AUTOMATED POWER SAVING UNIT

Team members:

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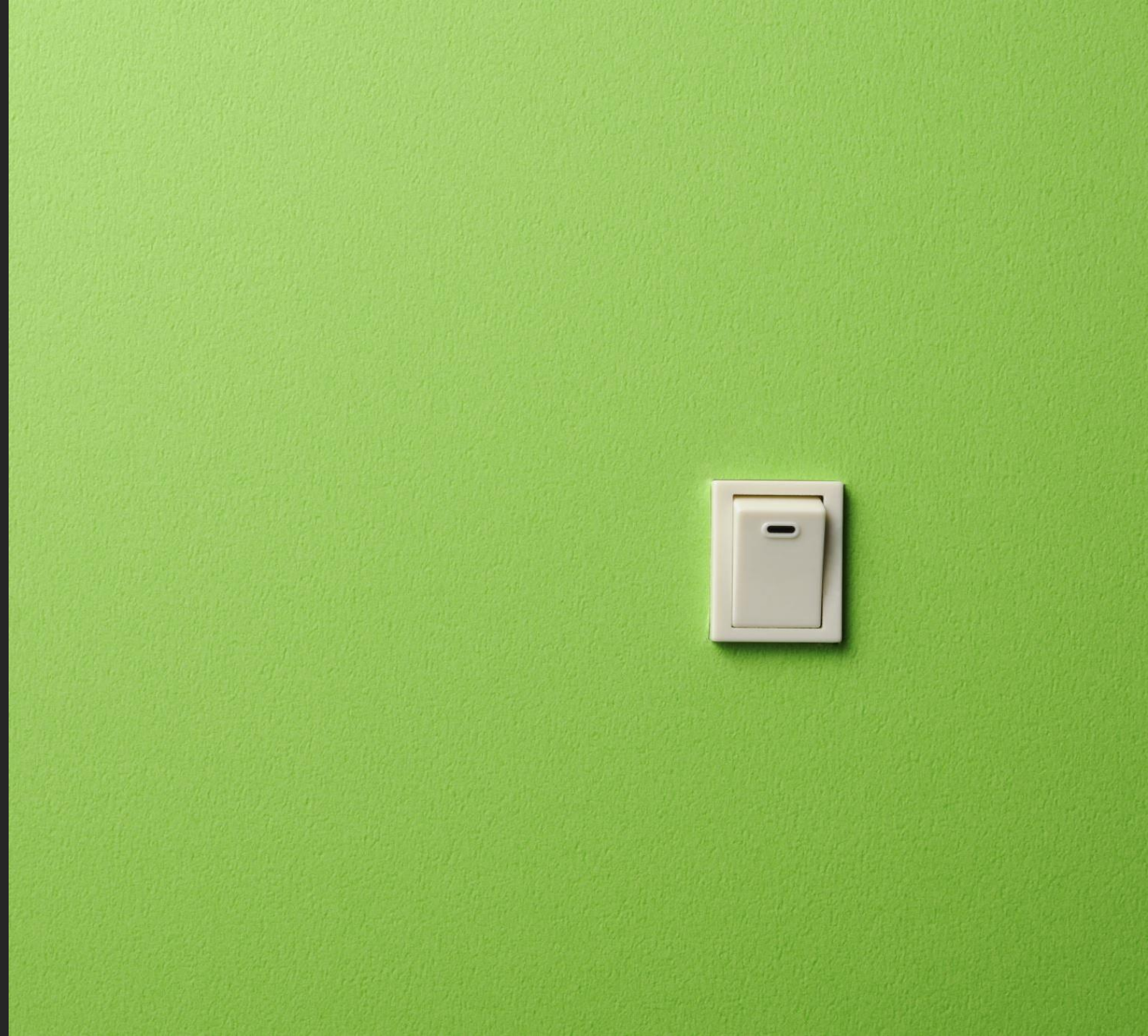
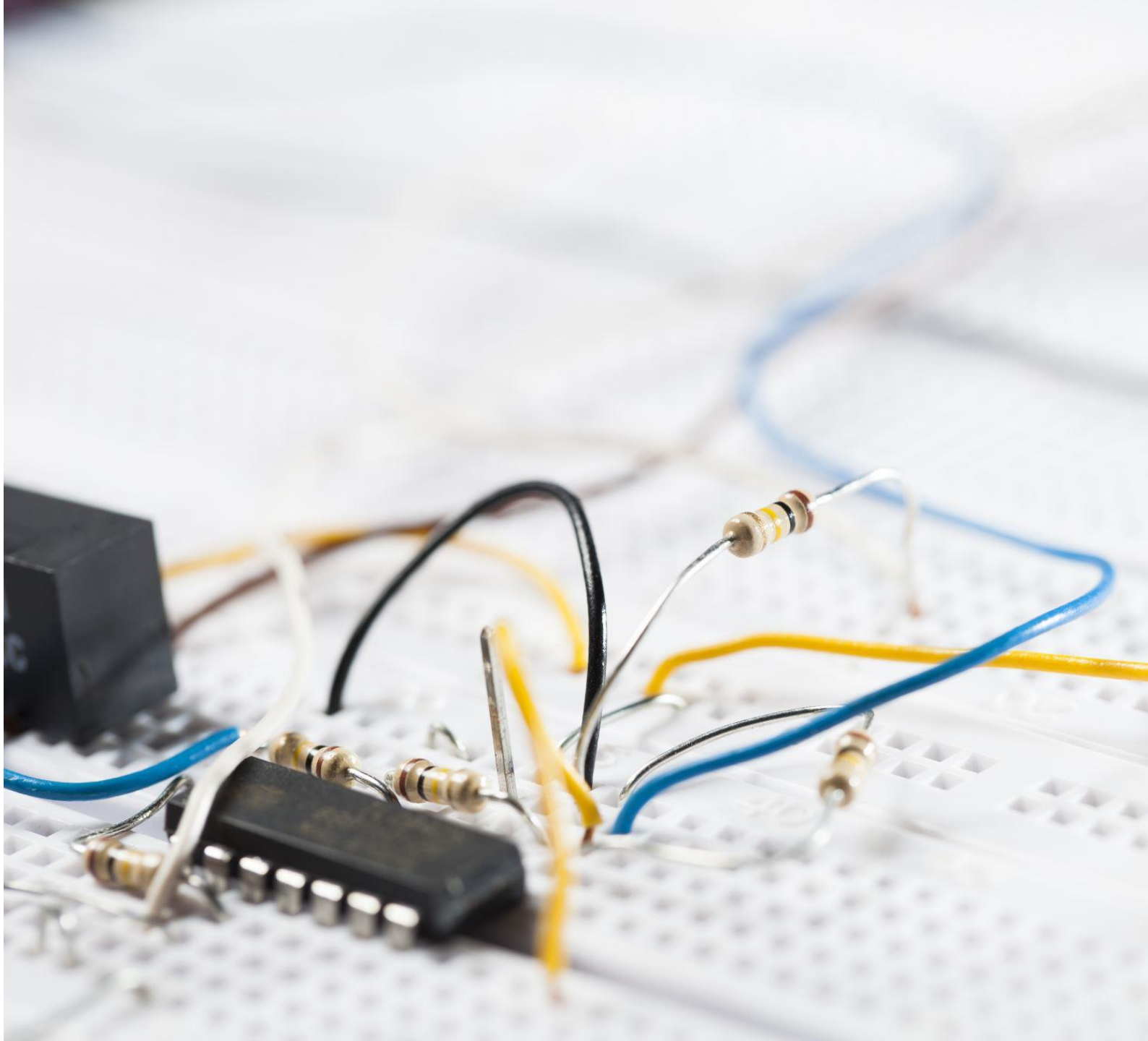


