: I learned the separation between connect and motivate (see notes) Next Steps <ul style="list-style-type: none"> Philip: Refine and assign Notes: <ul style="list-style-type: none"> Philip: Connect: connecting the dots (FIRST, your team, stem community) Motivate: Team exemplifies essence of FIRST and FTC | |
| Scrimmage Presentation | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Chirag: Worked on Design and Innovate award presentations. <ul style="list-style-type: none"> Why: To present during the scrimmage. Teja: I worked on creating points for the script that will be said during the Scrimmage Presentation. <ul style="list-style-type: none"> Why: So that we have a workable presentation in time for Scrimmage. Learning <ul style="list-style-type: none"> Chirag: I relearned what each award required. Teja: I learned how many experts we had talked to during the year so far. Next Steps <ul style="list-style-type: none"> Chirag: Split up tasks in the document and find pictures. Teja: Gather our points and create a script for the team. | |

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| Prototyping | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Eric: Decided on the layout for the robot <ul style="list-style-type: none"> ▪ Why: So we know what changes need to be made for the scrimmage robot • Learning <ul style="list-style-type: none"> ◦ Eric: Contact sets don't carry over in designs • Next Steps <ul style="list-style-type: none"> ◦ Eric: Build | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

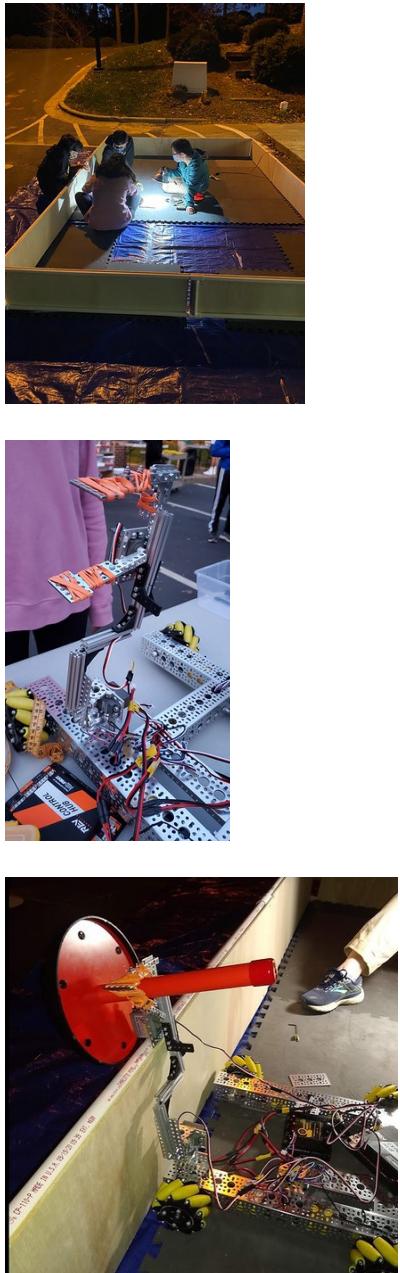
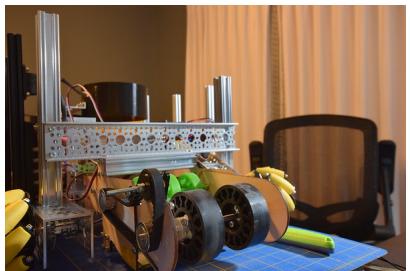
2020-11-03

| Task | Details | Picture(s) |
|-----------------------|---|------------|
| Engineering Portfolio | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Arjun: I helped update the DP2 page of our engineering portfolio.<ul style="list-style-type: none">▪ Why: So we have a completed portfolio• Learning<ul style="list-style-type: none">◦ Arjun: I learnt that fetch origin pulls the file from github and once I commit, I need to push to origin.• Next Steps<ul style="list-style-type: none">◦ Arjun: Finish page | |

2020-11-07

| Task | Details | Picture(s) |
|------------------------------|--|---|
| Shooter | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: Worked on getting the pitch changer built for the shooter <ul style="list-style-type: none"> ▪ Why: So we can aim a bit for scrimmage ◦ Philip: Designed and printed the shaft adapter <ul style="list-style-type: none"> ▪ Why: So we can have a pot to monitor pitch angle ◦ Philip: Mounted shooter onto robot • Learning <ul style="list-style-type: none"> ◦ Philip: I learned how good quad blocks are for mounting channel ◦ Philip: Tolerances are important ◦ Philip: I learned that gotube is deceptively small • Next Steps <ul style="list-style-type: none"> ◦ Philip: Print adapter and mount pot ◦ Philip: Mount pot ◦ Philip: Design and make thing that holds rings and the servo to push them into the shooter |    |
| Engineering Portfolio | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: added the math page into lyx <ul style="list-style-type: none"> ▪ Why: to get more of the portfolio complete • Learning <ul style="list-style-type: none"> ◦ Nithya: how to change margins and the different ways to adjust them • Next Steps <ul style="list-style-type: none"> ◦ Nithya: finish up more pages of the portfolio | |

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| Lyx | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: I finished planning for the Scrimmage Presentation and converted 3 documents into Lyx. <ul style="list-style-type: none"> ▪ Why: The documents from Google Drive need to be converted into Lyx. • Learning <ul style="list-style-type: none"> ◦ Teja: I learned how to change the margins so they are spaced correctly when you view the document. • Next Steps <ul style="list-style-type: none"> ◦ Teja: Convert all the documents into Lyx. | |
| Alliance Marker Holder | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |
| Rev Servo Power Module | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: I worked on finding out how the rev servo power module worked and attaching it. <ul style="list-style-type: none"> ▪ Why: To increase servo power on shooter rotation. • Learning <ul style="list-style-type: none"> ◦ Chirag: What crimping is and how to do it. How to strip wires. What a rev servo power module does, how to set it up, and how to use it. • Next Steps | |

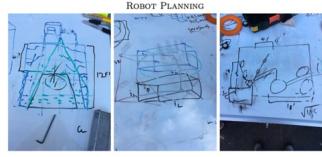
| | | |
|---------------------|---|--|
| Wobbly Goals | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: I tested the code and mounted the wobbly goal next to the robot ◦ Preeti: Mounted the wobbly goal on the robot and tested it(it goes over the wall!) <ul style="list-style-type: none"> ▪ Why: So we could prepare for scrimmage • Learning <ul style="list-style-type: none"> ◦ Arjun: I learnt that when you drop a wobbly goal on your finger, it hurts ◦ Preeti: I learned that a rollback in code turns the code back to how it was on the last commit • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Finish coding mechanism ◦ Preeti: Test more to see if we need to change the arm to lift the wobbly goal higher |  |
| Intake | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Eric: built and attached the intake to the robot <ul style="list-style-type: none"> ▪ Why: prep for scrimmage • Learning <ul style="list-style-type: none"> ◦ Eric: adding extra holes to a laser cut piece is helpful • Next Steps <ul style="list-style-type: none"> ◦ Eric: test intake |  |
| Transfer | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Andrew: Slimming it down and shortening to get it to fit in the robot <ul style="list-style-type: none"> ▪ Why: So that we can transfer rings between our shooter and intake • Learning <ul style="list-style-type: none"> ◦ Andrew: That there's a lot less room for transfer than initially thought • Next Steps | |

2020-11-08

| Task | Details | Picture(s) |
|------|---|------------|
| Lyx | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Teja: Finished converting documents from Google Drive into Lyx.<ul style="list-style-type: none">▪ Why: All the documents need to be in Lyx for formatting.• Learning• Next Steps<ul style="list-style-type: none">◦ Teja: This task is complete. | |

