

## MILESTONE 2 REPORT

**Overview:** For milestone 3, I worked on creating 3D-printed prototypes to find the right design for the device. The goal was to make a small, wearable design that could still hold all the electronic parts like the GPS module, microcontroller, and battery.

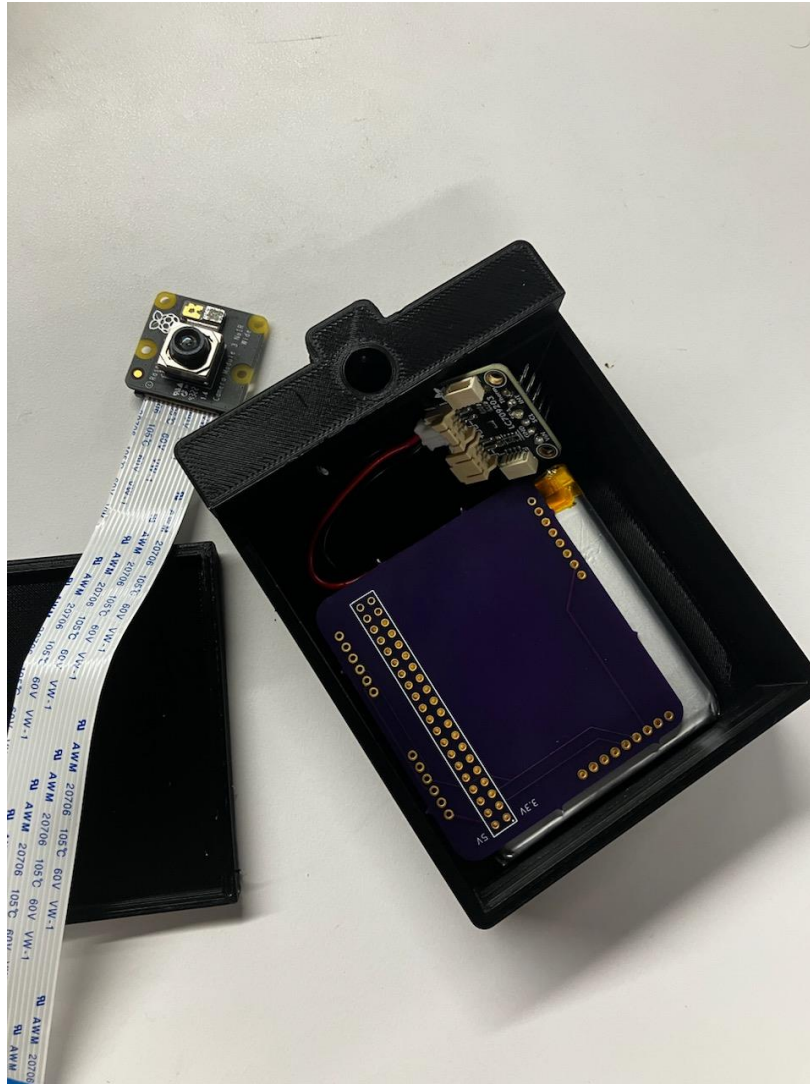
### Design Journey:

#### 1. Starting Point:

- I began designing the model using Autodesk Fusion 360. The first prototype I printed ended up being much bigger than I wanted, making it too bulky to be a comfortable necklace.



- After reviewing the design, I made changes to reduce the size and improve the fit for the internal components. The second version was a bit better, but still not perfect. It was smaller and more balanced, but there's still room for more adjustments.



## 2. Refining the Model:

- My focus was on making a model that could easily hold all the components while being comfortable to wear.
- With each print, I tested how well the parts fit inside and adjusted the design as needed, working closely with available component measurements to make sure everything lined up properly.

## 3. Next Steps:

- As I'm waiting for my team mates to put the needed components together, I'll be making further changes to make sure everything fits just right.
- I'm also looking into making other designs for future prints to make the device more portable.
- Finally integrating data from AWS into our application.

**Conclusion:** Designing these 3D models has been a learning process, and I've come a long way from that initial oversized prototype. Each new design has brought improvements, bringing me closer to a compact and user-friendly design that aligns with the vision for the 'LockIT' project.