## **Culmination progress 2**

This set of progress reports I accomplished and finished alot. I had a finished seat and described the building process at the end of this report. The first steps of this were trial and testing. I had started with cutting a piece of wood or piece that contained use for both bits and cutting styles. This is where I learned a lot by making mistakes. One was something called tabs, which held the piece of wood down which I didn't think about. I say this because the first text cut had actually flown from the cnc machine because i didn't have anything holding it down. Also with this I learned about multiple passes, this was to not overheat the bit or prevent it from breaking. Once the testing went smoothly and going over simulations, I decided to green light the first sheet. The first sheet was the ½" contours. It was the longest but I wanted it to go slow to make sure everything went smoothly. The first 1/4" cuts went well so I decided to do the second cut on the sheet which is the dog bones using the 1/8" bit. Dog bones simply help with fitting square or rectangular wood within each other. Now that this sheet went fine, I did the exact same for the second sheet and that went well, I popped out the pieces and then started staining. After staining and waiting for it to cure, I started the assembly of the seat frame. This was probably the easiest part and most simple part of the project, just screwing pieces of wood together. Now that I had the frame and seat ready it was time for cutting the most complex part of the project which is the seat skin. It was difficult due to how thin and brittle the wood is. I had to make these thin slits in \( \frac{1}{4} \)" thin wood so it would bend. The first sheet had initially messed up since I used a bigger screw which lifted the wood and cut through the skin. Now that I found and fixed my problem I tried again and this time it layed fine. I had to soak it first in hot water so it would bend easily without snapping. I had my seat assembled and ready to race. I attached the wheel and pedals and adjusted the seat and set it to my height. At this point I had finished half of my project and from now it was to focus on the video aspect. Now that I had the seat it was easier to see what shot I wanted of the race and that was now getting started to plan. Next steps, to do practice races, film the actual race, edit and submit.