2020-11-09

| Task | Details | Picture(s) |
|------------------------|--|------------|
| Engineering Notebook | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: finished the shooter math and started the polar math <ul style="list-style-type: none"> ▪ Why: to get more math uses in the eng ntbk • Learning <ul style="list-style-type: none"> ◦ Nithya: you can tag images on lyx • Next Steps <ul style="list-style-type: none"> ◦ Nithya: finish polar math | |
| Manipulator Controls | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: I helped map manipulator controls. <ul style="list-style-type: none"> ▪ Why: I did that so we could program for the scrimmage easier. ◦ Teja: Created a Google Doc with all the Manipulator Controls listed on it. <ul style="list-style-type: none"> ▪ Why: So that the code can be written for the Scrimmage. ◦ Andrew: Worked on deciding where manipulator controls go and what we need for them <ul style="list-style-type: none"> ▪ Why: To have something set for scrimmage • Learning <ul style="list-style-type: none"> ◦ Arjun: I learnt that manipulator controls means mapping to controller. ◦ Teja: I learned that Manipulator controls are changeable and not set. ◦ Andrew: That we have much less needed controls compared to last year and our systems work more together rather than as separate parts • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Code commands ◦ Teja: Program the controls. ◦ Andrew: Coding the inputs in | |
| Scrimmage Presentation | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: I worked on finishing the presentation and making sure it fits within the time limit. <ul style="list-style-type: none"> ▪ Why: To use during the scrimmage. ◦ Ryan: Worked on color-coding the presentation notes (among other things) • Learning <ul style="list-style-type: none"> ◦ Chirag: That the presentation time limit is 5 minutes. • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Do a run-through with everyone (ASAP, as soon as control is done), have everyone choose where they want to talk. Finish the control section. | |

| | | |
|------------------------------|---|--|
| Engineering Portfolio | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: I worked on the portfolio for experts <ul style="list-style-type: none"> ▪ Why: So we could have a good engineering notebook. ◦ Philip: Worked on refining the math section of the portfolio • Learning <ul style="list-style-type: none"> ◦ Arjun: I learnt that judges want a table over text. ◦ Philip: I learned more about formatting inside of figures in lyx • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Convert text to table. ◦ Philip: finish math section and do more of them • Notes: <ul style="list-style-type: none"> ◦ Philip: you want to use a custom vertical spacer to add space between header and images in a figure |  <p>Figure 0.1: Doing Trig to determine how things could fit together and the sizes of objects</p> |
| Presentation | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Preeti: connect and motivate for the scrimmage presentation, expanded the points and split up points <ul style="list-style-type: none"> ▪ Why: finish the presentation, fit in time limit ◦ Eric: fixed the design and innovate portion <ul style="list-style-type: none"> ▪ Why: so it can fit in the time limit • Learning <ul style="list-style-type: none"> ◦ Preeti: shooting a ring towards any other wall than the tower wall is a minor penalty ◦ Eric: the different parts in the design and innovate section • Next Steps <ul style="list-style-type: none"> ◦ Preeti: Expand on talking points in control, do a final read through for timing and assign roles ◦ Eric: do a run through after control is finished | |
| FLL Videos | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Ryan: Worked on FLL video, what are FLL rubrics and why are they important? • Learning • Next Steps | |
| Shooter | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Rishi: Worked on shooter ballistic math <ul style="list-style-type: none"> ▪ Why: To calculate certain unknown variables to allow the ring to enter the towers. • Learning <ul style="list-style-type: none"> ◦ Rishi: How to calculate projectile motion. • Next Steps <ul style="list-style-type: none"> ◦ Rishi: Finish the next assignment which is polar math. | |

2020-11-10

| Task | Details | Picture(s) |
|-----------------------|--|------------|
| Engineering Portfolio | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Nithya: worked more on the expert's page <ul style="list-style-type: none"> Why: to continue working on the portfolio Teja: Added Team Summary, checked Team Bios and Added/Removed from the Scrimmage Presentation. <ul style="list-style-type: none"> Why: We need to have the portfolio ready by Scrimmage. Arjun: I helped work on the team bios page and experts page. <ul style="list-style-type: none"> Why: I did that so we can complete our portfolio as quick as possible. Learning <ul style="list-style-type: none"> Nithya: more relearned but all the experts we met with so far this year Teja: I learned how to create table floats in Lyx. Arjun: I learned how to make a table in LyX Next Steps <ul style="list-style-type: none"> Nithya: finish experts page Teja: Finish the portfolio. Arjun: Finish pages | |
| Teleop Code | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Philip: Wrote the drivers portion of the teleop code <ul style="list-style-type: none"> Why: so we can drive at scrimmage Learning <ul style="list-style-type: none"> Philip: I learned that we actually had several things that make 0 sense from our code last year (nested ifs that should have been if - else etc) Next Steps <ul style="list-style-type: none"> Philip: test on the robot and DRIVEEEE | |
| Manipulator Controls | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Chirag: Worked on code for manipulator controls. <ul style="list-style-type: none"> Why: To use during scrimmage. Learning <ul style="list-style-type: none"> Chirag: How to use range scale and how useful it can be. Next Steps <ul style="list-style-type: none"> Chirag: Test on robot and then make necessary changes. | |

| | | |
|-----------------------------|--|--|
| Transfer | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Andrew: Worked on adjusting transfer and attaching a motor so that it fits into our robot <ul style="list-style-type: none"> ▪ Why: So that we can have a transfer for scrimmage • Learning <ul style="list-style-type: none"> ◦ Andrew: That there is significantly less space now and mounting the transfer at the angle we need may be hard • Next Steps <ul style="list-style-type: none"> ◦ Andrew: Fixing the transfer to fit in without pushing on the robot | |
| Shooter | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nikhil: We worked on making a flicker servo device to load rings into the shooter. We originally were using corrugated plastic sheets, but we discovered that they crumbled easily. We eventually switched to a metal beam, which worked great. <ul style="list-style-type: none"> ▪ Why: So that our shooter can work in time for the scrimmage. • Learning <ul style="list-style-type: none"> ◦ Nikhil: I learned how to assemble bolts in tight spaces, and how to cut plastic sheets with an X-Acto knife. • Next Steps <ul style="list-style-type: none"> ◦ Nikhil: Bolt-on the ring hopper properly, and attach the other things to the robot (transfer, wobbly goal). | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2020-11-13

| Task | Details | Picture(s) |
|------------------------------------|---|------------|
| Engineering Notebook | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: Added more to mecanum drive <ul style="list-style-type: none"> ▪ Why: to finish the mecanum drive • Learning <ul style="list-style-type: none"> ◦ Nithya: how the set up for scrimmage looks • Next Steps <ul style="list-style-type: none"> ◦ Nithya: nothing | |
| FLL Videos | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: Created a script for Finding problems and picking one. • Learning <ul style="list-style-type: none"> ◦ Teja: I learned how to change the task status in ClickUp. • Next Steps <ul style="list-style-type: none"> ◦ Teja: Write scripts for other videos. | |
| Stemarga Scrimmage Practice | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: I helped setup the field and reviewed the presentation. <ul style="list-style-type: none"> ▪ Why: I did that so we could be prepared • Learning <ul style="list-style-type: none"> ◦ Arjun: I learned about the role of a human player • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Clean up presentation | |
| Presentation | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: Did a few run throughs of the presentation. <ul style="list-style-type: none"> ▪ Why: To see what needs to be done before scrimmage. • Learning <ul style="list-style-type: none"> ◦ Chirag: That we will probably need to cut out some of the script • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Timed runs and cutting out unnecessary parts. | |
| Alliance Marker Holder | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2020-11-14

| Task | Details | Picture(s) |
|------------------------------------|---|------------|
| Scrimmage Presentation | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: I worked on cutting down the scrimmage presentation, making edits and practicing with the team. <ul style="list-style-type: none"> ▪ Why: We need to have a presentation ready for the scrimmage day. ◦ Chirag: Worked on getting script in time limit and some practice. <ul style="list-style-type: none"> ▪ Why: So we can use it during scrimmage. • Learning • Next Steps <ul style="list-style-type: none"> ◦ Teja: Practice your lines in the presentation and memorize them. | |
| Stemarga Scrimmage Practice | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |
| Transfer | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Andrew: I worked on getting transfer working and tweaking it as well as the robot to get it working <ul style="list-style-type: none"> ▪ Why: So we can have a robot that drives for scrimmage • Learning <ul style="list-style-type: none"> ◦ Andrew: Our gears for the lifting of our shooter aren't meshed properly so we need a better way to mount it so they don't slip • Next Steps <ul style="list-style-type: none"> ◦ Andrew: Either fix the gear meshing or leave it in a set position for scrimmage | |

