What is the problem, **Why** that is a problem, **How** are your planning on solving, or **How** you solved it.

Due Sunday 2/13/2022
Journal #1

Recounting:
    Nothing to recount since it's the start of the second semester.

Current Problem:
    Just catching up everyone and assess any changes with the group. This will focus on the EE part of the group.

Solution:
    We delegated the work each of us has a clear contribution with the next presentation. I was given the task of casing design.
    For now, I've only thought about the shape and possible ideas on how to make it a straightforward install so anyone can take in/out. So far, making a round casing that's keyed so it has some sort of fastening. This could help make the install more consistent in terms of sensor placement (more for the Time of Flight sensor). The casing will also need a "glass" so the Time of Flight will work properly. I'd like to integrate some sort of handle as well so the install and removal is easy. I've also just started to measure out the current component package to think about the depth required. There is also a thought of making the casing in a way that the battery can be easily replaced (without removing it from the installed spot) if we end up going with the non-rechargeable battery route. If we go the route of a rechargeable battery, using a solar panel will be a good thing to get or keep the battery in operating temperature. As far as the solar panel goes, I'm hoping we could make this an easy disconnect since it will be on the top.
    Everything is just a thought right now. While I would like to keep NEMA in mind, I would like to focus on making a case that can do everything we need it to do. This means that the casing may end up being 3D printed so we can make the ideal casing.