# *Smart Cooler*

Week 27 Feb 3 – Feb 09

Progress Made

- 3D Printed Parts.

- Continued Designing brackets and parts for printing.

- Researched Locking Mechanism.

- Added information into Project Report Chapter 3.

Measurements taken for RFID bracket

- Bracket will be designed based on the measurements
- Dimensions are will be 60mm by 40mm with 10mm offsets on either side to accommodate the pins
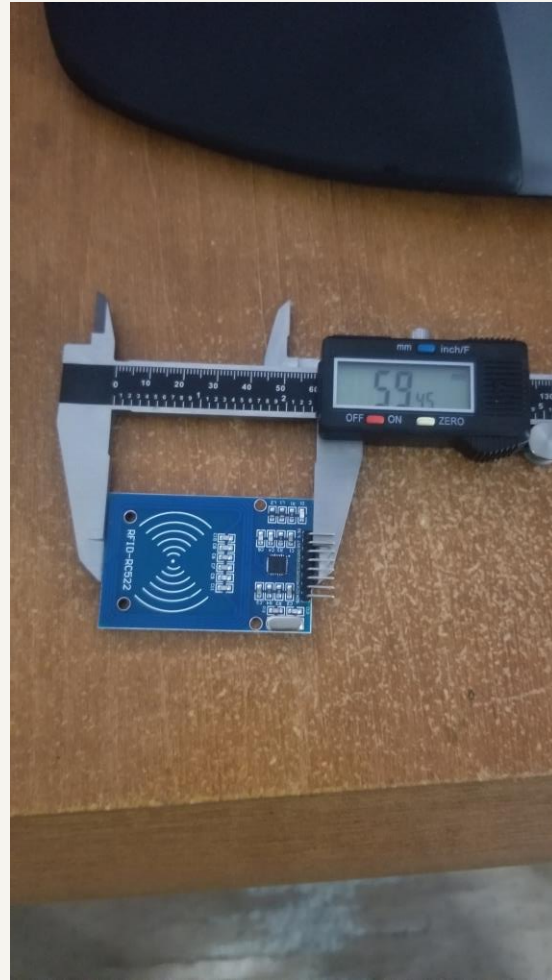
3d Printing Lock

- The sliding lock was printed.

- Unfortunately, because the printer needed to print support beams for the top part of the case, the gap was filled with plastic.

- Not usable.