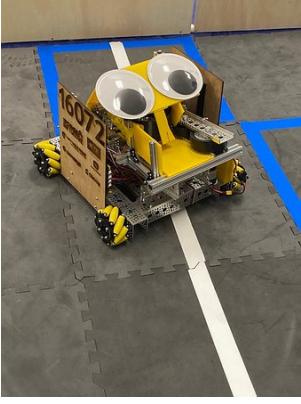
2020-11-16

| Task | Details | Picture(s) |
|-----------------------------|--|------------|
| Stemarga Scrimmage Practice | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: Counted points for scrimmage practice. <ul style="list-style-type: none"> ▪ Why: So we know how many points we have and how many we still need to earn. ◦ Andrew: worked on eng portfolio, pit crew practice, drive coaching, and photographer for scrimmage <ul style="list-style-type: none"> ▪ Why: to get experience with more roles ◦ Arjun: I drove the bot, set up the field, managed stream, and took photos <ul style="list-style-type: none"> ▪ Why: so we could have a good scrimmage • Learning <ul style="list-style-type: none"> ◦ Andrew: that if we keep the transfer mounted the same way it is more beneficial in a lot of cases to completely remove the transfer mechanism ◦ Arjun: I learnt how to enable autofocus on a olympus lens. • Next Steps <ul style="list-style-type: none"> ◦ Teja: Continue practicing. ◦ Andrew: adjusting the intake so it sits a little bit higher up ◦ Arjun: Get ready for thursday | |
| Engineering Portfolio | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: the experts page along with different scrimmage roles <ul style="list-style-type: none"> ▪ Why: to start wrapping up the portfolio • Learning <ul style="list-style-type: none"> ◦ Nithya: how the robot is running • Next Steps <ul style="list-style-type: none"> ◦ Nithya: finish the portfolio | |
| Scrimmage | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: I was manipulator, human player, and scorer. <ul style="list-style-type: none"> ▪ Why: It was my scrimmage roles. • Learning <ul style="list-style-type: none"> ◦ Chirag: The manipulator controls. • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Thursday's runs. | |

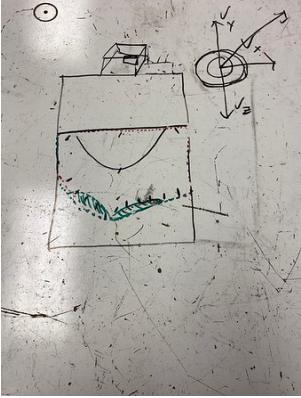
2020-11-18

| Task | Details | Picture(s) |
|--------------|---|------------|
| Presentation | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Chirag: Went over the presentation with most of the team and got used to bigmarker.<ul style="list-style-type: none">▪ Why: So we would be able to present well and within the time limit on Friday.◦ Rishi: Read through our lines in Big Marker.<ul style="list-style-type: none">▪ Why: To meet the time limit and see how big marker worked• Learning<ul style="list-style-type: none">◦ Chirag: That transitioning between people over an online call talks a lot longer than in person.◦ Rishi: There is a lot of information to cover and we need to cut down a little bit.• Next Steps<ul style="list-style-type: none">◦ Chirag: Maybe do another practice an hour before the presentation with everyone.◦ Rishi: Have another run through. | |

2020-11-19

| Task | Details | Picture(s) |
|------------------------------------|--|--|
| Scrimmage | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: Got robot working? ◦ Chirag: I was pit crew & stream manager. <ul style="list-style-type: none"> ▪ Why: It was my scrimmage role. ◦ Arjun: I was pit crew and Human player <ul style="list-style-type: none"> ▪ Why: I did that so we could have a good scrimmage • Learning <ul style="list-style-type: none"> ◦ Philip: Duct tape isn't always the answer, sometimes you have to snap a 3dp part ◦ Chirag: That shooting over the walls that don't have the goals gets you a minor penalty. ◦ Arjun: I learnt that rings can only go over the wall that has a goal on it. • Next Steps <ul style="list-style-type: none"> ◦ Philip: Tear robot apart and start mostly from scratch ◦ Chirag: We have our scrimmage interview tomorrow. ◦ Arjun: Optimize robot for competition |  |
| Stemarga Scrimmage Practice | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: Counted penalties for scrimmage practice. • Learning <ul style="list-style-type: none"> ◦ Teja: If you accidentally break the frame of the board, you don't get a penalty. • Next Steps | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Rishi: Pit crew and driver, so I mainly worked with the robot. <ul style="list-style-type: none"> ▪ Why: Those were my roles during the scrimmage. • Learning <ul style="list-style-type: none"> ◦ Rishi: The bottom portion of the intake keeps getting caught on the mat and duck tape is not enough to hold it up. • Next Steps <ul style="list-style-type: none"> ◦ Rishi: Look for a more permanent and viable solution for the intake. | |

2020-11-21

| Task | Details | Picture(s) |
|----------------------|---|--|
| Auto Code | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: I helped try to resolve issues with the auto code. <ul style="list-style-type: none"> ▪ Why: So we can have a successful auto by the competition ◦ Teja: Worked with Coach Alan and Arjun on the auto code to reduce the length the robot travels. <ul style="list-style-type: none"> ▪ Why: The robot was moving too far whenever the code was run. • Learning <ul style="list-style-type: none"> ◦ Arjun: I learned about the app team view and how it can be useful. ◦ Teja: I learned how to "zoom in" on individual lines of code. • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Finish resolving auto issues ◦ Teja: Figure out what's going wrong and fix it. | |
| Shooter | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: Mapping out where shooter can shoot a high goal from with fixed angle ◦ Chirag: Worked on getting shooter to shoot into high goal and seeing where on the field it could do so. <ul style="list-style-type: none"> ▪ Why: So we could shoot high goal in our actual matches. • Learning <ul style="list-style-type: none"> ◦ Philip: A large portion of the field is a good shot ◦ Chirag: That we can hit high goal from most of the field at a static position. • Next Steps <ul style="list-style-type: none"> ◦ Philip: Figure out the math for robot angle and power ◦ Chirag: Find out what power we need depending where we are on the field. |   |
| Mecanum Drive | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: Got second chassis almost driving <ul style="list-style-type: none"> ▪ Why: So we can test the wobbly goal • Learning • Next Steps <ul style="list-style-type: none"> ◦ Philip: Attach expansion hub and add code | |

| | | |
|---------------|--|--|
| Intake | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Eric: Prototyped a bottom roller design for the intake<ul style="list-style-type: none">▪ Why: So we could compare the intakes• Learning<ul style="list-style-type: none">◦ Eric: How soon our first qualifier is• Next Steps<ul style="list-style-type: none">◦ Eric: Compare | |
|---------------|--|--|

2020-11-23

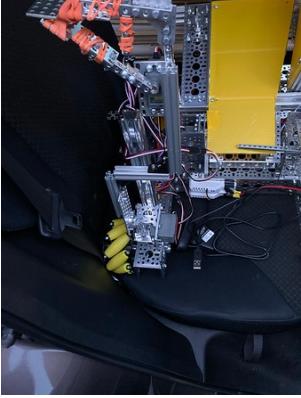
| Task | Details | Picture(s) |
|------------------------------|---|------------|
| Alliance Marker Holder | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |
| Software Diagrams | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Nithya: Looked at what the different software diagrams are <ul style="list-style-type: none"> Why: to take what we learned from the programming panel Teja: Looked at different types of software diagrams and started creating one. <ul style="list-style-type: none"> Why: We need the diagrams to demonstrate what we learned from the programming review panel. Learning <ul style="list-style-type: none"> Nithya: what the different software diagrams were Teja: I learned what software diagrams were. Next Steps <ul style="list-style-type: none"> Nithya: read the book for what exactly we need to do and do the diagrams Teja: Complete the diagrams. | |
| Presentation | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |
| Mapping & Dimensioning Robot | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Chirag: Worked on mapping and dimensioning of the robot and its components. <ul style="list-style-type: none"> Why: To see how we would actually map it in our real robot. Andrew: Drew out some rough drawings of spacing for the robot and started cad modeling <ul style="list-style-type: none"> Why: So we can figure out how much space we have for each component of the robot Learning <ul style="list-style-type: none"> Chirag: I learned about Condorcet voting, what it is, and how to use it. Andrew: That we have a lot more options for our chassis than I initially thought Next Steps <ul style="list-style-type: none"> Chirag: Finish mapping out the robot. Andrew: Finishing out modeling for spacing | |

