The Iron Man Arm

Stark Industries

William Zhou and Kenneth Liu

What is our project? Why?

- Create an Iron Man Arm
- Based off of Mark 3
- Marvel fan


NEW YORK
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What Was Fixed

- Added more details and texture
- Made it more cartoony
- Created hinges to connect assembly

Schedule

- Week 8: Continue on updating designing the parts
- Week 9: Create more advanced details on the parts
- Week 10: Continue working on the advanced details
- Week 11: Create the connections between parts (bolts, hinges, etc)
- Or do everything the night before
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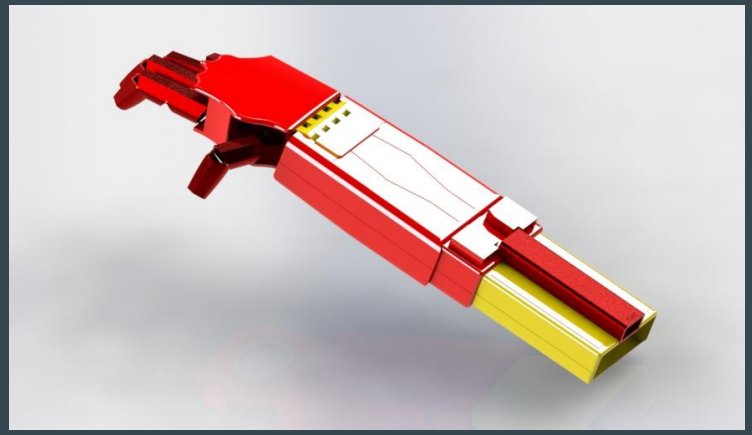
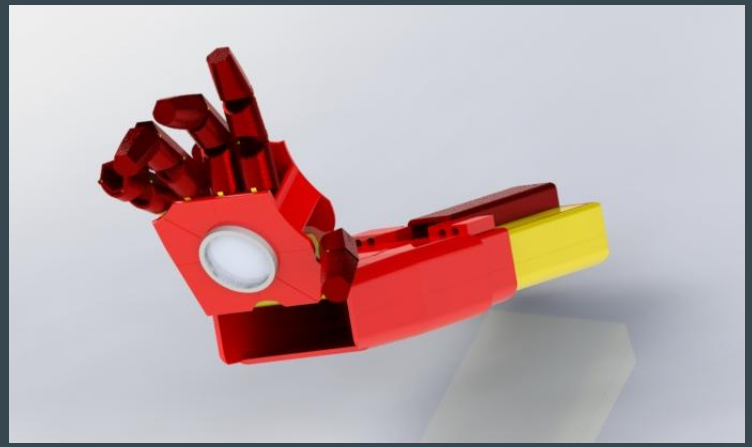
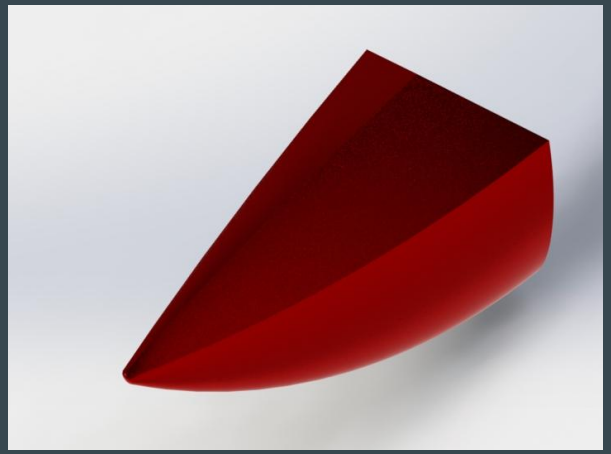
The Iron Man Arm