PROBLEM IDENTIFICATION

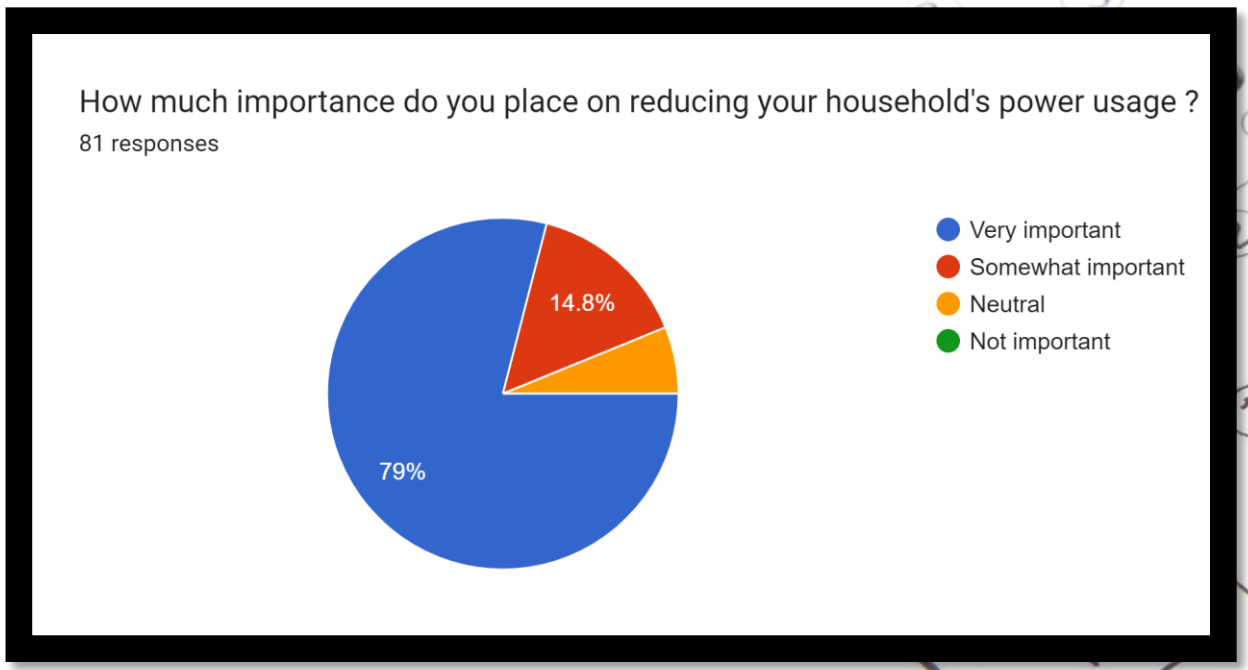
- Unnecessary energy consumption impacts both your wallet and the environment.
- Manually turning off appliances can be inconvenient and lead to forgotten electronics.
- Leaving lights on in unoccupied rooms is a common source of wasted energy in homes and offices.
- Rising energy costs require smarter solutions for managing power consumption.