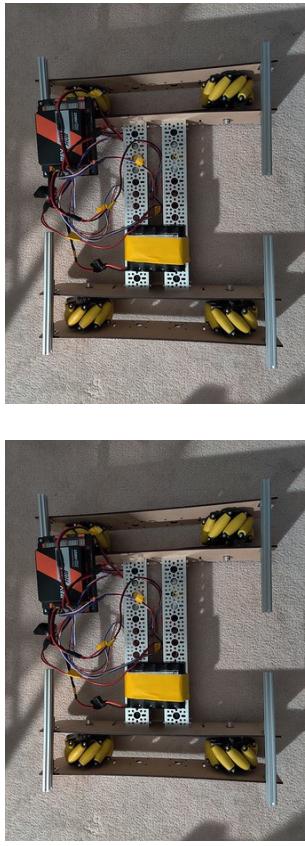
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|-----------------------------------|--|--|
| Come Up With Team Builders | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Ryan: Made a vid script and barely started team builders• Learning• Next Steps | |
| Minutes I Forgot Lol | <ul style="list-style-type: none">• Accomplished• Learning• Next Steps | |

2020-11-25

| Task | Details | Picture(s) |
|-----------|--|------------|
| Auto Code | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Arjun: I helped write autocode for different zones<ul style="list-style-type: none">▪ Why: I did that so we can score wobbly goal in different zones• Learning<ul style="list-style-type: none">◦ Arjun: I learnt how to write a blank action• Next Steps<ul style="list-style-type: none">◦ Arjun: Test it with robot | |

2020-11-28

| Task | Details | Picture(s) |
|-------------------------------|--|--|
| Engineering Portfolio | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Nithya: Made a list of changes based on the different awards for the portfolio <ul style="list-style-type: none"> Why: to make sure we fit all the criteria for the different awards Teja: Compared the portfolio to the award rubric to make sure everything was there. <ul style="list-style-type: none"> Why: We need to have everything needed in the portfolio. Learning <ul style="list-style-type: none"> Nithya: a lot of the awards repeat themselves Next Steps | |
| FLL Videos | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: I wrote 3 FLL video scripts. <ul style="list-style-type: none"> Why: We need to have the scripts ready for filming for the YouTube channel. Ryan: Worked on a video about presentations Learning <ul style="list-style-type: none"> Teja: I learned that Fun is a category evaluated in the CV FLL rubric. Next Steps <ul style="list-style-type: none"> Teja: Continue writing scripts. | |
| Wobbly Goal Mechanism | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Philip: Mounted and tested the wobbly goal mech Learning <ul style="list-style-type: none"> Philip: I learned that our current mech will work unless we have time to spare on a new one Next Steps <ul style="list-style-type: none"> Philip: Tune servo limits to make it easier |  |
| Alliance Marker Holder | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |

| | | |
|-----------------------|--|--|
| Custom Chassis | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Eric: Designed and built the first prototype of the custom chassis <ul style="list-style-type: none"> ▪ Why: So we can decide which chassis option is best ◦ Eric: Designed and built the first prototype of the custom chassis <ul style="list-style-type: none"> ▪ Why: So we can decide which chassis option is best • Learning <ul style="list-style-type: none"> ◦ Eric: 7mm flat wrenches from gobilda are great at plugging in power cables ◦ Eric: 7mm flat wrenches from gobilda are great at plugging in power cables • Next Steps <ul style="list-style-type: none"> ◦ Eric: Fix the belt tension and decide ◦ Eric: Fix the belt tension and decide |  |
| Intake | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Preeti: modified and tested the intake <ul style="list-style-type: none"> ▪ Why: so it doesn't drag against the ground and slow our robot, and we collect rings more effiecently • Learning <ul style="list-style-type: none"> ◦ Preeti: I learned that hurricane nuts are useful to attach something to a piece of gobilda gorail • Next Steps <ul style="list-style-type: none"> ◦ Preeti: add a rubber band to the bottom so there is a force on the ring that propels it upward |  |

Transfer

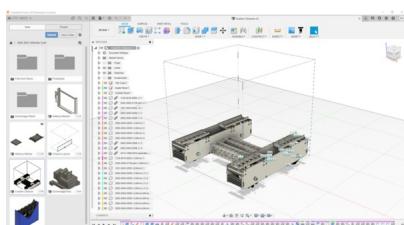
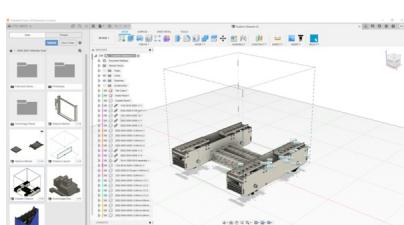
- Accomplished
 - Andrew: Worked on u transfer
 - Why: For the next iteration of our robot
- Learning
 - Andrew: How to use a chain break
- Next Steps
 - Andrew: Motorizing testing out wheel between transfer and intake
- Notes:
 - Andrew: Works well going up and over needs tweaking between intake and transfer



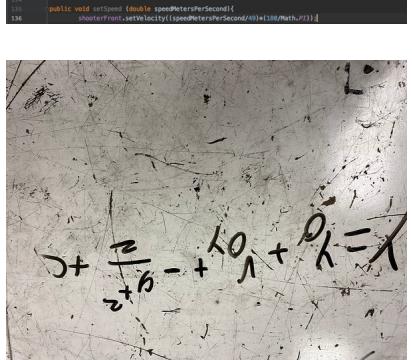
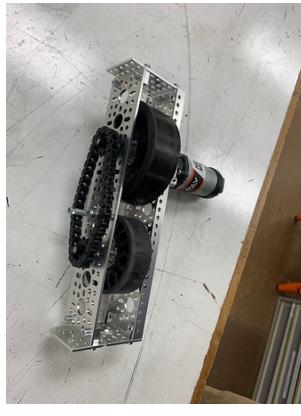
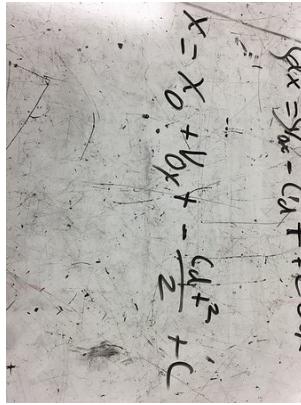
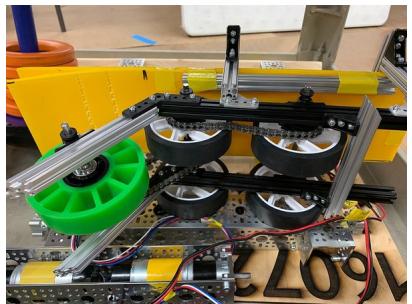
2020-11-30