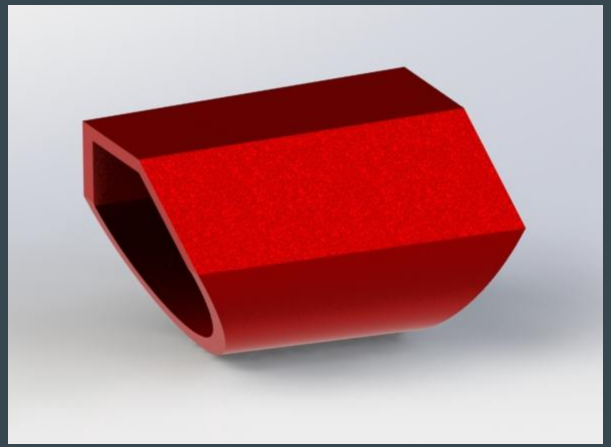
The Iron Man Arm

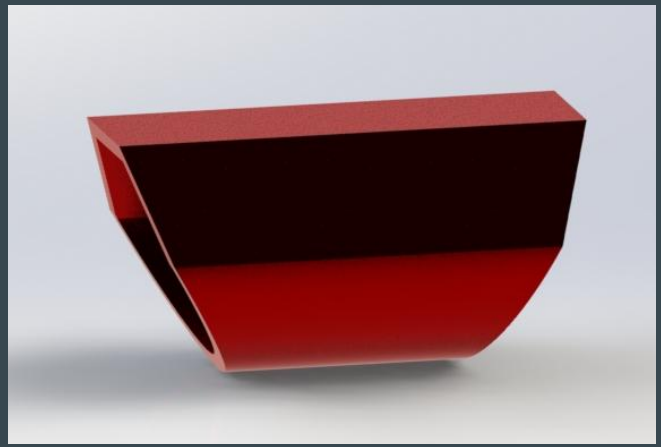




Design

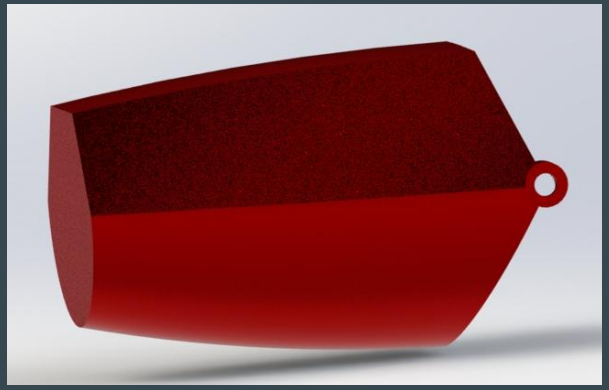
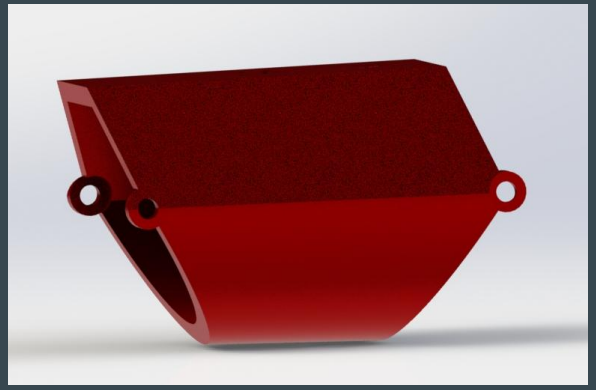
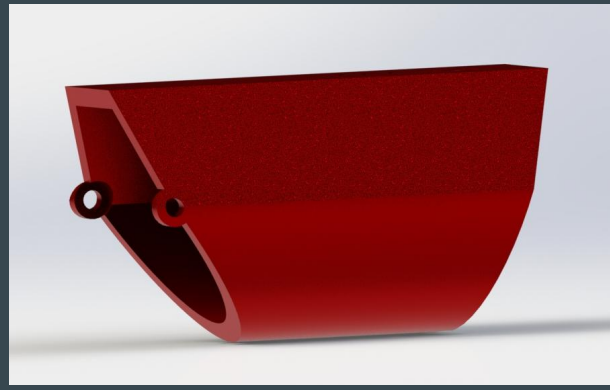






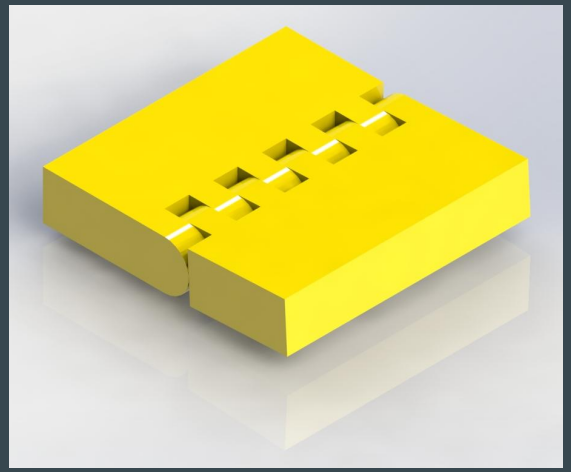
This is the previous version of the fingers. These 3 pictures represent the pointer finger but the other fingers are similar with the thumb missing the middle segment. Each components was shelled to have a 0.05 inch thickness.

