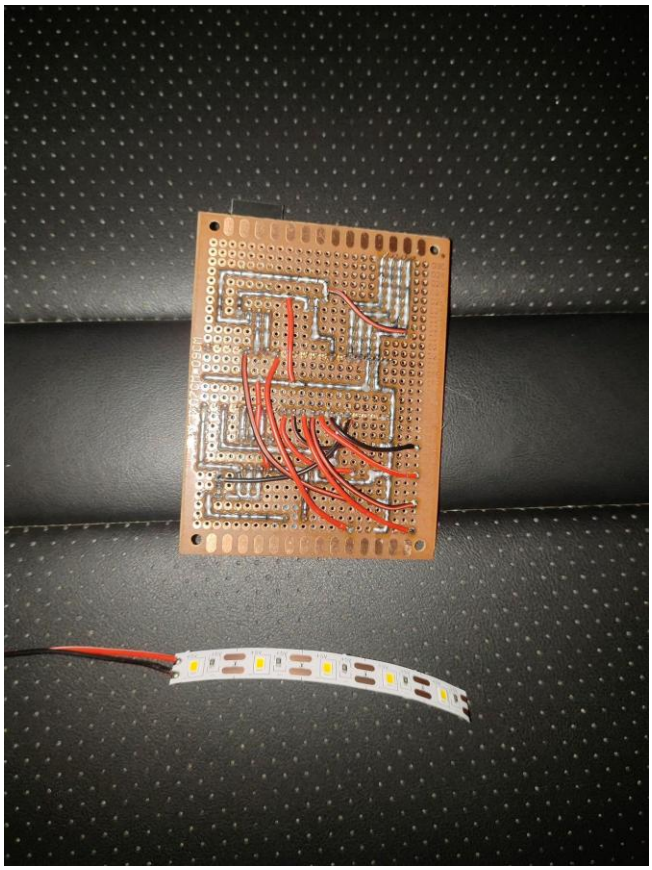

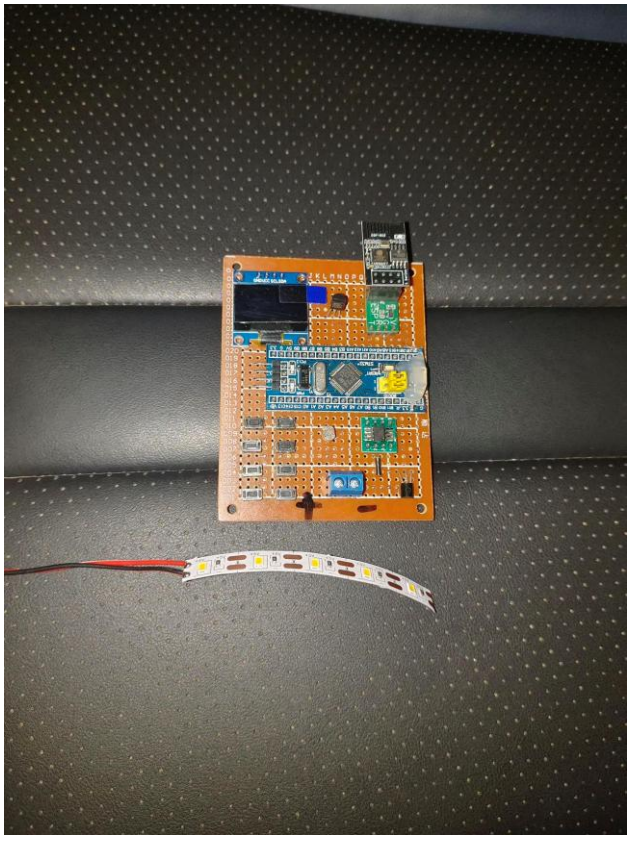

Progress

Project name: STM32-Based Smart Lighting Control System

Project objective: The system detects external light intensity using a BH1750 illuminance sensor, adjusting the LED brightness automatically based on pre-set thresholds. Users can adjust brightness, set rest timers, and monitor room temperature using a mobile app, which also allows for remote control via an ESP8266 Wi-Fi module. The system also includes temperature monitoring (using a DHT22 sensor) and manual adjustment buttons on the device for easy access. Additionally, the app provides lighting modes such as "Reading" for high brightness and
"Movie" for low brightness to meet different ambient needs.

Current progress:
1. Completed the construction of the experimental prototype, including the selection of key components and the welding of the circuit board.
2. The prototype circuit includes the basic control module, sensor and indicator belt to ensure the integrity of the basic circuit.
(more like a guidance to our real product)

Existing problems:
• PCB plate making has not been completed.
• Program burning work is still in progress, program logic to be improved.
• WiFi networking module has not been configured, lack of network function testing.

Next step:
1. Complete the development and burning of the program, debug the code logic to achieve automatic adjustment of light according to the light intensity.
2. Configuration and networking test of WiFi module to ensure remote control and data transmission functions.
3. Make PCB circuit board to improve the stability and cleanliness of the circuit.