- Will need to find a suitable replacement at hardware store.
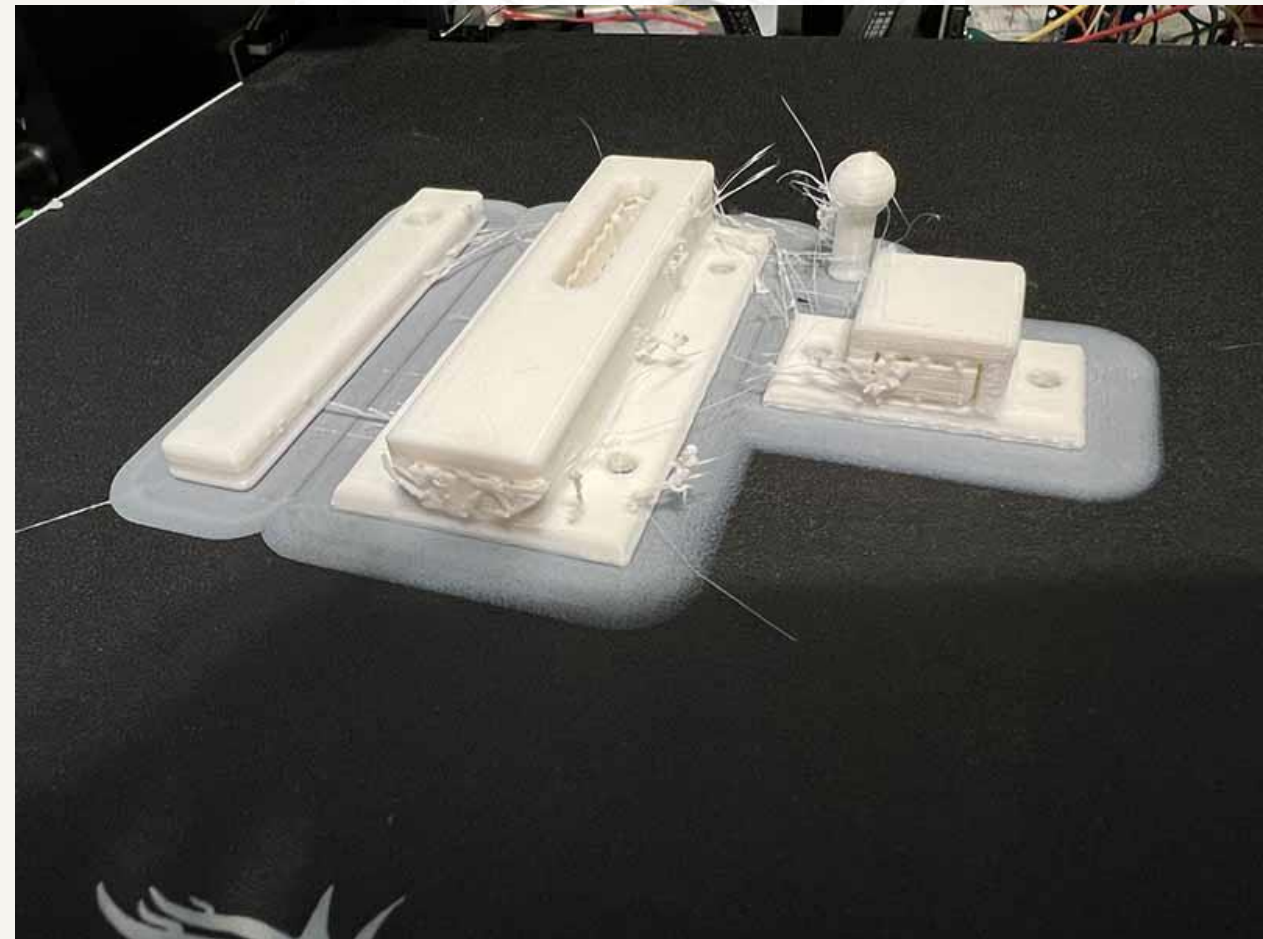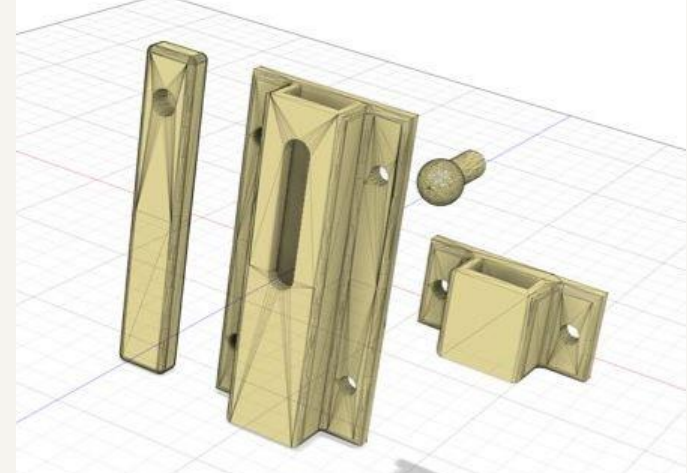
Servo Bracket

- A bracket was 3d printed to hold the servo in place.

- The servo arm is going to be connected to a wire, when rotated 90 degrees it will slide the lock.

- First iteration, dimensions were too small.