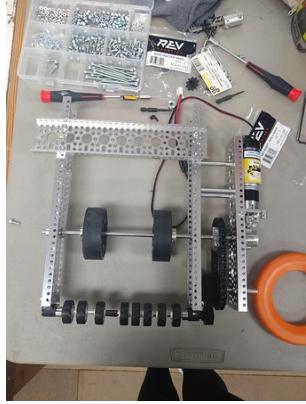
| Task | Details | Picture(s) |
|-----------------------|--|------------|
| Engineering Portfolio | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: made changes to the portfolio and made a list <ul style="list-style-type: none"> ▪ Why: to perfect the portfolio ◦ Teja: Made changes to the Portfolio based on the list made last meeting. <ul style="list-style-type: none"> ▪ Why: To make sure our Portfolio fits the requirements for awards. ◦ Preeti: updated the fundraising and experts pages • Learning <ul style="list-style-type: none"> ◦ Nithya: we had an unfinished section in the previous portfolio ◦ Teja: FLL Workshops can be considered as STEM Outreach. ◦ Preeti: Delrin is a plastic used in cnc and in REV plastic parts • Next Steps <ul style="list-style-type: none"> ◦ Preeti: add into lyx and update other pages | |
| Custom Chassis | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Andrew: Looked at the panels and CAD model and what we should change on it <ul style="list-style-type: none"> ▪ Why: To get a list of what we want to change for put custom chassis • Learning <ul style="list-style-type: none"> ◦ Andrew: About two color acrylic that is one color on top then another when you cut into it • Next Steps <ul style="list-style-type: none"> ◦ Andrew: Implementing changes | |
| Mecanum Drive | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: Analyze to find more attachment points <ul style="list-style-type: none"> ▪ Why: we want our hybrid chassis to be able to have stuff mounted to it • Learning <ul style="list-style-type: none"> ◦ Philip: I learned that we are going to make a hybrid chassis this year • Next Steps <ul style="list-style-type: none"> ◦ Philip: Redesign and order the plates • Notes: <ul style="list-style-type: none"> ◦ Philip: See clickup task https://share.clickup.com/t/h/emrcwr/18RGOSAAMA020UU for items | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2020-12-02

| Task | Details | Picture(s) |
|----------------|---|--|
| Custom Chassis | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Eric: CADed and priced the chassis<ul style="list-style-type: none">▪ Why: so we have a design to work off of◦ Eric: CADed and priced the chassis<ul style="list-style-type: none">▪ Why: so we have a design to work off of• Learning<ul style="list-style-type: none">◦ Eric: what types of files are wanted by different companies for their quotes◦ Eric: what types of files are wanted by different companies for their quotes• Next Steps<ul style="list-style-type: none">◦ Eric: buy the panels and build the chassis◦ Eric: buy the panels and build the chassis |   |

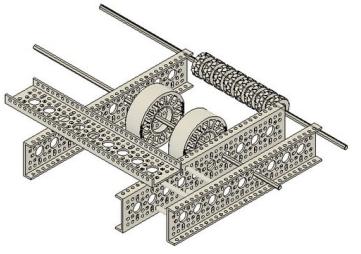
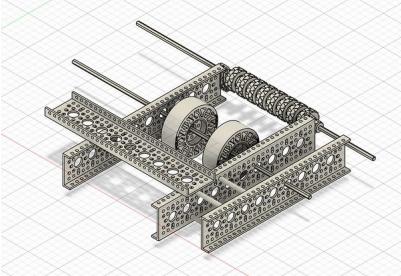
2020-12-05

| Task | Details | Picture(s) |
|----------|--|---|
| Shooter | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: Added angular velocity shooter math code to Master. Philip: Solved equations to find x and y at every time step <ul style="list-style-type: none"> Why: So we can figure out what angle to mount shooter and what speed to shoot Andrew: Putting it on one motor and making it more sturdy <ul style="list-style-type: none"> Why: Because we don't need to use two motors on the shooter Izaak: Calculated what x and y are at every time step <ul style="list-style-type: none"> Why: So that we can figure out the shooter velocity Learning <ul style="list-style-type: none"> Teja: I learned a lot about angular velocity. Philip: I learned that drag is a constant acceleration not a function of the velocity Andrew: How to break apart the plastic chain with a screwdriver Izaak: That the high goal is only double the height of the robot Next Steps <ul style="list-style-type: none"> Teja: Test when the shooter is operational again. Philip: Solve for theta Andrew: Testing it out |    |
| Transfer | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Chirag: Worked on chaining a couple wheels on the transfer so it could run from one motor. <ul style="list-style-type: none"> Why: So we could use other motors elsewhere. Learning <ul style="list-style-type: none"> Chirag: How to use rev chains and the rev chain tool. Next Steps <ul style="list-style-type: none"> Chirag: Properly reattach top wheels and then attach motor and test. |  |

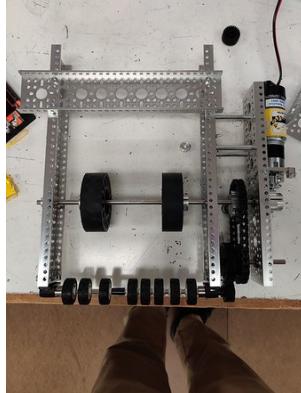
| | | |
|---------------------------------------|---|--|
| Alliance Marker Holder | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |
| Intake | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Preeti: Started working on a bottom roller intake(also testing different configurations with the metal plate, but that didn't work as well as we wanted to) • Learning <ul style="list-style-type: none"> ◦ Preeti: I learned that the 90° brackets have holes that are not centered, abt 2 mm off • Next Steps <ul style="list-style-type: none"> ◦ Preeti: Test with motors |  |
| FLL Videos | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Ryan: Worked on creating the video, what are team builders (or some other name but same concept) • Learning • Next Steps | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2020-12-07

| Task | Details | Picture(s) |
|------------------------|--|------------|
| Shooter | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: Worked on the math for the angle for the velocity of the shooter. Ryan: Worked On Shooter Math Philip: Worked on solving the shooter equations for theta <ul style="list-style-type: none"> Why: So we can know what exit angle our shooter needs to be at Learning <ul style="list-style-type: none"> Teja: I learned about derivatives and integrals in physics. Philip: I learned that forgetting gravity makes projectile math strange Next Steps <ul style="list-style-type: none"> Teja: Since we got stuck towards the end, next steps would be to finish. Philip: Finish solving an equation for t and plug it in to get the answer Notes: <ul style="list-style-type: none"> Philip: Current progress on solving | |
| Cad Wobbly Goal | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Nithya: Caded how we will pick up the wobbly goal <ul style="list-style-type: none"> Why: to be able to score for the wobbly goal Learning <ul style="list-style-type: none"> Nithya: the benefits of having only one moving piece and one standstill piece Next Steps <ul style="list-style-type: none"> Nithya: to clean it up fix values and a few floating pieces | |

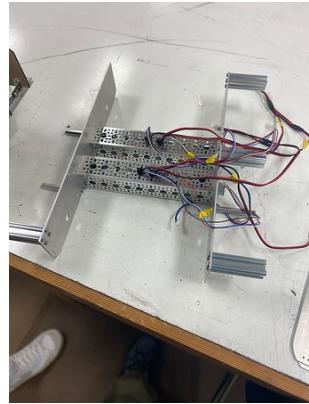
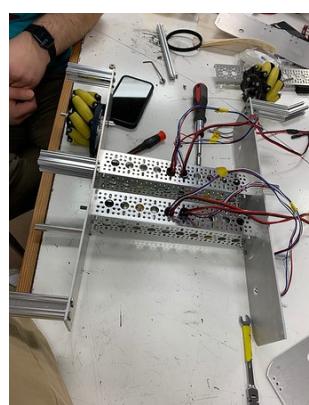
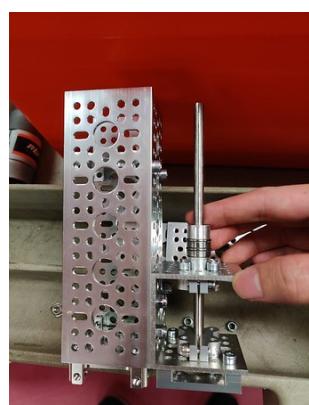
| | | |
|-----------------------------|---|--|
| | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: I worked on the CAD for the Intake. <ul style="list-style-type: none"> ▪ Why: In order to help our documentation and to test builds off of it/future iterations. ◦ Preeti: CAD for the bottom roller intake prototype <ul style="list-style-type: none"> ▪ Why: so we can map out side panels • Learning <ul style="list-style-type: none"> ◦ Chirag: How our new intake would look, as this was the first time I saw it. ◦ Preeti: I learnt how to configure a part in a joint • Next Steps <ul style="list-style-type: none"> ◦ Chirag: We need to add the motor, mounts for it, mount small wheels and its axle, add hubs, and add shaft collars. ◦ Preeti: add motors, hubs, shaft collars etc. and side panels |   |
| Engineering Notebook | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Andrew: worked on problems we encountered <ul style="list-style-type: none"> ▪ Why: for our engineering notebook ◦ Arjun: I helped convert math into lyx, and work on team organization. <ul style="list-style-type: none"> ▪ Why: So we could have a better engineering notebook • Learning <ul style="list-style-type: none"> ◦ Andrew: that we are asking a lot more questions about what we want to learn before prototyping instead of prototyping and seeing what we learned I think that this is helping with the time constraints we have to learn what we want to learn ◦ Arjun: I learned how to input math into LyX • Next Steps <ul style="list-style-type: none"> ◦ Andrew: having other check over and add as well as make them more into paragraphs or go more into depth into them ◦ Arjun: Convert all math in drive and smugmug to lyx | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2020-12-08