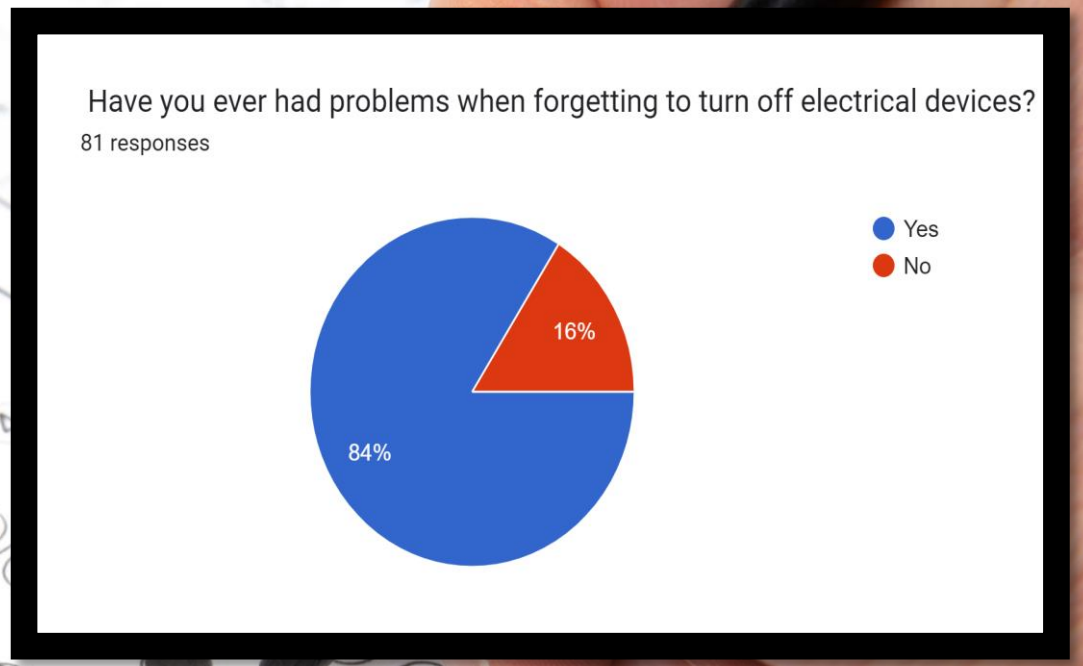
OUR SOLUTION

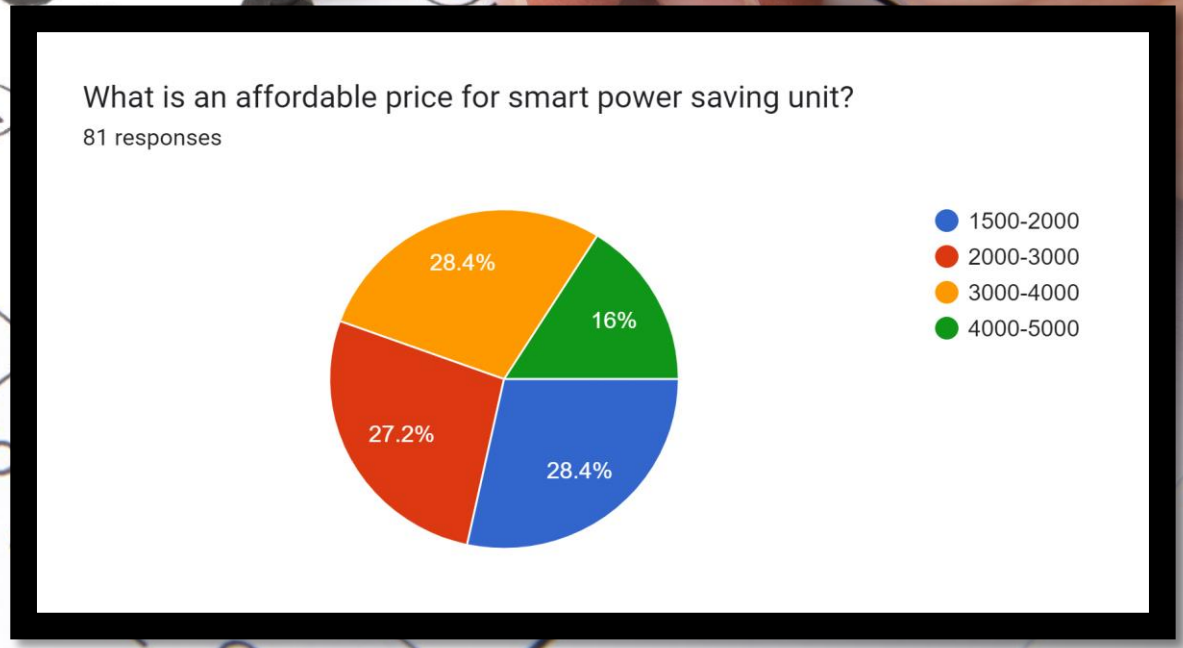
- The unit will utilize occupancy detection technology to identify when a room is empty and will subsequently power down designated electronics.
- Additionally, we are giving options on wiring separate wire lines to existing switches
- Counting occupancy using two IR sensors
- Our innovative design will operate using AC power