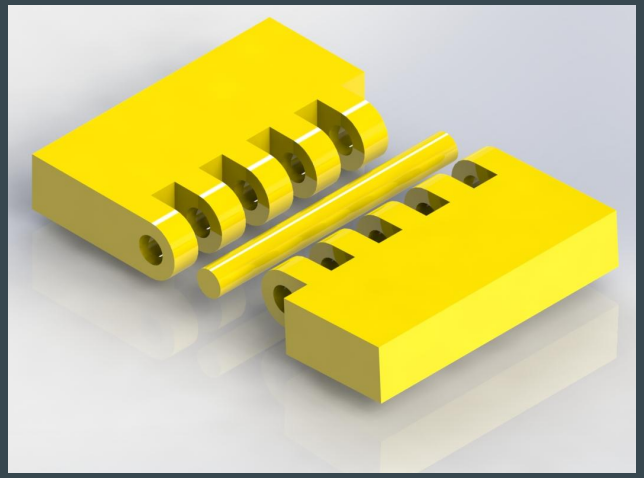
Design

This is the new version of the fingers. These 3 pictures represent the pointer finger but the other fingers are similar with the thumb missing the middle segment. Each components was shelled to have a 0.05 inch thickness. The tip of the finger was rounded from the previous version and flanges were added to connect the segments together.

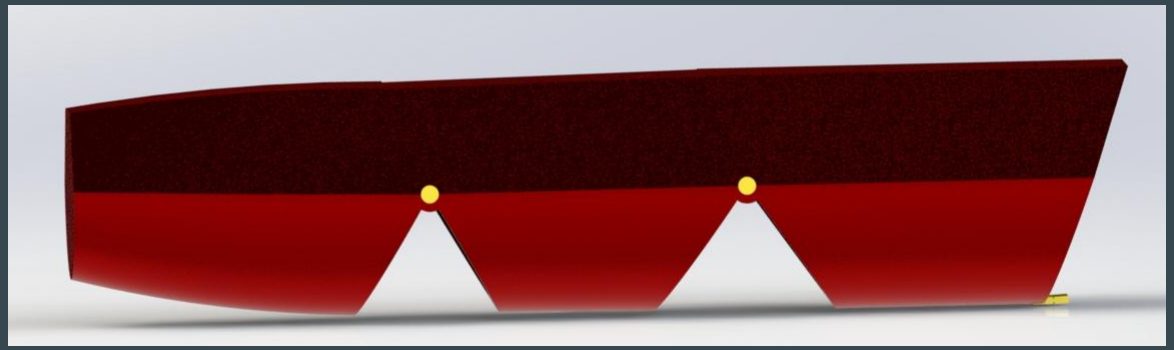
Design

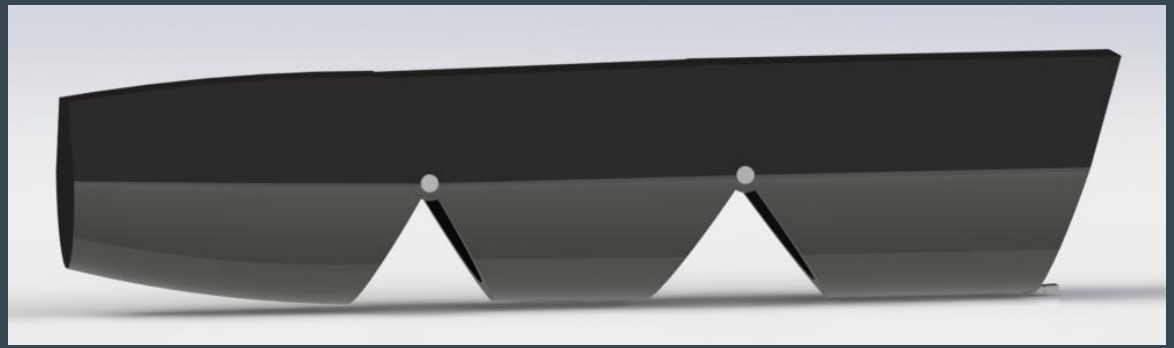




The hinge is used to connect the fingers to the palm and hand to forearm. The smaller pin on the right is used to connect the segments of the finger.

