**Biometric Door Lock**

What is the inspiration for this project?

My roommate keeps locking himself out of his room (me too lmao), so rather than waiting for either of us to come back and open the door, I want to make a door-opening mechanism that validates users through a biometric sensor, and then proceeds to open the door handle from the inside of the room.

Start Date: 2/14/2024

What do I want the project to look like?

I want a simple biometric interface with a RGB led affixed to the outside of the door. When the user attempts to come in, the sensor should read their fingerprint and then either flash a green light or red light to let them know of their validation.

The mechanism on the inside should then spin a motor and uplift the door handle from the inside (via a rack-pinion mechanism) to open the door pin and allow the user to swing it open.