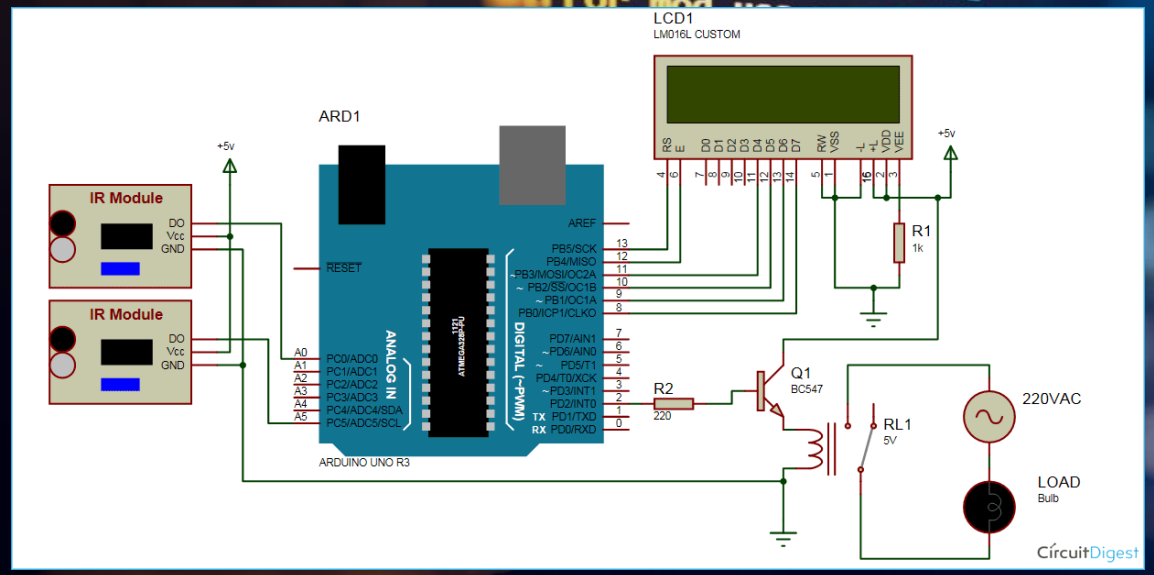
SURVEY RESULTS

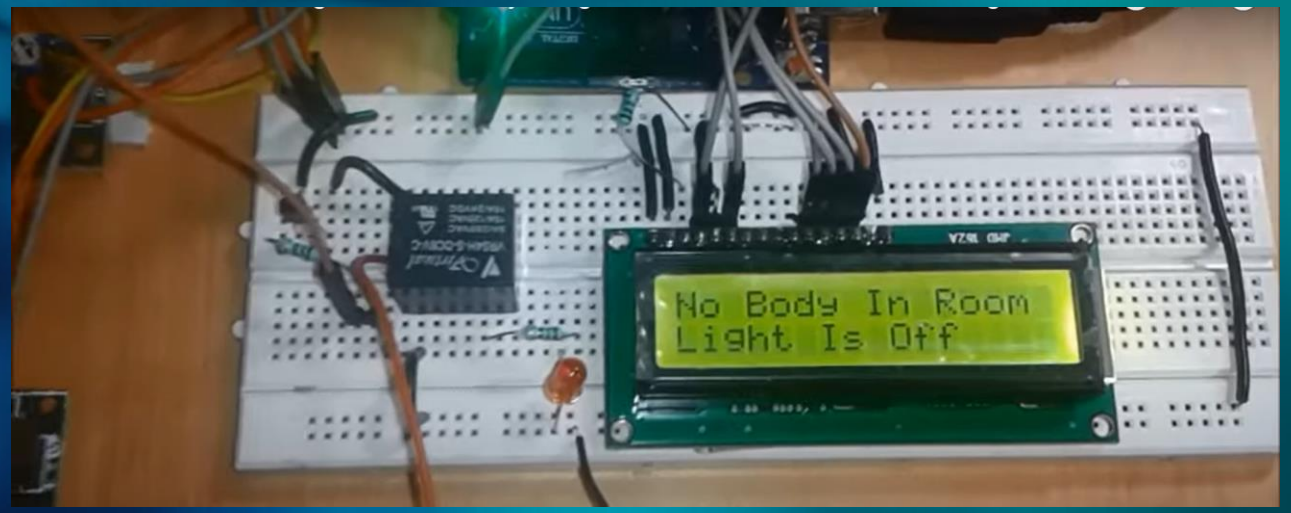


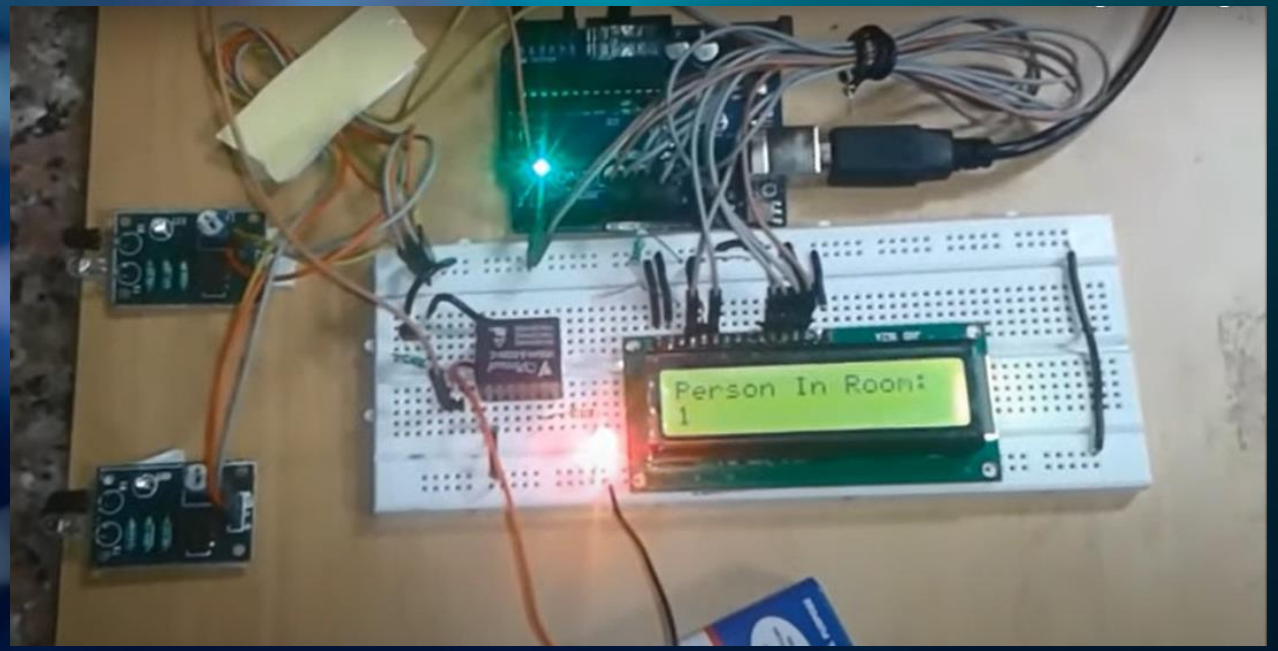