| Task | Details | Picture(s) |
|--------|---|--|
| Intake | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Eric: Built a prototype for a bottom roller intake<ul style="list-style-type: none">▪ Why: To test the concept• Learning<ul style="list-style-type: none">◦ Eric: Using a flathead screwdriver helps break plastic chain• Next Steps<ul style="list-style-type: none">◦ Eric: Test the intake |  |

2020-12-12

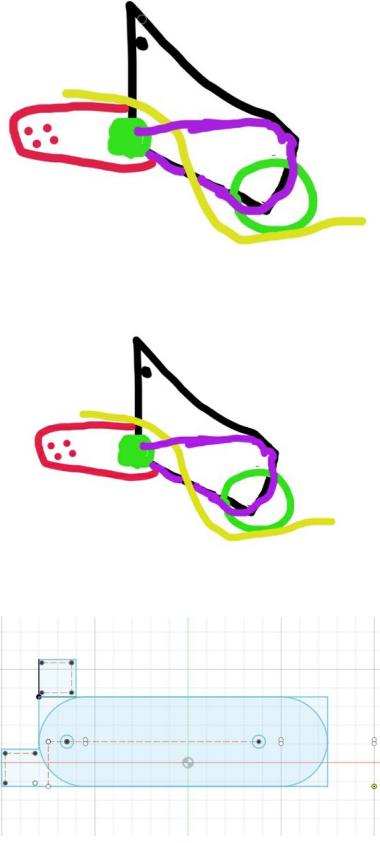
| Task | Details | Picture(s) |
|------------|---|--|
| FLL Videos | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: Created 3 FLL scripts <ul style="list-style-type: none"> Why: Videos for the YouTube channel need to be filmed Learning Next Steps <ul style="list-style-type: none"> Teja: Continue writing scripts for other videos | |
| Transfer | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Chirag: Worked on chain tensioning and attaching the last 2 wheels. <ul style="list-style-type: none"> Why: So that the transfer could run smoothly. Arjun: I designed a simple camera mount, and worked on transfer, and when I was online, I worked on editing an fll video <ul style="list-style-type: none"> Why: So we can have footage from our intake Learning <ul style="list-style-type: none"> Chirag: That we don't have hex to hex shaft couplers. Arjun: I learned that the razor tool cuts in premiere. Next Steps <ul style="list-style-type: none"> Chirag: Find a way to attach a motor, test, then make necessary changes. Arjun: finish vid |  |
| Shooter | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Preeti: Changed the configuration of the chain connecting the wheels, made it sturdier and tested <ul style="list-style-type: none"> Why: to make it easier to mount on the robot Learning <ul style="list-style-type: none"> Preeti: I learned what a wire protector is(for channel) Next Steps <ul style="list-style-type: none"> Preeti: replace 9 hole channel with 8 hole channel(need to order from gobilda) to mount it on the robot |  |

| | | |
|---------------------------------|--|---|
| <h3>Custom Chassis</h3> | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: I built a jig for tapping the gorail and then started assembling <ul style="list-style-type: none"> ▪ Why: So we can have a faster tapping process ◦ Andrew: Worked on assembling the custom chassis ◦ Eric: Cut and tapped the gorail <ul style="list-style-type: none"> ▪ Why: So we will have a custom chassis • Learning <ul style="list-style-type: none"> ◦ Philip: I learned that hex heads are immeasurable better than button heads ◦ Andrew: About tapping fluid and what it is ◦ Eric: Use a jig when tapping a large number of holes • Next Steps <ul style="list-style-type: none"> ◦ Philip: Finish assembling ◦ Andrew: Finishing it with all the tapped pieces ◦ Eric: Build chassis |     |
| <h3>Alliance Marker Holder</h3> | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

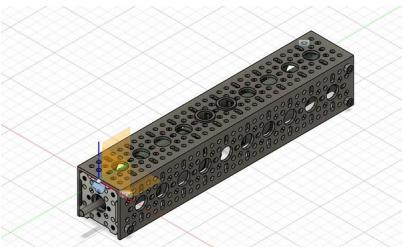
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| Minutes I Forgot Lol | <ul style="list-style-type: none">• Accomplished• Learning• Next Steps | |
|---------------------------------|--|--|

2020-12-14

| Task | Details | Picture(s) |
|-----------------------------|---|------------|
| Wobbly Goals | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |
| Engineering Notebook | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: added click up tasks, finished the sustainability plan, and added charts for the budget <ul style="list-style-type: none"> ▪ Why: to get more done in the eng notebook • Learning <ul style="list-style-type: none"> ◦ Nithya: how to add charts in google sheets • Next Steps <ul style="list-style-type: none"> ◦ Nithya: finish the budget | |
| Promote Video | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Andrew: Brainstorming where to go off of for the video because the question is pretty vague <ul style="list-style-type: none"> ▪ Why: So we have something to submit for promote ◦ Eric: Brainstormed ideas for promote video theme <ul style="list-style-type: none"> ▪ Why: So we can think through the ideas ◦ Rishi: Came up with ideas for a potential promote video. <ul style="list-style-type: none"> ▪ Why: To start the process to create a promote video. • Learning <ul style="list-style-type: none"> ◦ Andrew: That the promote question is why does FTC work ◦ Eric: The question for the video is for FTC not for FIRST ◦ Rishi: The question is very vague so we have lots of room to work with it. • Next Steps <ul style="list-style-type: none"> ◦ Andrew: Brainstorm more about where to go with the video ◦ Eric: Continue brainstorming ◦ Rishi: Keep brainstorming and come up with a solid idea. | |

| | | |
|---------------------------------------|---|--|
| | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: I worked on the cad for the intake side panels. <ul style="list-style-type: none"> ▪ Why: To use for our competition intake. ◦ Preeti: CADed side plates for the intake <ul style="list-style-type: none"> ▪ Why: for the new intake • Learning <ul style="list-style-type: none"> ◦ Chirag: I learned that we have a competition folder in Fusion. ◦ Preeti: I learned how to use the construction tool in sketch • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Finish the cad, find the angle we want to mount it at, combine it with the rest of the intake cad, see where we can mount motor, cut, then test and make necessary changes. ◦ Preeti: measure the angle that bottom roller has to be at(on sat), fillet the sides |  |
| Shooter | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: Finished the shooter math and started designing on Adobe Illustrator. <ul style="list-style-type: none"> ▪ Why: We need to start using cad to make the mechanism. • Learning <ul style="list-style-type: none"> ◦ Teja: I learned that the transfer does not use Rhino Wheels - it uses REV wheels. • Next Steps <ul style="list-style-type: none"> ◦ Teja: Complete the design. | |
| Alliance Marker Holder | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2020-12-19

