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### Flexi Initials

I made flexi letters using fusion 360. I used the sketch tool, the line tool the circle tool and many others to make my design. I was challenged to make this and these were my first steps into learning how to make a flexi. I used components to separate my work and named the important sketches and bodies. I looked at the design of a flexi dolphin for inspiration for the hinges. I made a lot of mistakes and had a lot to learn while making this. I had to figure out how thick to make the pole and the loop around the pole so they would not droop when printing. I also had to make sure it would be long enough to move a little when printed. I didn't really have much to go off of so it made it difficult. I was really focused on this so I completed my first one in about two days, probably spending 4 hours working on the design. I worked well on this because it interested me and I liked the idea of the project. I need to improve on my organization of my components and sketches because I got confused a lot. I used Prusa slicer to print my design and export it to gcode. I would advise others to look at other designs thoroughly before making your own because the first design I did did not work well and would have failed at printing because of the thin loop.

I printed my 3d models on the Original Prusa i3 mk3s. I printed using PLA filament. I first got certified then I printed my designs. They both took about an hour to an hour and a half to print. I watched them both until I had to go to class. Once done I took the magnetic bed off the printer and popped it off. I was surprised both worked first try. I need to improve on my perception of size and seeing the real model I could see what the faults were in my design. I would recommend using inches in fusion and then scaling correctly because I did not look at measurement when designing and so I had to make them smaller when I printed, the first was too big and the second worked out okay.