- Dimensions are 2.36" by 1.42"
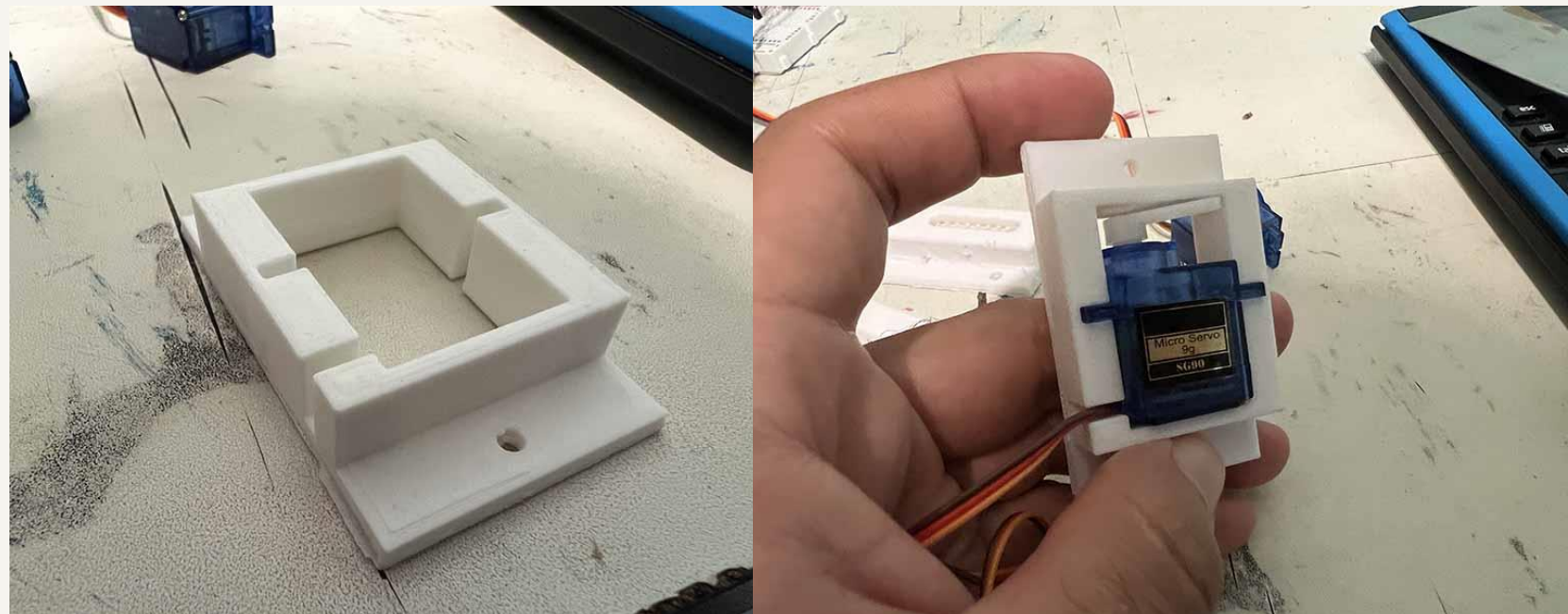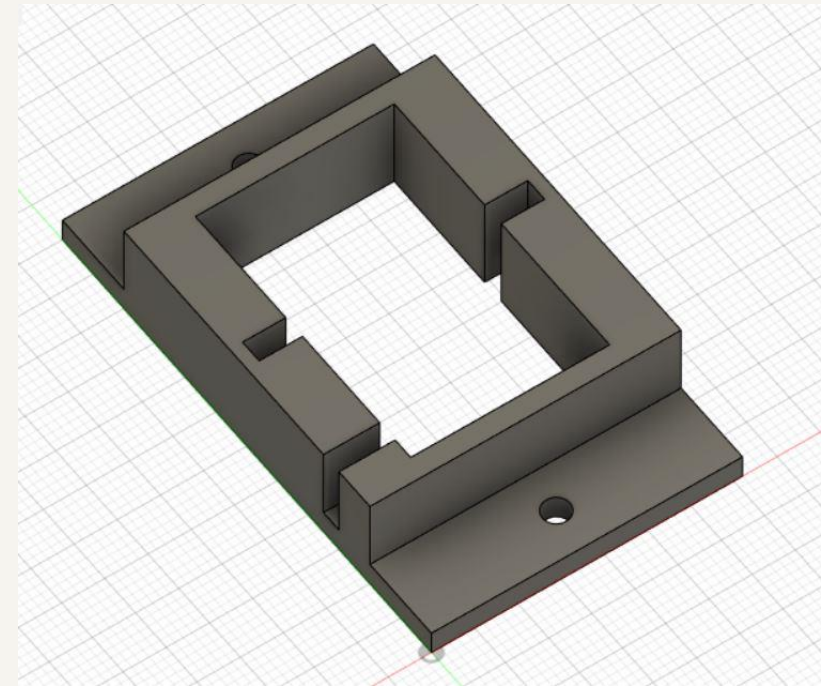
Monitor Bezel

- Originally, the monitor bezel was going to be one part. Because the size of the printer space, it was split in half.

- The first part covers the touchscreen. The bezel is hollow to allow a gasket to be placed in between for a tight seal.