| Task | Details | Picture(s) |
|-----------------------------|--|--|
| Custom Chassis | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Preeti: CADed the cross piece (channel + motors) <ul style="list-style-type: none"> ▪ Why: old one was funky ◦ Arjun: I worked on assembling the custom chassis <ul style="list-style-type: none"> ▪ Why: I did that so we could start getting other mechanisms onto the robot • Learning <ul style="list-style-type: none"> ◦ Preeti: how to use sectional analysis ◦ Arjun: I learned that bearings need to go on the outside of the panel. • Next Steps <ul style="list-style-type: none"> ◦ Preeti: add to whole robot cad ◦ Arjun: Add the proper belt |  |
| Engineering Notebook | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Preeti: Problems we encountered • Learning <ul style="list-style-type: none"> ◦ Preeti: How to use sectional analysis in cad • Next Steps <ul style="list-style-type: none"> ◦ Preeti: explain more problems and add to lyx | |
| Transfer | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Andrew: Worked on adjusting the transfer <ul style="list-style-type: none"> ▪ Why: So that we have a more reliable transfer • Learning <ul style="list-style-type: none"> ◦ Andrew: You can actually break a chain like snap the metal bit • Next Steps <ul style="list-style-type: none"> ◦ Andrew: More adjustment and structure added |   |

| | | |
|----------------------|--|--|
| FLL Videos | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: I started the presentation for an FLL Video <ul style="list-style-type: none"> ▪ Why: So we can upload more fll videos • Learning <ul style="list-style-type: none"> ◦ Arjun: I learned that I could drag and drop files and transitions into premiere • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Finish the video | |
| Intake | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: Worked on figuring out intake angle and working on sideplates. <ul style="list-style-type: none"> ▪ Why: To use on our competition robot. • Learning <ul style="list-style-type: none"> ◦ Chirag: What the colinear constraint does in Fusion 360. It aligns the center of each element selected into one linear path. • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Finish sideplates, cut, assemble, test, find out how to mount, mount. | |
| Brainstorming | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Rishi: Thought about more outreach ideas and worked on some potential ideas. <ul style="list-style-type: none"> ▪ Why: So we have more interaction with other teams and the first community. • Learning <ul style="list-style-type: none"> ◦ Rishi: That we are on a short time frame. • Next Steps <ul style="list-style-type: none"> ◦ Rishi: Keep working and planning and bring ideas up to teams attention. | |

2020-12-20

| Task | Details | Picture(s) |
|------------------------|--|------------|
| Alliance Marker Holder | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Rishi: Worked on robot showcase idea.▪ Why: So that we have more interaction with other teams and the FTC community.• Learning<ul style="list-style-type: none">◦ Rishi: We need to reach out to more teams.• Next Steps<ul style="list-style-type: none">◦ Rishi: Creating things such as flyers and tik toks to spread awareness of this meeting. | |

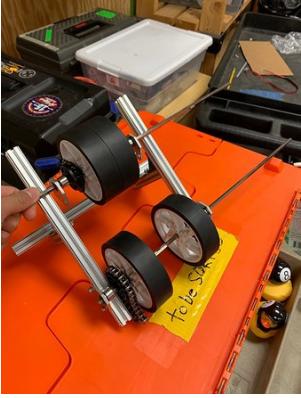
2020-12-21

| Task | Details | Picture(s) |
|----------------------|--|------------|
| Engineering Notebook | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: added season goals and put problems we encountered in lyx <ul style="list-style-type: none"> ▪ Why: to finish up the eng notebook ◦ Teja: Finished problems we encountered for the engineering notebook. <ul style="list-style-type: none"> ▪ Why: We need to follow the "rubric" for the awards. • Learning <ul style="list-style-type: none"> ◦ Nithya: we are doing our own robot showcase ◦ Teja: I learned that we had problems with the Intake in the past. • Next Steps <ul style="list-style-type: none"> ◦ Nithya: push everything onto git | |
| Intake | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: Worked on assembling intake and seeing how it could be mounted. <ul style="list-style-type: none"> ▪ Why: To use on our competition bot. • Learning <ul style="list-style-type: none"> ◦ Chirag: That one of the sprocket sizes that we needed, we don't actually have. It will probably have to be 3d printed. • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Once we get a good-sized sprocket, finish the belting, test, and attach. | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2020-12-26

| Task | Details | Picture(s) |
|------------------------|--|------------|
| Alliance Marker Holder | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |
| Programming | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: Changed the mecanum drive and checked code for JavaDoc comments. • Learning • Next Steps | |
| Engineering Notebook | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: Worked on CADing sponsorship info. • Learning • Next Steps | |
| FLL Videos | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: Created scripts for FLL videos • Learning • Next Steps | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

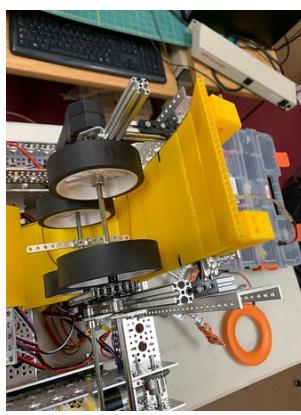
2021-01-02

| Task | Details | Picture(s) |
|------------------------|---|---|
| Promote Video | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: Wrote script and came up with ideas for the Promote video. Why: The promote video needs to be completed. Learning <ul style="list-style-type: none"> Teja: The criteria for the promote video. Next Steps <ul style="list-style-type: none"> Teja: Finish recording | |
| FLL Videos | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: Wrote scripts for FLL videos Learning Next Steps | |
| Alliance Marker Holder | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Andrew: Wheeled part of the transfer <ul style="list-style-type: none"> Why: So we can have our rings go out the same side Learning <ul style="list-style-type: none"> Andrew: That we can't do one wheel with our current setup because it puts too much pressure on the ring and the wheels slip Next Steps <ul style="list-style-type: none"> Andrew: Putting the second set of wheels on, motor mixing, and putting the wall on |  |
| Presentation | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Nithya: worked on the presentation and looked at script <ul style="list-style-type: none"> Why: to have a presentation Learning <ul style="list-style-type: none"> Nithya: how many teams we helped this year Next Steps <ul style="list-style-type: none"> Nithya: finish presentation | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |

2021-01-04

| Task | Details | Picture(s) |
|------------------------------|---|------------|
| Engineering Portfolio | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Nithya: got the eng portfolio shared and walked through also went through eng notebook stuff to get done <ul style="list-style-type: none"> Why: to get the last bits of the eng notebook done Learning <ul style="list-style-type: none"> Nithya: how indesign work Next Steps <ul style="list-style-type: none"> Nithya: work on the portfolio | |
| Engineering Notebook | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: Made changes in the notebook based on the criteria. <ul style="list-style-type: none"> Why: So that the notebook is ready for competition. Nikhil: We created a list of all entries that need to be completed. <ul style="list-style-type: none"> Why: So that we can have a finished engineering notebook. Learning <ul style="list-style-type: none"> Teja: I learned how to fix a rendering error. Nikhil: How to use InDesign, how to use the Slide Master. Next Steps <ul style="list-style-type: none"> Teja: Finish the list of changes to be made. Nikhil: Finish all tasks that need to be completed. | |
| Presentation | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: Edited the presentation Learning Next Steps | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |

2021-01-09

| Task | Details | Picture(s) |
|------------------------|--|---|
| Engineering Notebook | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Teja: Worked on goals and the history of tasks. Learning <ul style="list-style-type: none"> Teja: I learned that I can render individual pages but not the whole thing. Next Steps <ul style="list-style-type: none"> Teja: Finish history of tasks | |
| Transfer | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Chirag: Worked on getting bottom transfer functioning. <ul style="list-style-type: none"> Why: To use on robot Andrew: Worked on transfer mounting and getting to work <ul style="list-style-type: none"> Why: So we can transfer rings up and around to our shooter Eric: Tried different ideas for the bottom stage of the transfer Learning <ul style="list-style-type: none"> Chirag: We need more plastic chain Andrew: That our robot is pretty modular so we can pretty easily fix/change parts of our robot Eric: shaft collars fit around standoffs which allows them to be used as belt tensioners Next Steps <ul style="list-style-type: none"> Chirag: It slips, fix that and test. Andrew: Cutting off extra hex shaft, adjust bar on wheel, make thing for top of transfer Eric: attach to robot |   |
| Alliance Marker Holder | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |

