

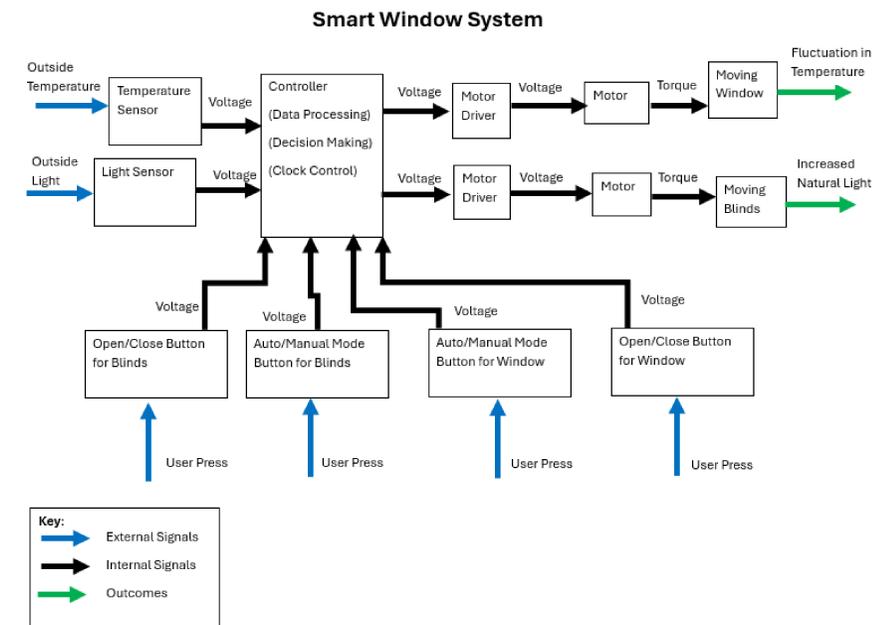
Smart Window System

Project

This project involves the opening and closing of a window and window blinds to accomplish the following:

- Cooling down a room using outdoor temperatures while not at home.
- Waking up to natural light without having to get out of bed to open the blinds.
- Automating the opening and closing of a window.
- Automating the opening and closing of window blinds.

System



Methods

Measuring temperatures



Controller

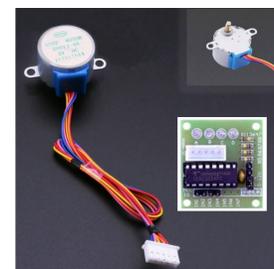


Moving the windows



Measuring light intensity

- C coding
- I2C communication
- 12V and 5V power supplies



Moving the blinds

Conclusion

Results Impact

- Helping college students who may live in a place without central air conditioning.
- Helping regulate circadian rhythm with natural light control.

Future of the Project

- This project could be expanded to various window and blind types by using different motors.
- Further testing with the temperature sensor and light sensor could allow for better measurements to feed into the control algorithms.