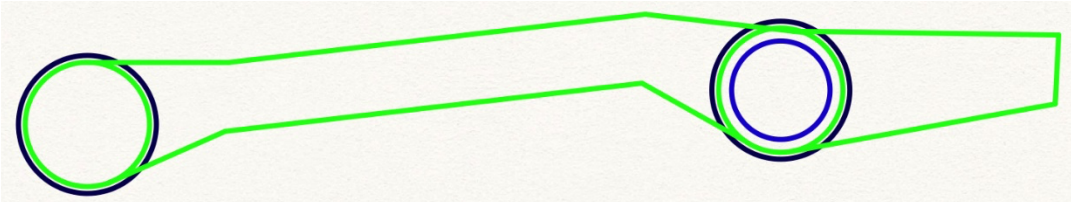
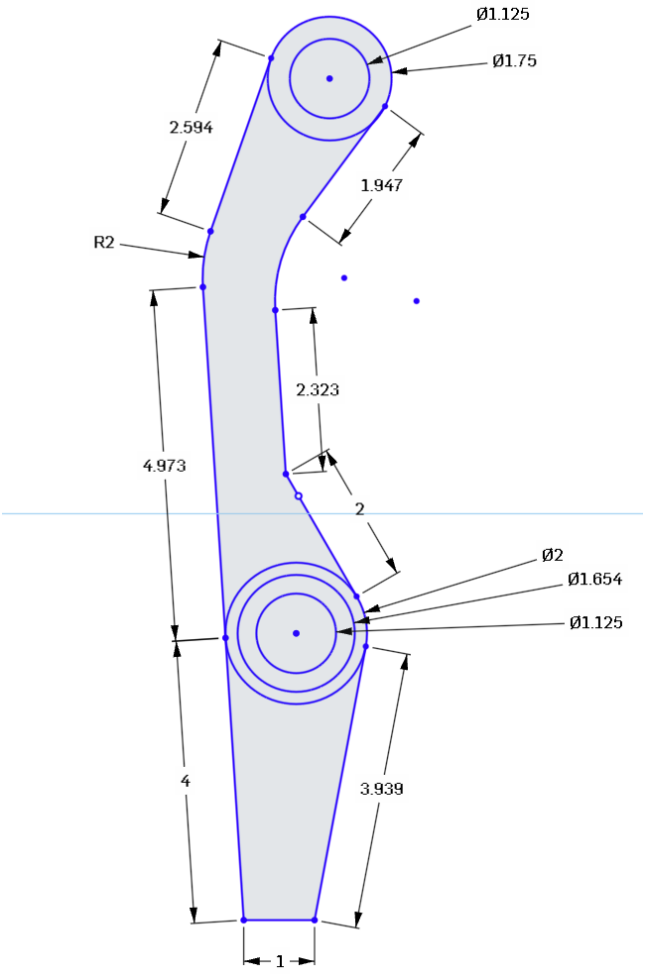
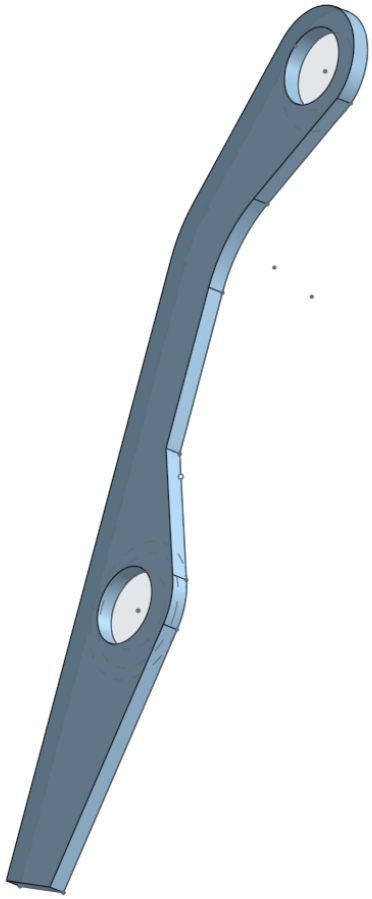
Alliance Project Design Guide Reflection Questions

Question 1: CNC Router







Question 6: Tolerancing

- Most of our pieced will be made with a CNC Router meaning that our tolerance should be held pretty well. We might end up using a leaser cut piece as well, and in

that case we would want to design our holes a little smaller in order to make the tolerances work out.

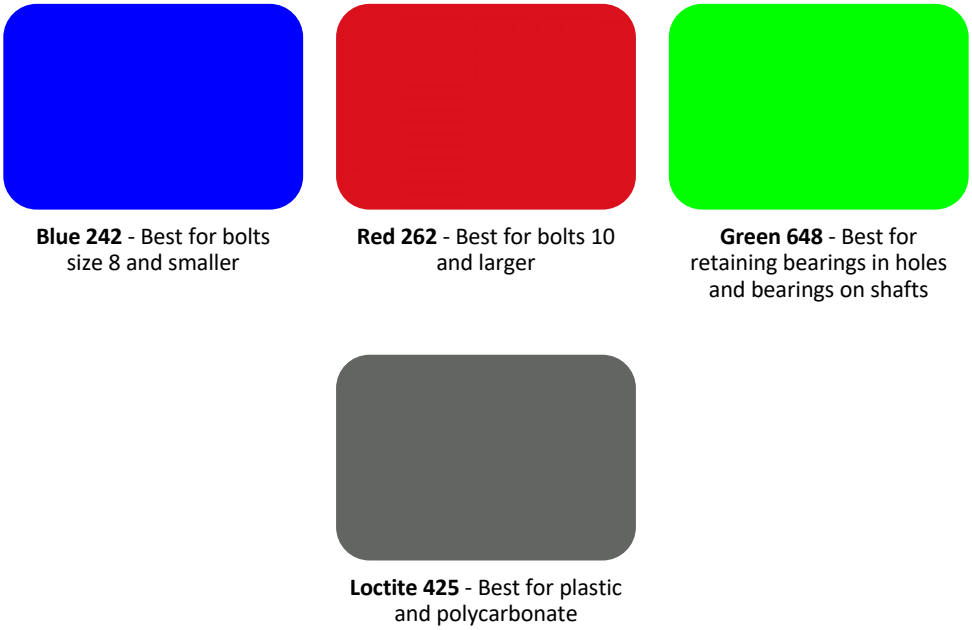
Question 7: Hardware Parts List

Product Name	Quantity	Price	Part Number	Vendor
REV Robotics Neo 550 Brushless Motor	2	$25	REV-21-1651	REV Robotics
24T x 15mm Wide Aluminum Pulley (HTD 5mm, 1/2" Hex)	8	$12.99	2127-4101	VEX Robotics
104T x 15mm Wide Timing Belt (HTD 5mm)	4	$10.99	217-3476	VEX Robotics
Bimba Original Line Pneumatic (5/16 Bore, 2" Stroke)	2	~$23.99	SS-090.011-DW	VEX Robotics
Clamping Shaft Collar, 1/2" Hex ID	8	$4.99	217-2737	VEX Robotics

Question 8: Bolt Size Notation

- ¼-20 means the bolt is a 3/16” allen and a 7/16” wrench
- 8-32 means the bolt is a 9/64” allen and a 11/32” wrench
- 10-32 means the bolt is a 5/32” allen and a 3/8” wrench

Question 10: Loctite



Question 12: Miscellaneous Fasteners

- We will need shaft collars for our project.