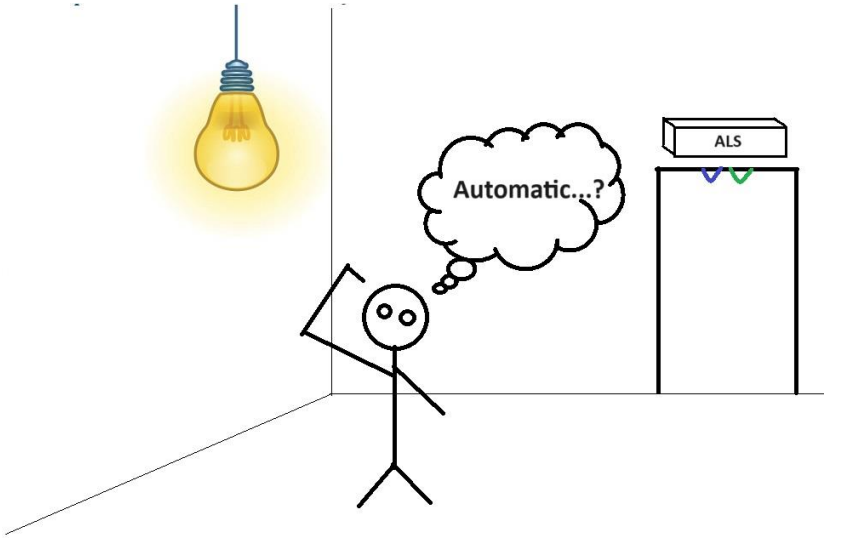


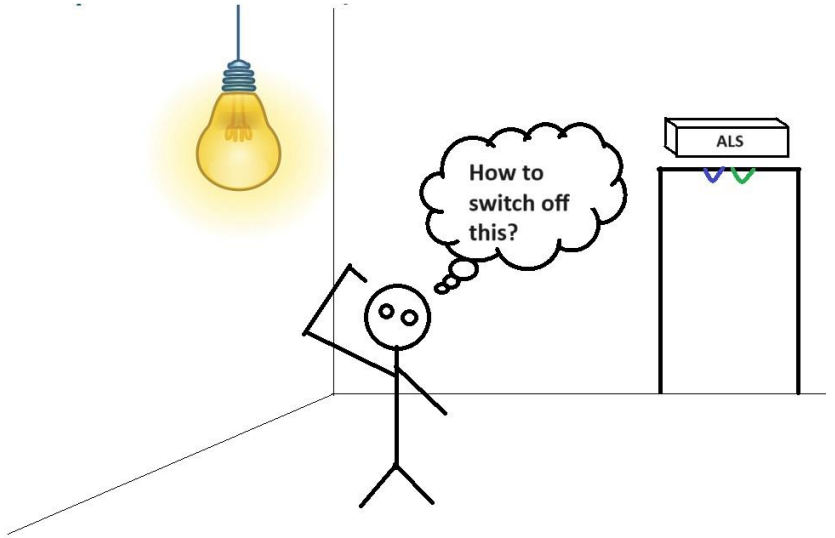
SIMULATION (USING ARDUINO)

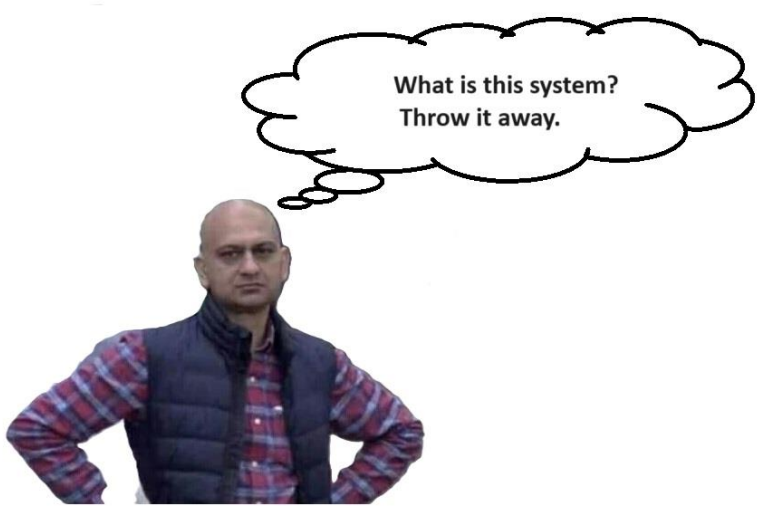







ALS
Automatic...?

