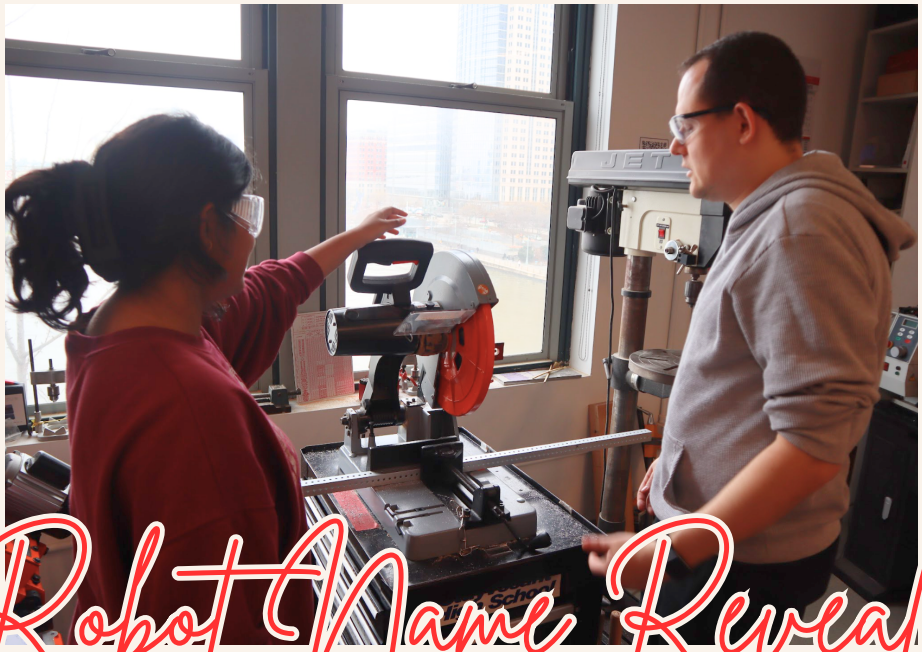


stuypulse 694

week 3 newsletter



Robot Name Reveal

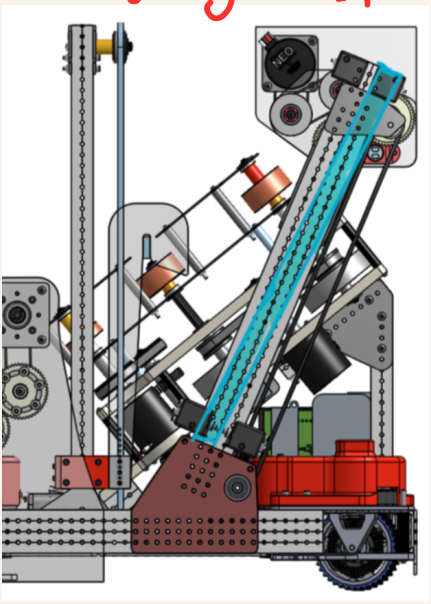
AFTER CAREFUL CONSIDERATION, STUYPULSE IS EXCITED TO ANNOUNCE THE NAME OF THE 2024 ROBOT, IZZI! THE NAME WAS THOUGHTFULLY DECIDED BY OUR NUMBER ONE SPONSOR, THE STUYVESANT PARENTS ASSOCIATION. “IZZI” IS NAMED AFTER ISABELLE CLARK, A 2013 STUYVESANT ALUMNA, WHO SPOKE AT THE 2024 CELEBRATE SCIENCE EVENT, AN EVENT PROMOTING RESEARCH DONE BY SENIORS. LET'S MAKE THE MOST OUT OF THIS SEASON AND WIN GOLD WITH IZZI!

engineering



AT THE START OF WEEK 3, THE ENGINEERING DEPARTMENT FINALIZED THEIR CAD DESIGN AFTER CAD MARATHON OVER THE WEEKEND. THE ENGINEERING DEPARTMENT, WHICH IS SPLIT INTO MECHANISM GROUPS, REVISITED THEIR PROTOTYPES AND MADE FINISHING TOUCHES TO THE MECHANISMS.