- Dimensions are 7.5" by 5.25"
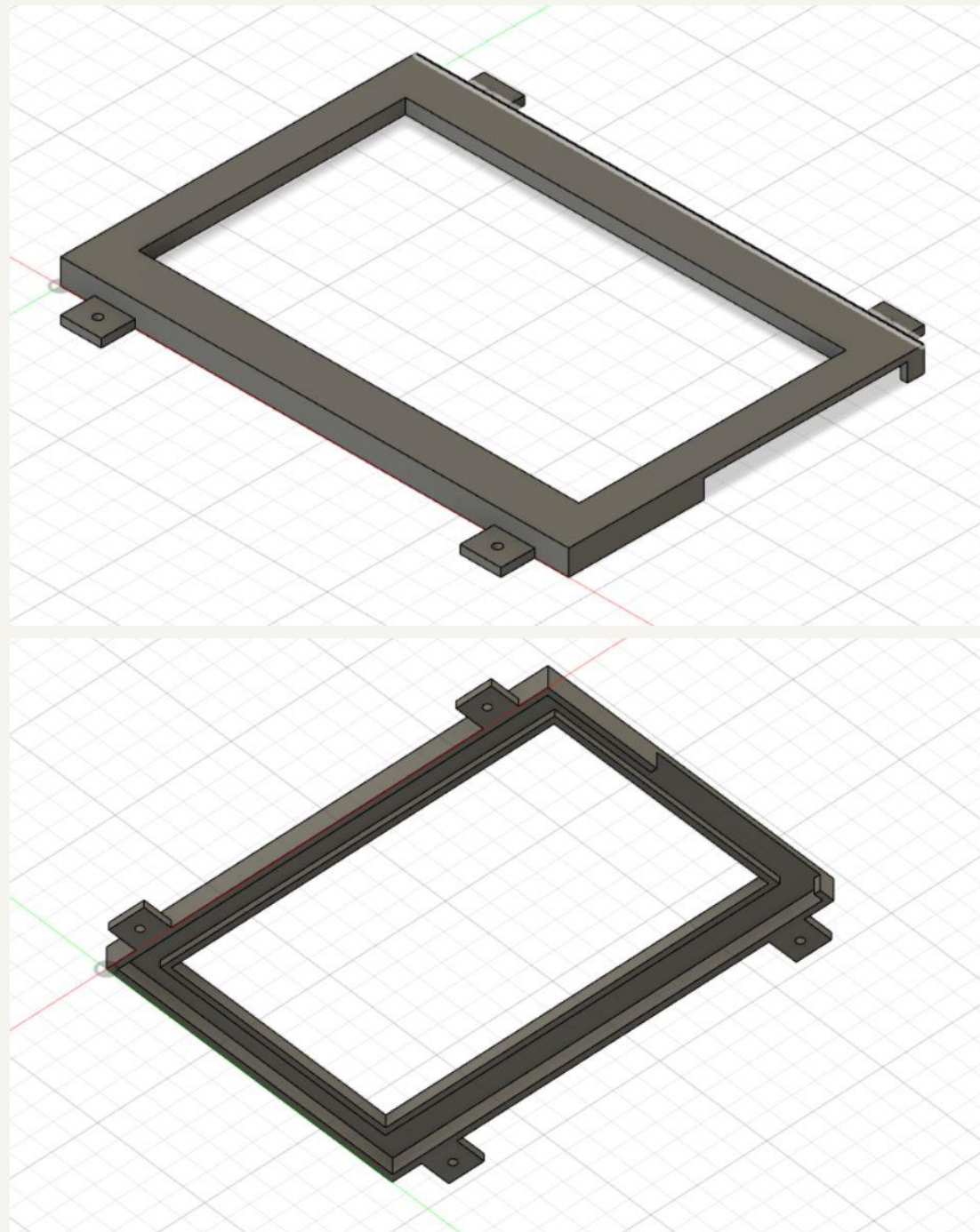
Monitor Bezel Wire Cover

- The second part of the monitor bezel is the wire cover, to cover the HDMI and USB cables.

- The monitor bezel and wire cover will be either epoxied or glued together.