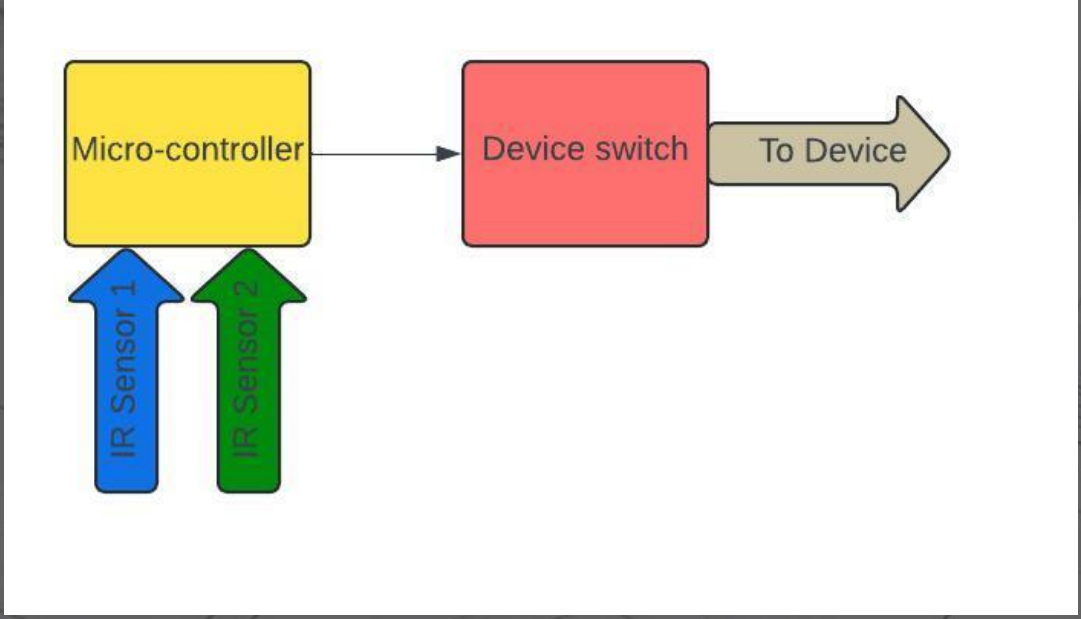

ALS
How to switch off this?


What is this system?
Throw it away.

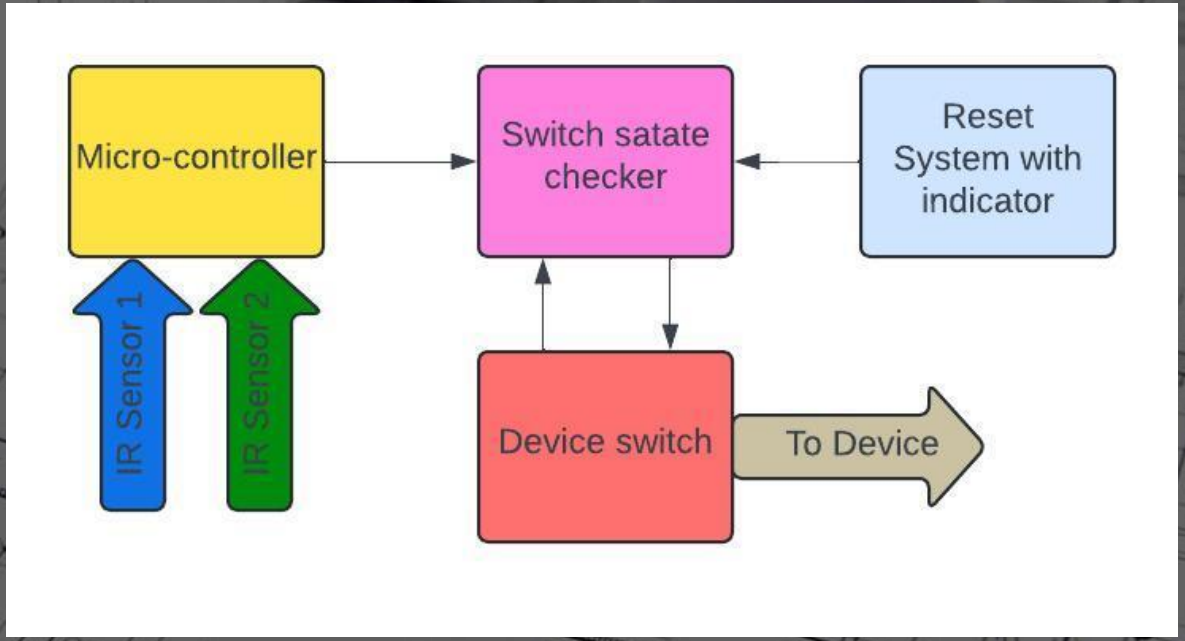
NO!