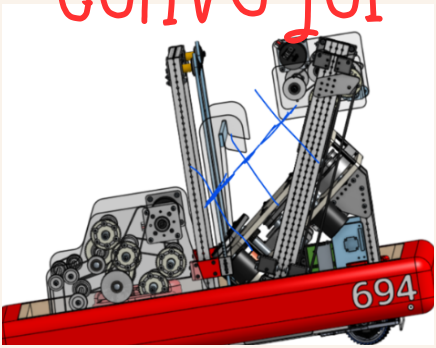
Lift group



THE LIFT GROUP HAS MADE IMPROVEMENTS TO THE LIFT BY SHRINKING THE BASE SO MORE SPACE CAN BE USED FOR THE PULLEYS.
SIMILARLY, THE DRIVETRAIN GROUP HAS DECIDED TO MINIMIZE THE SIZE OF THE ALUMINUM ON THE PLATE OF THE ROBOT.

conveyor

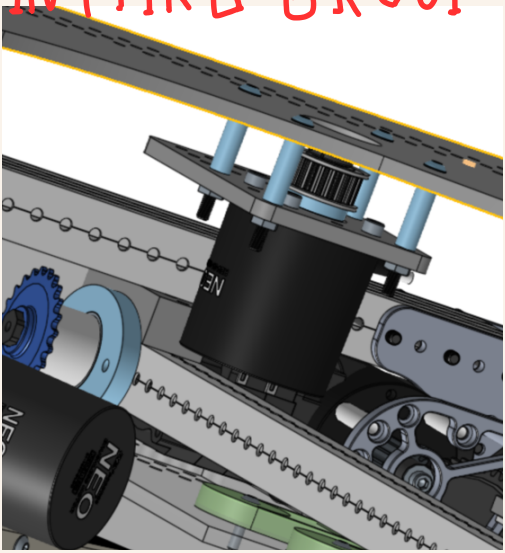
THE CONVEYOR GROUP HAD A COUPLE DISAGREEMENTS THIS WEEK, BUT EVERYTHING WORKED OUT IN THE END AS THE GROUP FIGURED OUT A WAY TO CONNECT THE CONVEYOR TO THE AMP WHEELS DESPITE HAVING CONFLICTING MECHANISMS.



THIS WEEK, THE SHOOTER GROUP REMOVED AND SHRANK THE PULLEYS OF THE SHOOTER. A TAKEAWAY THIS WEEK FROM THE SHOOTER GROUP IS TO BE MORE CAREFUL WHEN DEALING WITH BIG REPAIRS.

THE AMP GROUP CAME TOGETHER TO REMOVE THE GEARBOX, A SET OF CASED GEARS, ON THE BOT. THE IMPORTANCE OF PRIORITIZING ANGLE AND HEIGHT WHEN SHOOTING THE NOTE WAS ALSO DISCUSSED THIS WEEK WITHIN THE GROUP.

INTAKE GROUP



THE INTAKE GROUP CHANGED THE PLACEMENT OF THE MOTOR WHICH HELPS US INCREASE THE EFFICIENCY OF LOADING THE PARTS.

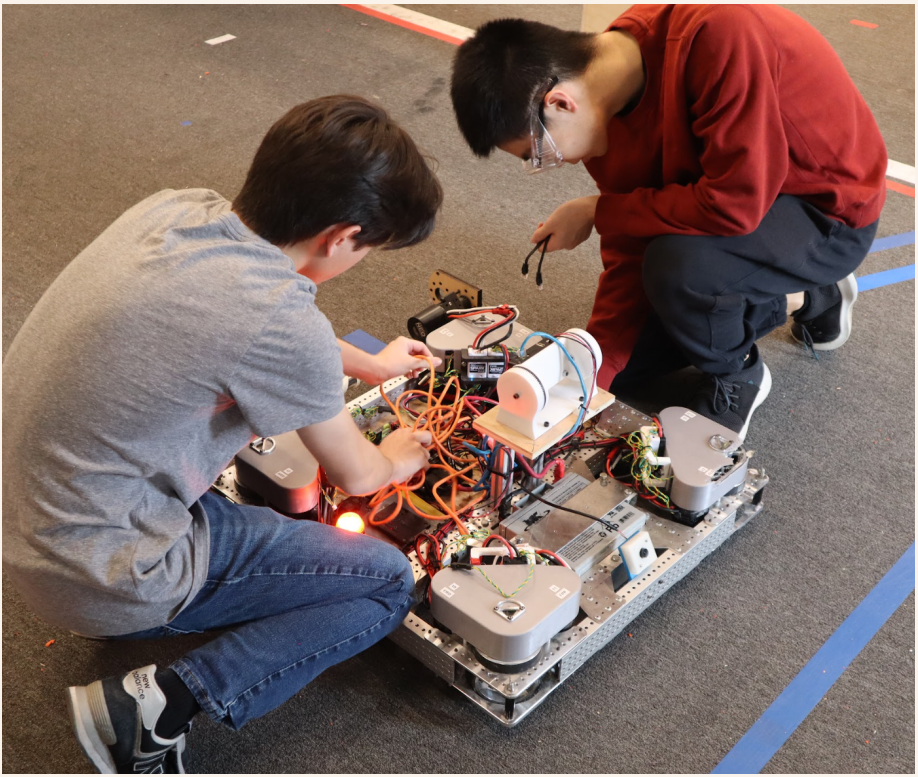
THE CLIMB GROUP THIS WEEK DID SOME REVISIONS AND DECIDED TO USE STRONGER TUBES TO INCREASE THE STRENGTH OF THE ROBOT.