2021-01-10

| Task | Details | Picture(s) |
|------------------------|--|------------|
| Alliance Marker Holder | <ul style="list-style-type: none"> Accomplished Learning Next Steps | |
| Wiring | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Arjun: I worked on wire management to make sure that the wires were out of the way so the wobbly goal mechanism could be mounted properly. Why: I did that so the wires can be easily accessed if needed. Learning <ul style="list-style-type: none"> Arjun: I learned that the lights receive their signal from a servo port. Next Steps <ul style="list-style-type: none"> Arjun: Practice runs | |
| Lights | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Arjun: I was helping plan where the lights would be mounted on the robot. Why: So our robot looks better Learning <ul style="list-style-type: none"> Arjun: I learned that the LEDs get their signal from a servo port. Next Steps <ul style="list-style-type: none"> Arjun: Finish mounting LED, and solder. | |
| Sponsor Panel | <ul style="list-style-type: none"> Accomplished <ul style="list-style-type: none"> Arjun: I mounted the brackets on the sponsor panel <ul style="list-style-type: none"> Why: So we could get the sponsor panel on the robot. Learning <ul style="list-style-type: none"> Arjun: I learned that the LEDs get their signal from servo ports Next Steps <ul style="list-style-type: none"> Arjun: laser-cut, and mount sponsor panels | |

2021-01-11

| Task | Details | Picture(s) |
|-----------------------|--|------------|
| Outreach | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Andrew: Worked on planning outreach <ul style="list-style-type: none"> ▪ Why: So we have a plan for our meeting on Monday ◦ Nikhil: I worked on the outreach meeting questions. <ul style="list-style-type: none"> ▪ Why: So that we can talk with other teams. • Learning <ul style="list-style-type: none"> ◦ Andrew: That we are using TikTok to promote our team ◦ Nikhil: I learned about how to spread the word about events with social media (tik tokk, Instagram). • Next Steps <ul style="list-style-type: none"> ◦ Andrew: Hold the event ◦ Nikhil: Host the event | |
| Software Diagrams | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: Worked on the Layered View Software Diagram. • Learning <ul style="list-style-type: none"> ◦ Teja: I learned what a layered view diagram was. • Next Steps <ul style="list-style-type: none"> ◦ Teja: Complete and convert into a png file | |
| Engineering Portfolio | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: Worked on the helping other teams successful goals portion <ul style="list-style-type: none"> ▪ Why: to get the portfolio done • Learning <ul style="list-style-type: none"> ◦ Nithya: how to put images in • Next Steps <ul style="list-style-type: none"> ◦ Nithya: finish successful | |

| | | |
|-----------------------------|--|--|
| Promote Video | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: Worked on the promote video rough shooting. <ul style="list-style-type: none"> ▪ Why: To see how we could do the real one and what needs to change. ◦ Arjun: I helped film the promote video, and brainstorm b-roll <ul style="list-style-type: none"> ▪ Why: So we could make a good promote video. ◦ Eric: Ran through the video and searched for b-role <ul style="list-style-type: none"> ▪ Why: Find issues in the video to fix • Learning <ul style="list-style-type: none"> ◦ Chirag: That slack distorts my audio when I record with QuickTime ◦ Arjun: I learned that windows has its own camera app. ◦ Eric: How to think about a video during the scripting stage from the perspective of the production and post stages • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Make necessary changes, find B-Roll, have intro/outro, make sure its a good time, reshoot. ◦ Arjun: Finish filming b-roll, and film promote video ◦ Eric: Lengthen the video | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2021-01-12

| Task | Details | Picture(s) |
|-----------------------|--|------------|
| Engineering Portfolio | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Nithya: Worked on the portfolio helping teams section<ul style="list-style-type: none">▪ Why: to make progress on the portfolio• Learning<ul style="list-style-type: none">◦ Nithya: how to use InDesign• Next Steps<ul style="list-style-type: none">◦ Nithya: finish helping teams section | |

2021-01-16

| Task | Details | Picture(s) |
|------------------------------|---|------------|
| Software Diagrams | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Teja: Ordering the software layering view diagram • Learning <ul style="list-style-type: none"> ◦ Teja: I learned that qq mechanism and qq test are on the same level on the diagram. • Next Steps <ul style="list-style-type: none"> ◦ Teja: Finish | |
| Engineering Portfolio | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: The helping team's section <ul style="list-style-type: none"> ▪ Why: to make progress on the portfolio • Learning <ul style="list-style-type: none"> ◦ Nithya: the fonts we are using are from outside places • Next Steps <ul style="list-style-type: none"> ◦ Nithya: finish the 3 remaining sections | |
| | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2021-01-18

| Task | Details | Picture(s) |
|-----------------------------|--|------------|
| | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |
| Mount Webcam | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: Worked on mounting webcam, mounting eyes, and checklist for legality. ▪ Why: To be ready for competition. • Learning <ul style="list-style-type: none"> ◦ Chirag: I learned that we need to reprint the safety stickers. • Next Steps <ul style="list-style-type: none"> ◦ Chirag: Actually mount webcam with our prototype onto the robot. | |
| Promote Video | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Chirag: Worked on promote video, finding background music, finding out how it would flow, etc. ▪ Why: For our promote video • Learning <ul style="list-style-type: none"> ◦ Chirag: What websites we can use for free to use music • Next Steps <ul style="list-style-type: none"> ◦ Chirag: find background music, Shoot, and edit | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2021-01-23

| Task | Details | Picture(s) |
|------------------------------|---|--|
| Convert To Lyx | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |
| Making Robot Legal | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Philip: Made robot legal! <ul style="list-style-type: none"> ▪ Why: So we can compete • Learning • Next Steps |  |
| Engineering Portfolio | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: I reviewed the engineering portfolio <ul style="list-style-type: none"> ▪ Why: So we could have an improved portfolio. • Learning <ul style="list-style-type: none"> ◦ Arjun: I learned that you can strikethrough and suggest replacements on an InDesign doc. • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Implement the changes | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2021-01-24

| Task | Details | Picture(s) |
|-----------------------------|--|------------|
| Field Personnel Meet | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Arjun: I went to field personnel meet<ul style="list-style-type: none">▪ Why: So I could learn about the roles of "field personnel"• Learning<ul style="list-style-type: none">◦ Arjun: I learned that as long as a ring has been shot before the buzzer rings, it is valid for that period.• Next Steps | |

2021-01-25

| Task | Details | Picture(s) |
|-----------------------------|--|------------|
| Presentation | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Arjun: I worked on rescripting the presentation for the qualifier. ▪ Why: So we could get a full run-through • Learning <ul style="list-style-type: none"> ◦ Arjun: I learned that a 1*1 table can be used as a box. • Next Steps <ul style="list-style-type: none"> ◦ Arjun: Work on run through, revise, go through with original people. | |
| Engineering Notebook | <ul style="list-style-type: none"> • Accomplished <ul style="list-style-type: none"> ◦ Nithya: The business plan ▪ Why: to get it done • Learning <ul style="list-style-type: none"> ◦ Nithya: what exactly is needed in the business plan • Next Steps <ul style="list-style-type: none"> ◦ Nithya: finish it | |
| Minutes I Forgot Lol | <ul style="list-style-type: none"> • Accomplished • Learning • Next Steps | |

2021-01-30

| Task | Details | Picture(s) |
|-----------------------------|---|------------|
| Minutes I Forgot Lol | <ul style="list-style-type: none">• Accomplished<ul style="list-style-type: none">◦ Preeti: Updated the javadoc<ul style="list-style-type: none">▪ Why: So the code will render properly• Learning<ul style="list-style-type: none">◦ Preeti: I learned how to create a javadoc• Next Steps | |