PRODUCT ARCHITECTURE

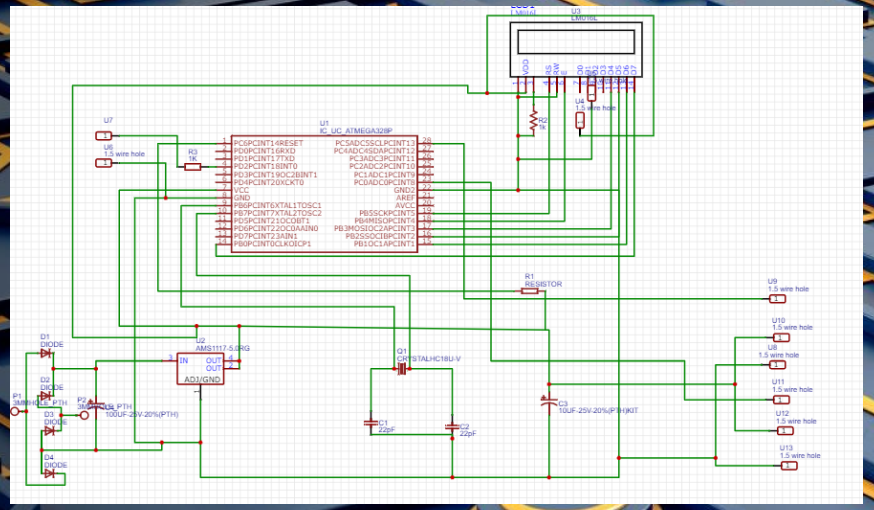
Before Extend

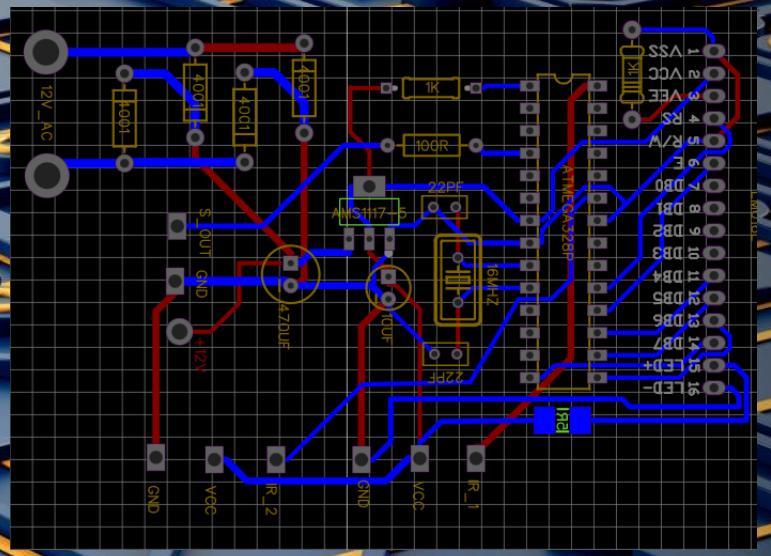


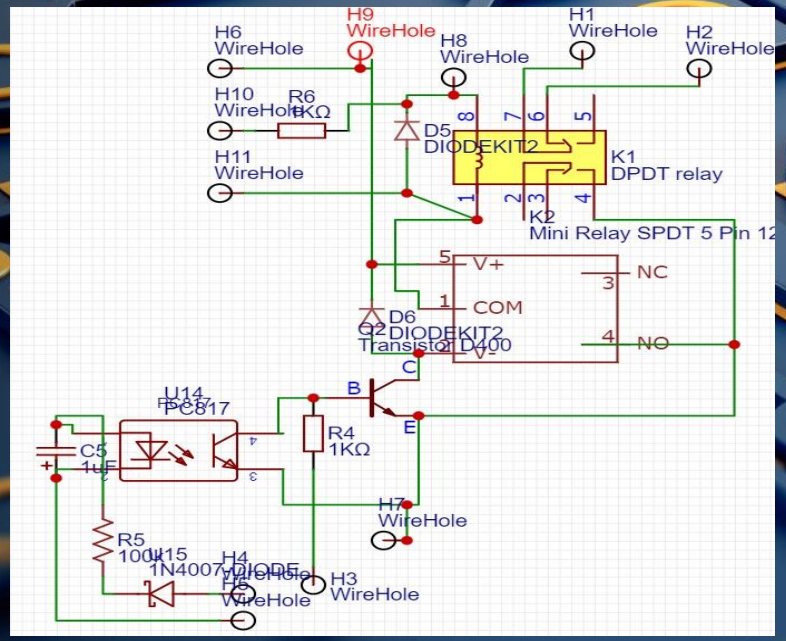
After Extend

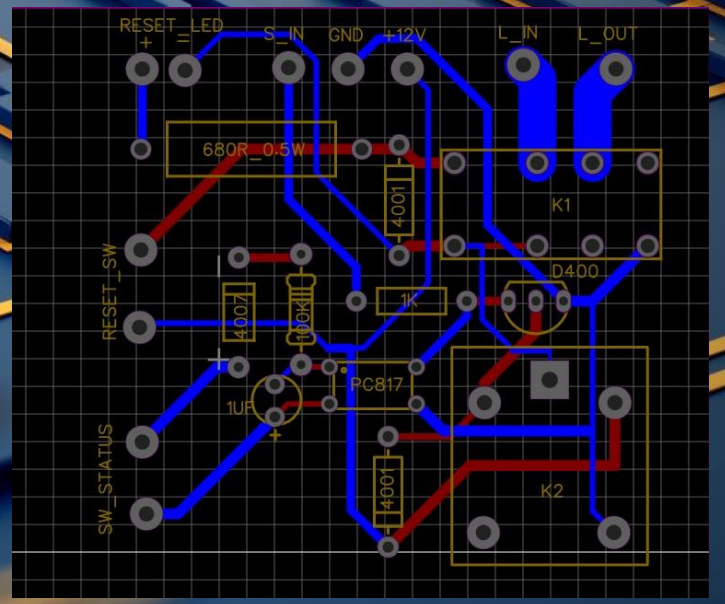


