12/4/23 In Class

Base of final design: weighted door concept

-could apply ideas from concept 3 to weight door concept

-potentiometer angle sensor

Meet with client?

-After design concept on solid works becomes robust

-IN PERSON

-Wednesday 13th?

Work standards for break:

Do at least 1 hour of work over break (does not have to be all at once)

Four Sections

1 & 2 Basically done and just need to be edited

3. Material and Manufacturability (arms need to be rigid)

Use TEAM Lab

What material we need

-Prototyping, 3D Print

-delrin

-Use Arduino

-Glue or Tape for now

-Final Design

-Consider an average fridge, make sure **most** biological fridge can apply the device

-Companies that make them

-Stainless steel or aluminum

-Other solutions might be too expensive

-no drilling

-Don’t have to worry about whether the door is left side or right side

-Other metals that exist: brass bronze titanium

-What way are we applying the device (Ex: Glue, Tape)

-Magnets?

-Are all doors magnetic (iron or stainless steel (low chromium))

-Clamping?

-Glue?

-Are all doors metal?

4. Detail drawing

Conclusion: Final concept

-Explain what minor alterations might be changed

12/5/23 10:30 AM MC

yongheng email

-meet in person(after finals, possibly wednesday 12/13 around noon if possible)

-figure out what models of fridges are used

-measurements for how big the device should be

-possibly figure out what methods of attachment stick to the fridge

-current state of project design

-future plans for prototyping and testing

-checking tolerances with design on fridges currently in use

Dear Yongheng,

How are you doing? We are currently coming up with a finalized design for the project and we have three final ideas that are under consideration. We would like to meet with you in person potentially on Wednesday 12/13 at noon if possible to figure out what models of fridges are used, figure out potential measurements for how big the device should be, and possibly figure out what methods of attachment stick to the refrigerator. Our future plans are to prototype and test our final idea into a feasible device. Furthermore, we plan on checking tolerances with the refrigerators currently in use to ensure our device idea is usable on these refrigerators.

Best regards,

Team 1

<https://howtomechatronics.com/tutorials/arduino/rotary-encoder-works-use-arduino/>

Look at this thing I wanna fit in the bendy arm