Design

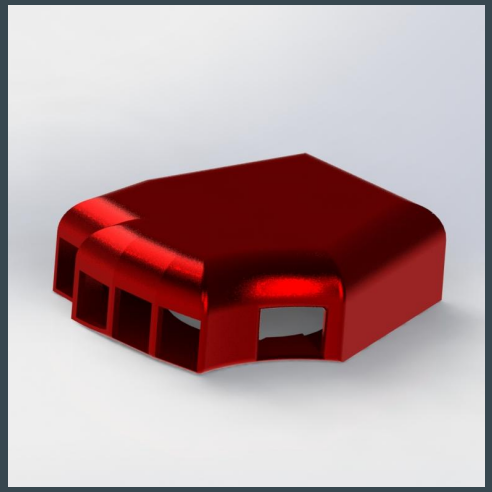


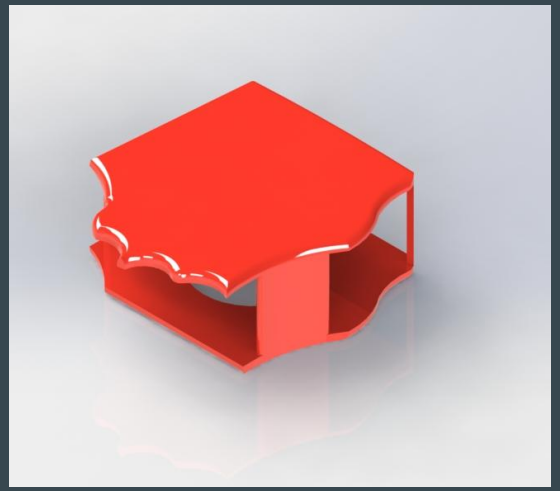


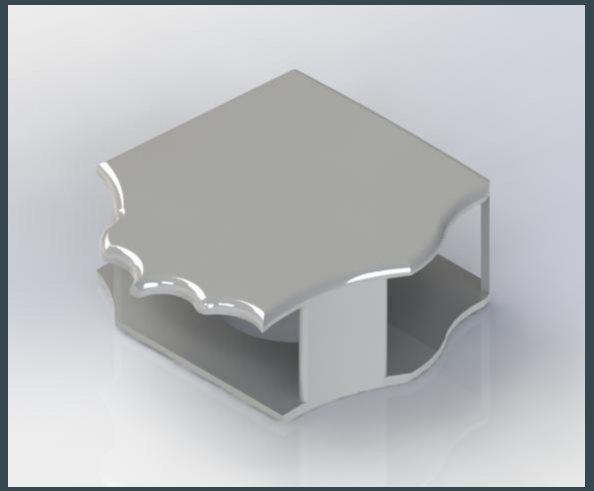
Here are all the components of the finger combined. The bottom image is the configuration for the War Machine

Design

- Made by using hand reference with a ruler to make base
- Splined and traced image of hand to get shape
- Changed to wider hole for simplicity
- The hole on the bottom is 1 inch diameter

