IoT course

Final Project

Phase #3

In this phase of the final project, each group works on the IoT dashboard structure and data presentation.

The requirements of this phase are:

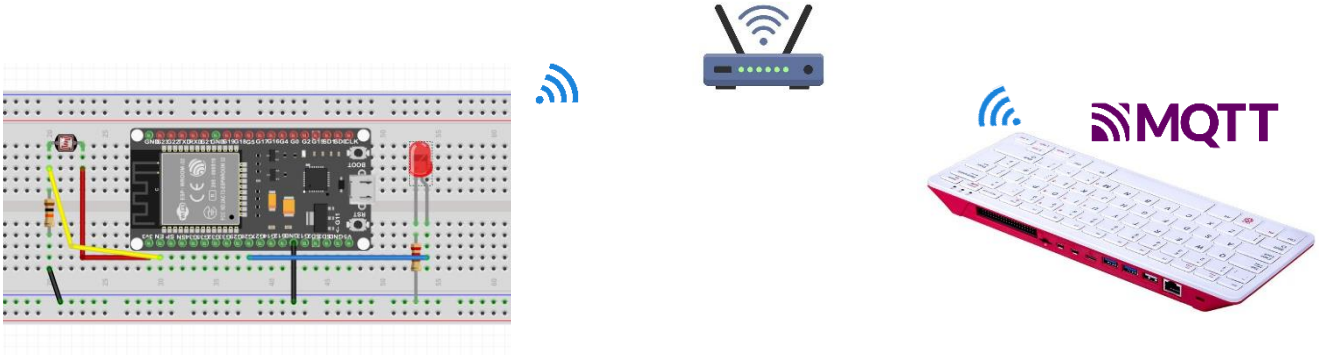
- Photoresistor
- Resistors
- Wires
- Breadboard
- Raspberry-Pi
- ESP8266 or ESP32
- LED

This phase has the following steps:

- Data capture
- Data communication
- Data presentation

Data Capture:

By connecting a photoresistor sensor, capture the light intensity. As the picture shows, the photoresistor sensor should be connected to the ESP8266/ESP32 boards.



Data communication:

The captured data is transferred to the RPi via a Wi-Fi connection and to the MQTT broker.

If the current amount of light intensity is less than 400, turn on the LED (connected to the RPi) and send a notification email “The Light is ON at hh: mm time. (hh: mm means the current time)

Data Presentation:

The current amount of light intensity, the status of the light, and a message that says “Email has been sent” should be added to the dashboard.

LED could be connected to the RPi or ESP8266. It is optional.

The following pictures are some examples of the data presentation.