- Dimensions are 2.25" by 3.75"
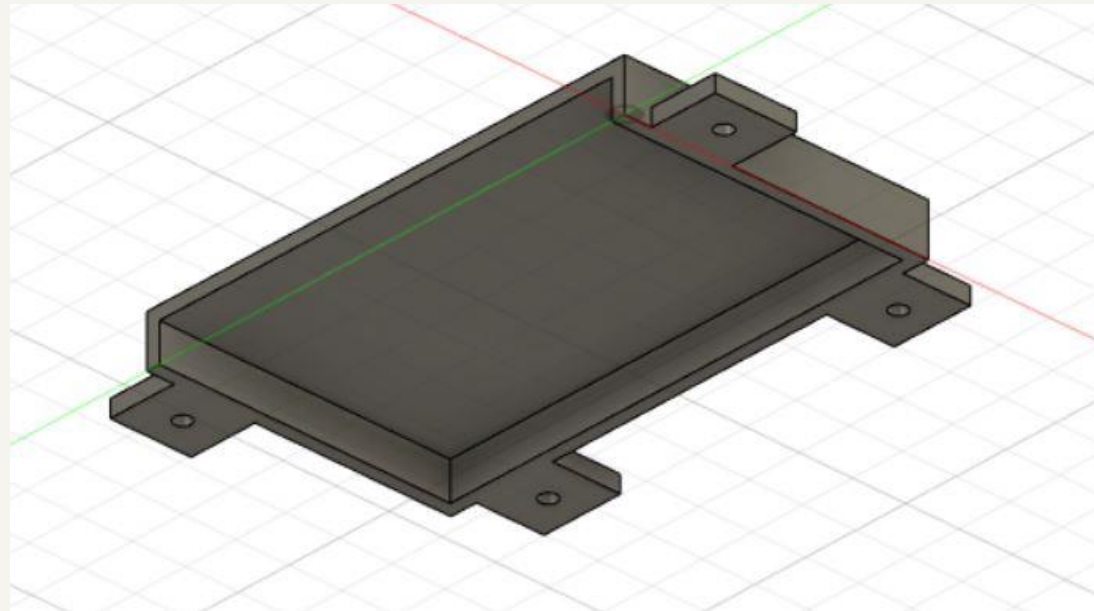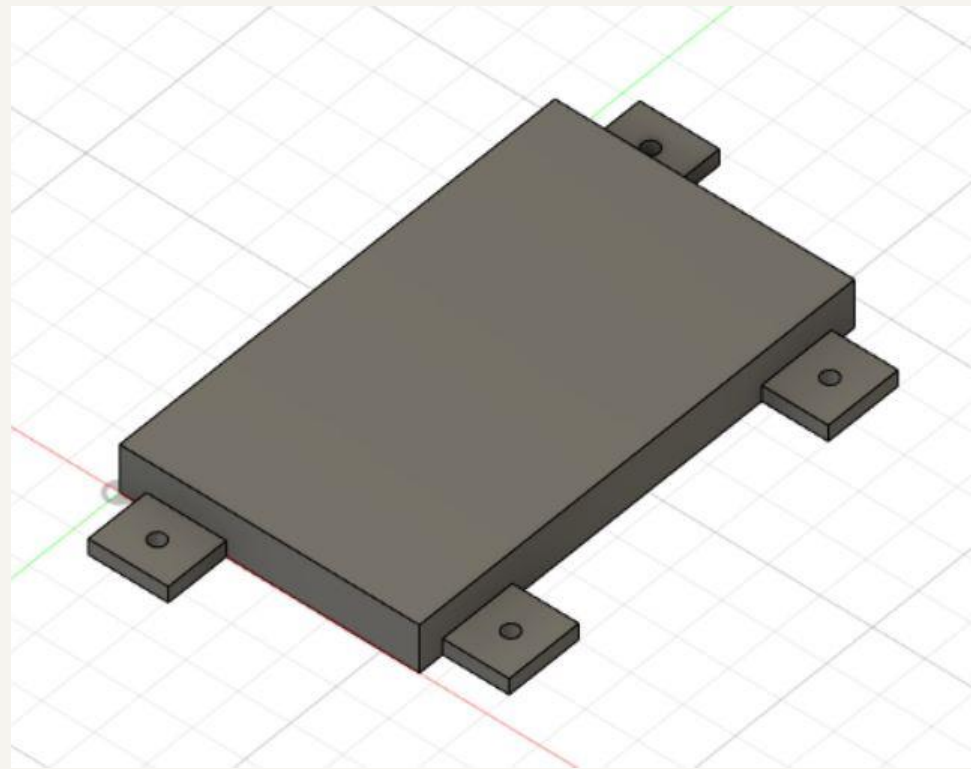
Monitor Bezel 3d Printed

- The part was printed and fit perfectly into the touchscreen.

Save Settings on Power Down

- When the Raspberry Pi powers down, an external text file is saved with the settings for each button.

- When the Raspberry Pi is started up, the program reads the text file and sets each button to original state when powered down.

Goals For Next Meeting

- Assemble and dry fit printed parts

- Design parts for 3d Printing

- Continue work on Project Report

- Continue work on mobile app