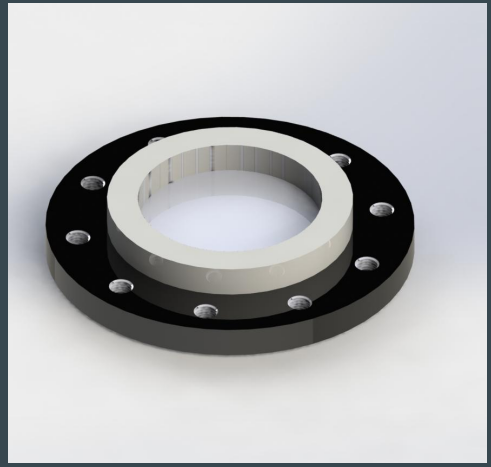






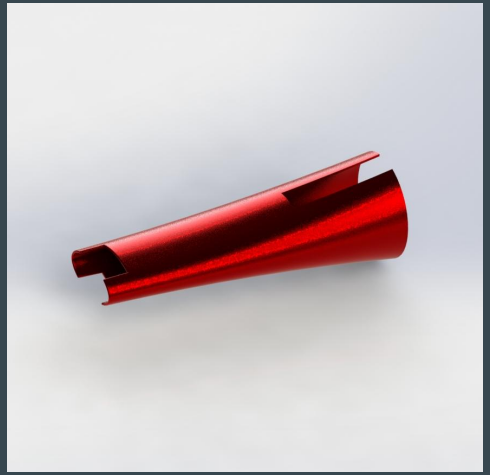
Design

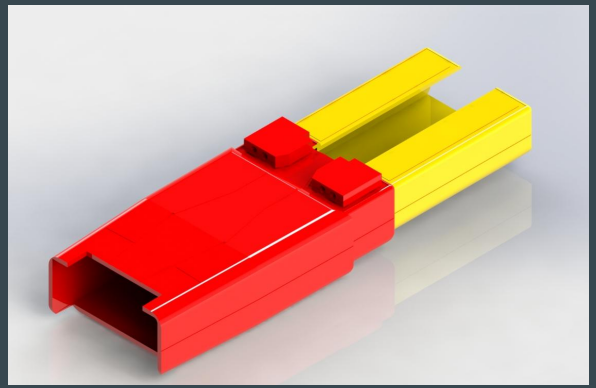
- Changed to weld into glove instead of having screwhole