SCHEMATICS & PCBS

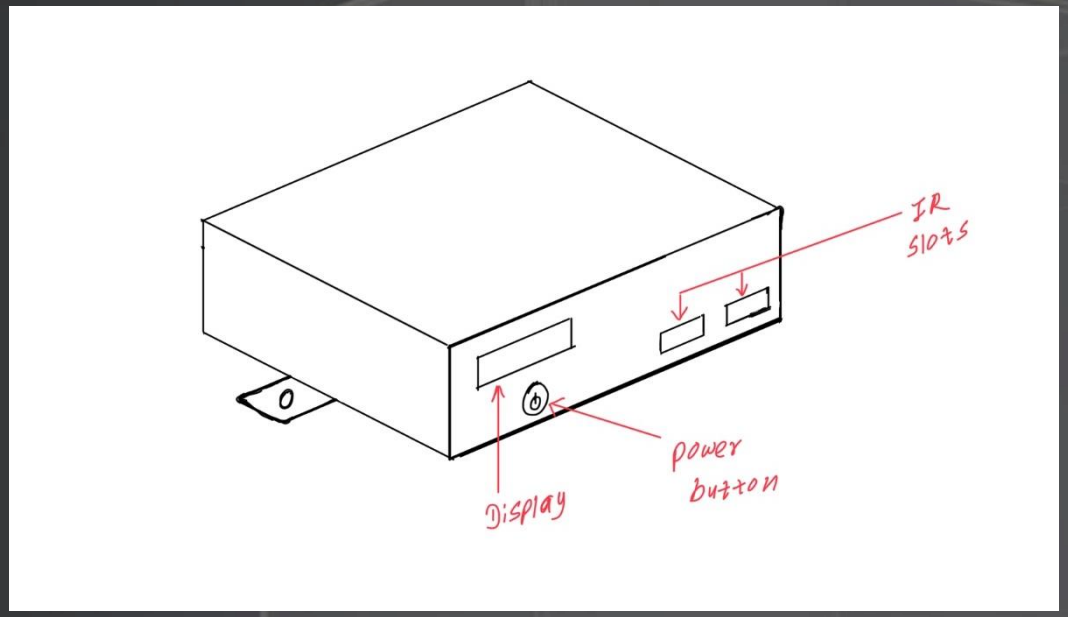


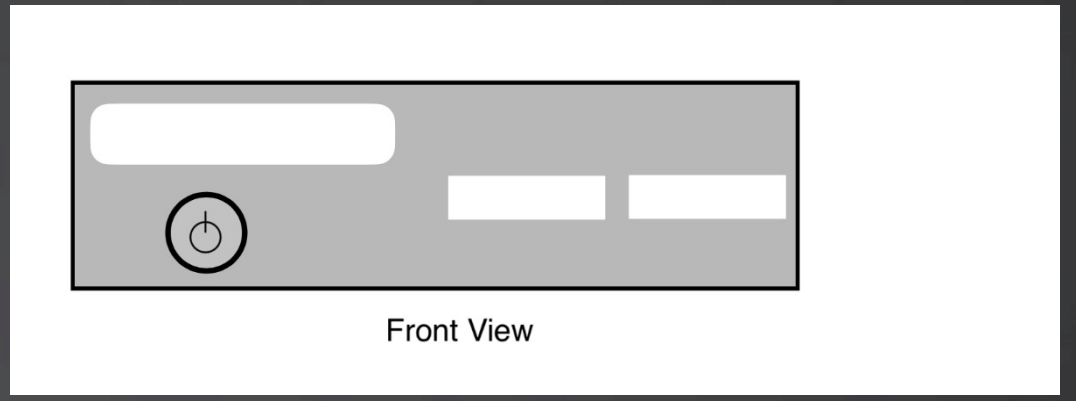


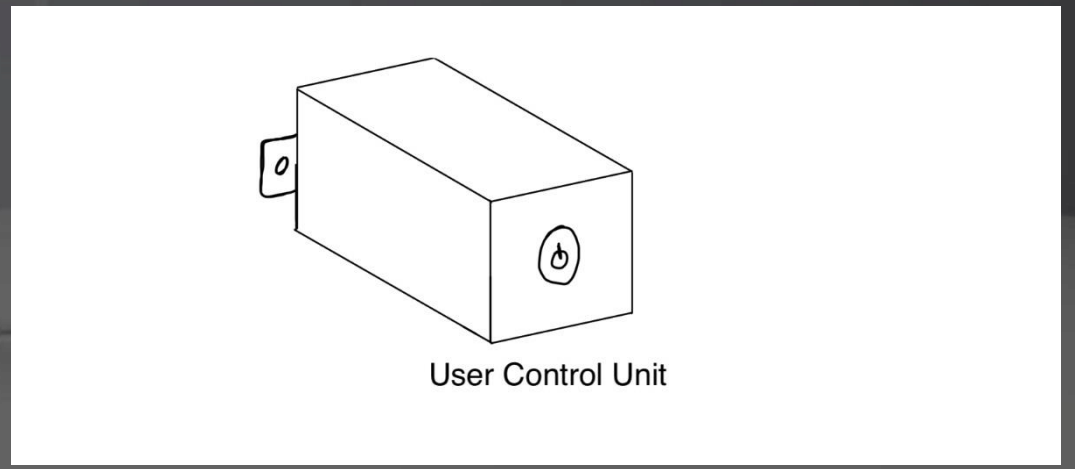




PRODUCT ENCLOSURE







THANK YOU!