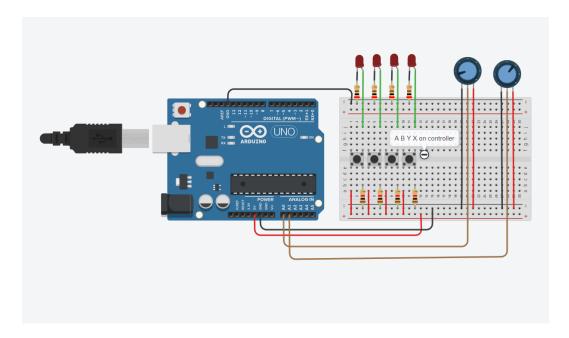
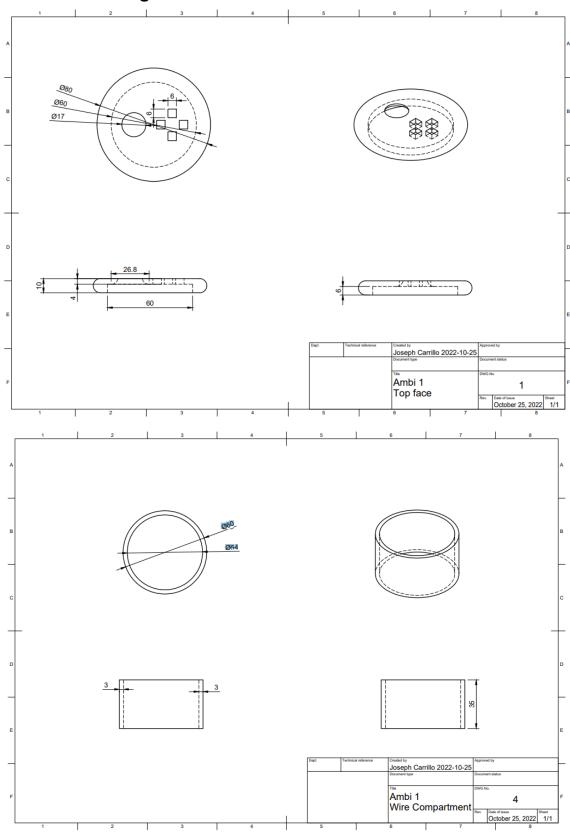
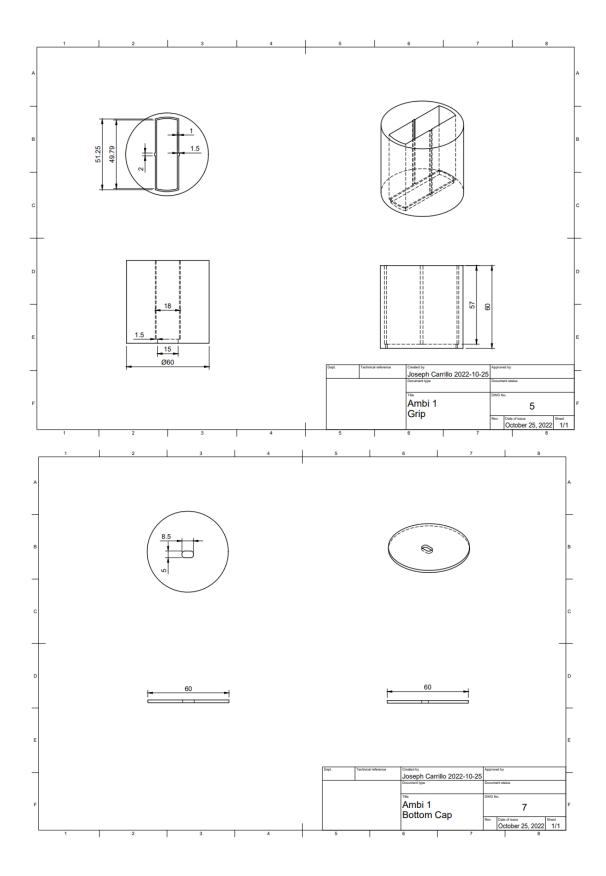
Electronics.

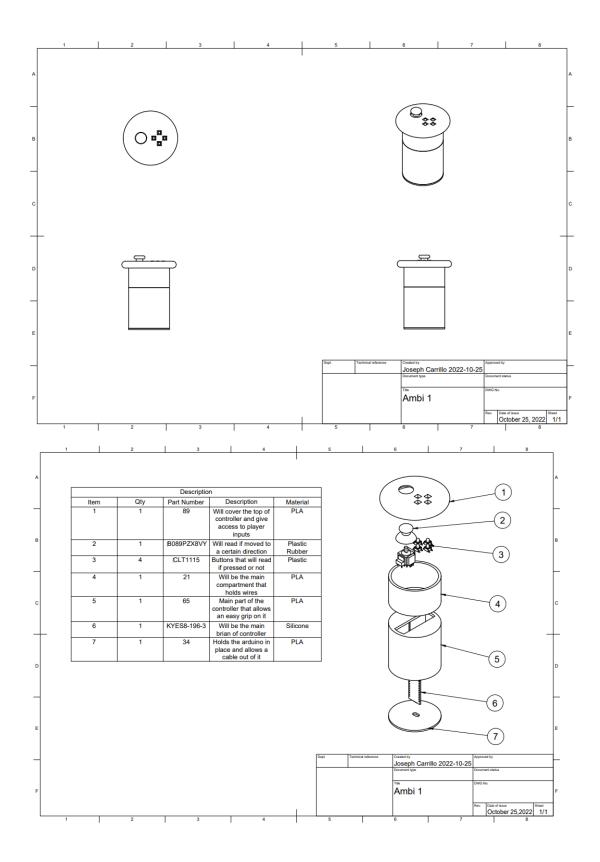
Component	Amount	Price	Role	Supplier
Arduino Pro Micro	x1	\$32.98	Main Microcontroller	Arduino Store
Analog stick	x1	\$6.50	Main movement	Amazon Store
Push Buttons	x1	\$10.99	Main inputs	Amazon Store
USB micro b	x1	\$7.60	Power/Send inputs to computer	Amazon Store
Magnet	x1	\$8.21	Locking mechanism for rotation	Esty
Protoboard	x1	\$1.83	Secure placement of buttons in controller	Retro Amplis



Technical drawings.

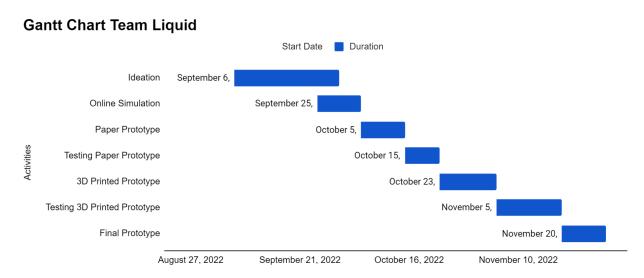






For our cable management the wire management is going to be affected by the wire compartment(Part number 4) as well as the grip(5). The space in the grip is there so wires can connect to the arduino as well as reach our wire compartment without having too much stress on them as they will be moving around constantly from rotating. The wire compartment is a hollow cylinder that exists to have space for not only the buttons and analog stick but also room for wire slack to further reduce the wear and tear on the wire from stretching due to movement.

Planning.



Alex Chow (Main programmer)- Assisted with working on designing the controller and modeled the entire controller in fusion, also made the Gantt chart.

Joseph Carrillo (Main hardware designer)- Designed the controller and created all technical drawings for the project, as well as completed the tinkerCAD.