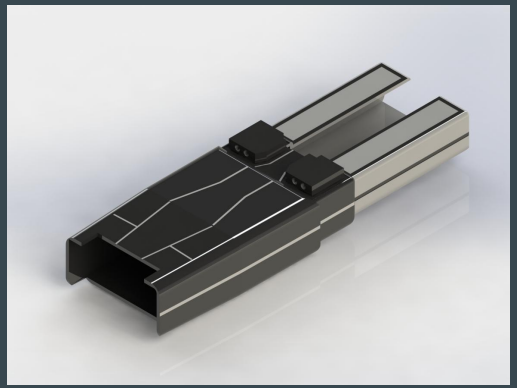


Design

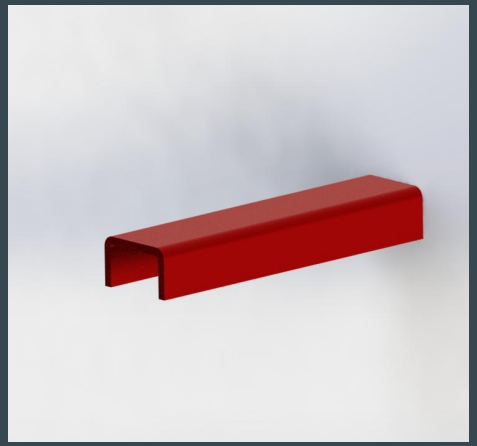
- Changed the shape
- Added texture

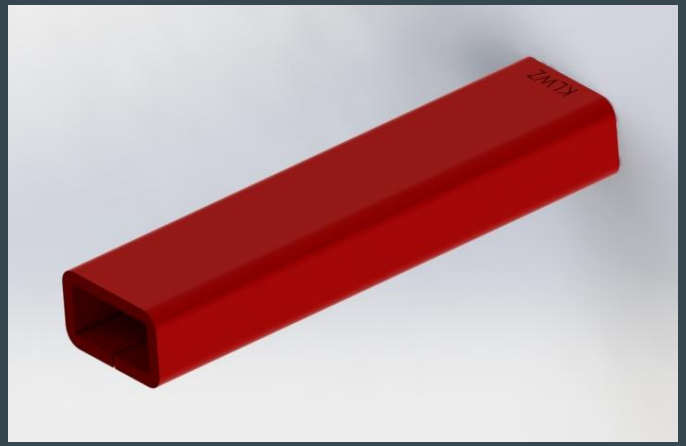


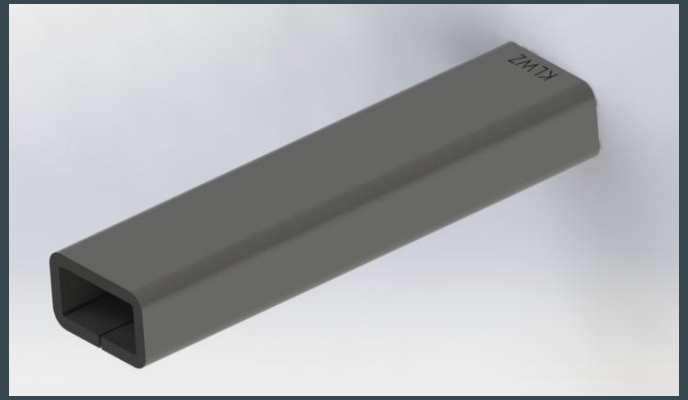




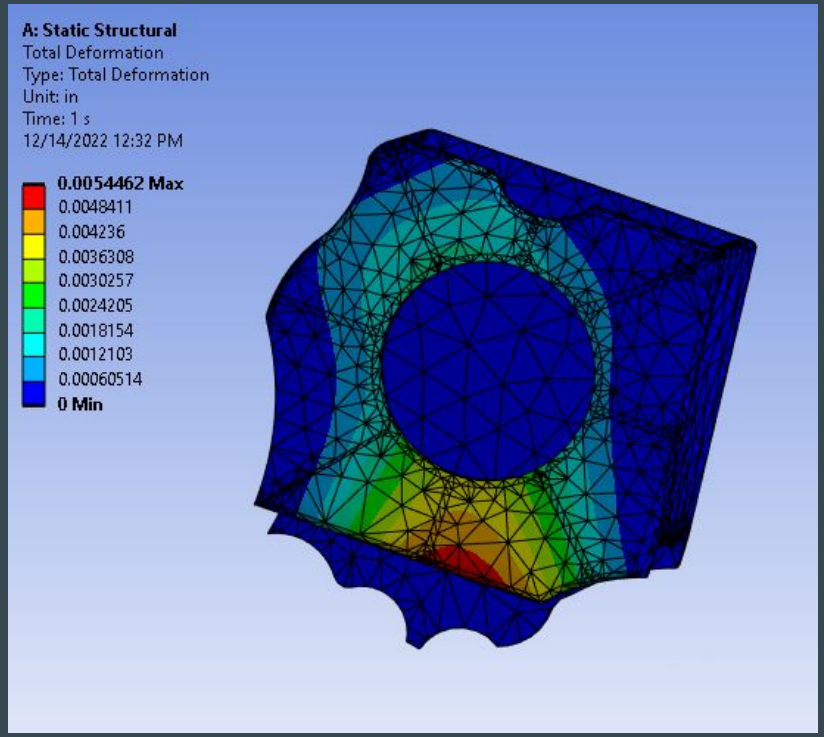
Rocket Sheet Metal

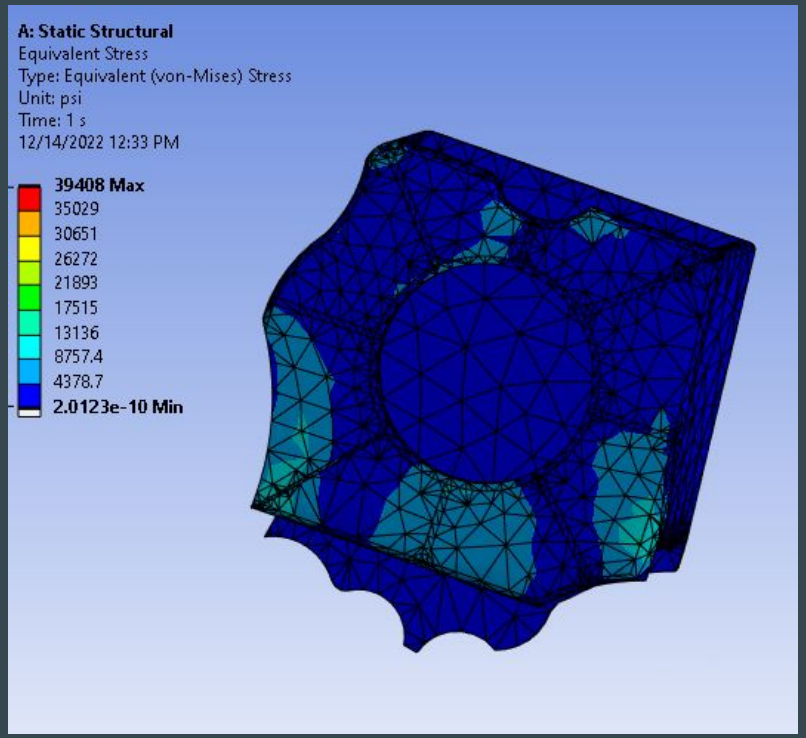