software



OVER THE WEEK, MEMBERS OF THE SOFTWARE DEPARTMENT DIVIDED OFF INTO SEPARATE GROUPS TO WRITE AND COMPLETE THE CODES FOR EACH INDIVIDUAL OF THE ROBOT ON JAVA. THE PARTS IN INCLUDE THE AMP/TRAP, LIFT, SHOOTER, VISION, CLIMBER, CONVEYOR, SWERVE, AND INTAKE WHICH ARE ALL ASPECTS OF THE GAME THAT THE ENGINEERING DEPARTMENT IS ALSO MAKING MECHANISMS FOR. SOME PARTS OF THE CODE INCLUDED CREATING NECESSARY OBJECTS (MOTORS, LIGHT SWITCHES, PID CONTROLLERS, AND ENCODERS) WITH JAVA.

THE RESPECTIVE GROUPS GOT TO WORK COMPLETING TASKS LIKE BLOCKING OUT CLASSES, ORGANIZING INFORMATION FLOW THROUGH THE SOFTWARE SYSTEM, AND MORE. THE SWERVE GROUP, WHICH IS CODING FOR OUR ROBOT'S ABILITY TO MOVE, WENT OVER HOW SWERVE WORKS AND CODED SOME OF THE MOVEMENT. TOWARDS THE END OF THE WEEK, SOME GROUPS MERGED SO THE CODE CAN RUN MORE SMOOTHLY. OTHER GROUPS CODED SIMULATORS FOR OUR ROBOT, WHICH WILL THEN BE USED TO TEST OUR ROBOT'S CAPABILITIES VIRTUALLY AND ALSO TO GIVE OUR DRIVERS ONLINE PRACTICE OPPORTUNITIES.



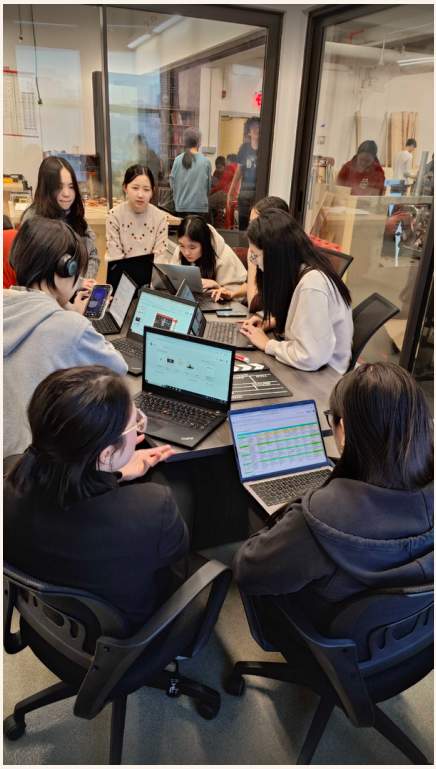
business



BUSINESS THIS WEEK MADE A SPREADSHEET FOR ALL THE PLACES THAT WERE CONTACTED FOR PRESENTATIONS AND DEMOS MADE. THE LIST INCLUDED LOCAL SCHOOLS, MUSEUMS, AND LIBRARIES. THE LIST WENT INTO DETAIL WITH THE TYPE OF EVENT (PRESENTATION OR DEMO), ADDRESS, IF THEY RESPONDED, CONTACT INFORMATION, DATE PROPOSED, POINT OF CONTACT, AND OTHER DETAILS.

WE TOOK PHOTOS AND VIDEOS FOR THE WEEK 3 RECAP VIDEO AND POST. THEY WERE POSTED ON YOUTUBE, INSTAGRAM, AND TWITTER. PROMO VIDEOS FOR THE MOMATH PRESENTATION WERE ALSO FILMED AND POSTED ON TIKTOK AND INSTAGRAM. ADDITIONALLY, A POST REGARDING THE MOMATH PRESENTATION WAS POSTED ON INSTAGRAM AS WELL.





THE BUSINESS DEPARTMENT CONTINUED WRITING AND EDITING THE SC JOHNSON GRANT AS WELL AS THE IMPACT AWARD ESSAY. ANY UPDATES THAT WERE MADE FOR THE IMPACT AWARD ESSAY WERE REVIEWED AND AN EXECUTIVE SUMMARY WAS WRITTEN. MENTORS AND MEMBERS OF TEAM MADE EDITS AND SUGGESTIONS OF WHAT WAS WRITTEN ALREADY FOR BOTH THE GRANT AND ESSAY.

Upcoming events

JANUARY 30TH: FLL GIRLS SCOUTS

FEBRUARY 12TH: BAKE SALE

FEBRUARY 17TH: MOMATH PRESENTATION







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