

IoT course

Final Project

Phase #2

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

The requirements of this phase are:

- DHT 11 Temperature and Humidity sensor
- Resistors
- Wires
- Breadboard
- Raspberry-Pi
- DC motor and driver

This phase has the following steps:

- Data capture
- Data communication
- Data presentation

Data Capture:

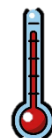
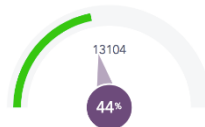
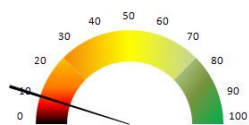
By a DHT-11 sensor, current temperature and humidity are captured.

Data communication:

The captured data is transferred to an RPi

Data Presentation:

Students should create an IoT dashboard and present the captured data (Temperature and Humidity) on the dashboard. For each value, a gauge or another type of gadget should be utilized. (As shown in the pictures)



If the current temperature is greater than 24, send an email to the user with this message

“The current temperature is ***. Would you like to turn on the fan?”

If the user replies YES, then turn on the fan. Otherwise, do nothing.

The Fan status should be presented on the dashboard.

Also, on the breadboard DC motor is used as a fan. Therefore, when the dashboard shows the fan is ON, the DC motor should work.