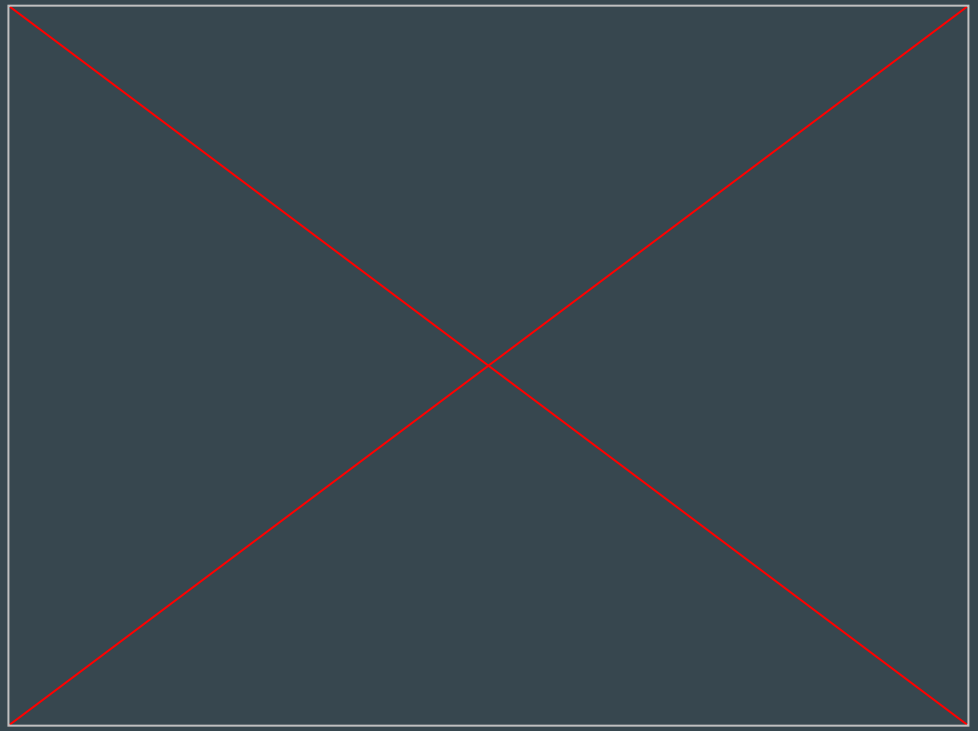


FEM Analysis

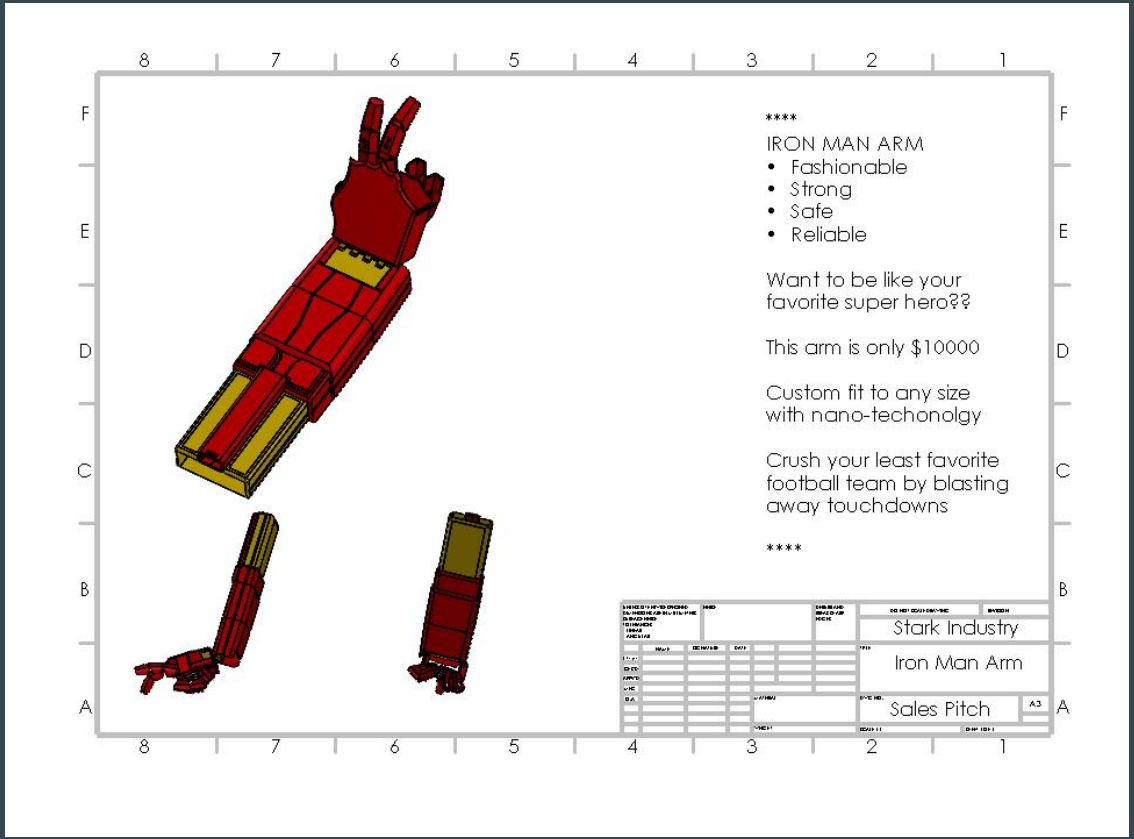




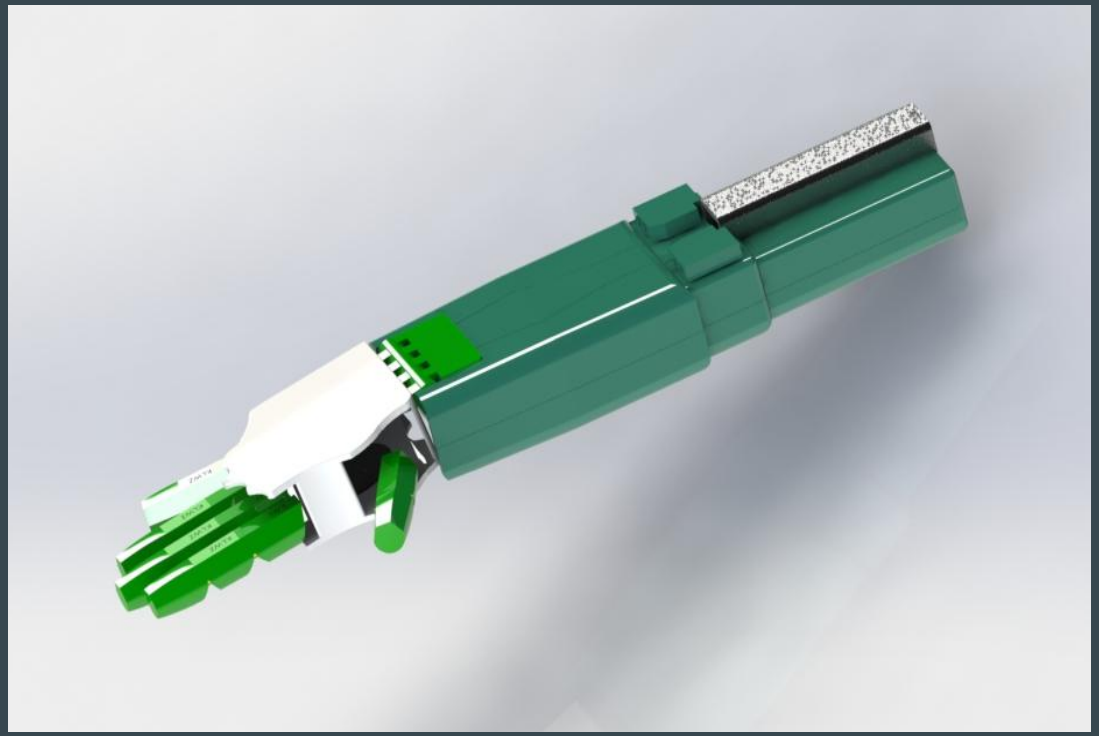
Animation



Why You Want It!!



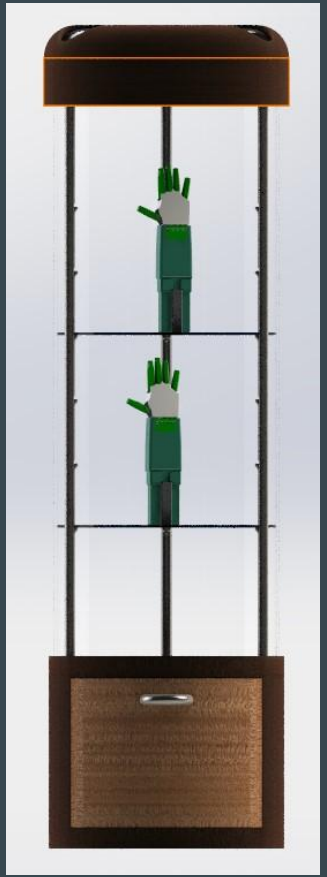
Customized for the Jets



Superteam- The Iron Jet Stadium

Trophy will sit inside the stadium

The second trophy is for the Jets win once again



What We Learned

- Will learned
  - Lofting
  - Creating hinges
  - Many mates to connect and limit movement
- Kenny learned
  - Lofting (a lot of it)
  - Fillet
  - Mechanical Mates
  - The power of friendship (and energy drinks)