

Q-02

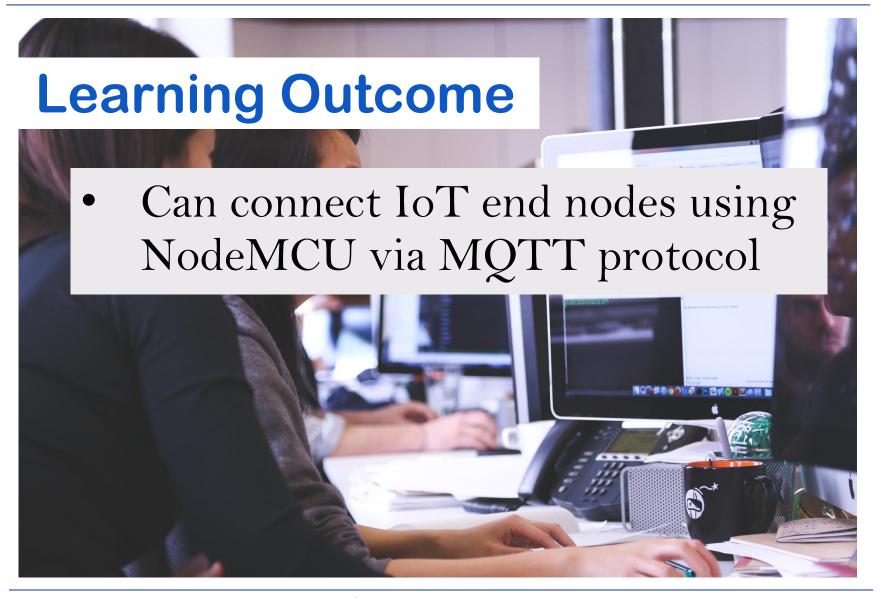
Quiz MQTT

Semester 1/2563

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Score (5%)

- Build a simple PUBLISHER device (2%)
 - NodeMCU
 - DHT22 (Temp / Humid)
 - BH1750 (Light)
- Build a simple SUBSCRIBER device (2%)
 - NodeMCU
 - OLED Display
 - LED
 - SPEAKER
- Each person must finish 2 tasks
- Answer a short question (1%)





Task A

- Build a weather station using
 - NodeMCU
 - BH1750 (Light)
- Publish Light (lux)
 - In every 5 sec
 - -MQTT
 - Broker: broker.hivemq.com, Port:1883
 - Topic
 - -/iot/{yourstudentid}/lux





Task B

- Build a weather station using
 - NodeMCU
 - DHT22 (Temp)
- Publish Temperature (T)
 - In every 5 sec
 - -MQTT
 - Broker: broker.hivemq.com, Port:1883
 - Topic
 - -/iot/{yourstudentid}/temp





Task C

- Build a weather station using
 - NodeMCU
 - DHT22 (Humid)
- Publish Humidity (H)
 - In every 5 sec
 - -MQTT
 - Broker: broker.hivemq.com, Port:1883
 - Topic
 - -/iot/{yourstudentid}/humid





Task D

- Build a LED status using
 - NodeMCU
 - ZX-LED
- Subscribe to command for controlling LED ON/OFF
 - MQTT
 - Broker : broker.hivemq.com, Port:1883
 - Topic
 - /iot/{yourstudentid}/led/
 - Message
 - 0 or 1 for OFF and ON





Task E

- Build a OLED display using
 - NodeMCU
 - OLED
- Subscribe to command for display message on OLED
 - MQTT
 - Broker : broker.hivemq.com, Port:1883
 - Topic
 - /iot/{yourstudentid}/message/
 - Message
 - 0 or 1 for OFF and ON





Task F

- Build a SOUND alert
 - NodeMCU
 - Speaker
- Subscribe to command for display message on SPEAKER
 - MQTT
 - Broker : broker.hivemq.com, Port:1883
 - Topic
 - /iot/{yourstudentid}/alert/
 - Message
 - 0 or 1 for Alert and No sound





