**Make It Real CAD Piece**

Hello, my name is Lyndon and I will be telling you about team 56445C’s custom CAD make it real piece. Our custom piece is here to solve the problem of building your own claw with magnets being the main piece, since this task can be very tedious. This design will solve that very problem. Even though magnets aren’t very versatile in a situation with magnets it would excel. Another use for this piece is that it could serve as a claw, magnets involved or not. This part is supposed to be installed in the front of the robot not on an arm or anything other unless you feel it would have better performance in another spot. In fact we originally had a windmill idea which when reviewed it was bound to go downhill. This piece is meant to be powered by a motor and would work best if you built a plate or wall on front of your robot. This design took much thought on if the purpose was a good one. I really wondered on if the design should have been revamped to yet another design or should we see how this piece could do if we stayed with the current idea. We decided we were going to stay with this strange idea. In the process of using Tinkercad we had to do much scaling for the piece to be to scale with an actual sizeable part for a robot. The design had frequently changed from a pincer or claw to an actual conventional magnet shape. Another tedious process during Tinkercad was making the pieces used to create part symmetrical with each other. We then had to export our design from Tinkercad and import it onto Cura to get it ready for 3D printing. Apart from the last final touches Cura provided little support. Although Cura did provide the ability to get the resources to program our 3D printer to actually print out our piece so Cura very much did help a lot of the process, after the printing of our piece it provided the pictures we needed to complete our report and It also gave us the opportunity to see how it looks on a robot itself which we attached it to. To sum it all up we had used CAD to design our piece and had then used Cura to prepare our design for printing after everything we finally printed out a successful piece.