UNIVERSITI MALAYA

WIC2008 Internet of Things

Exercise 5 Report

Semester 2, Session 2024/2025

Occurrence: 6

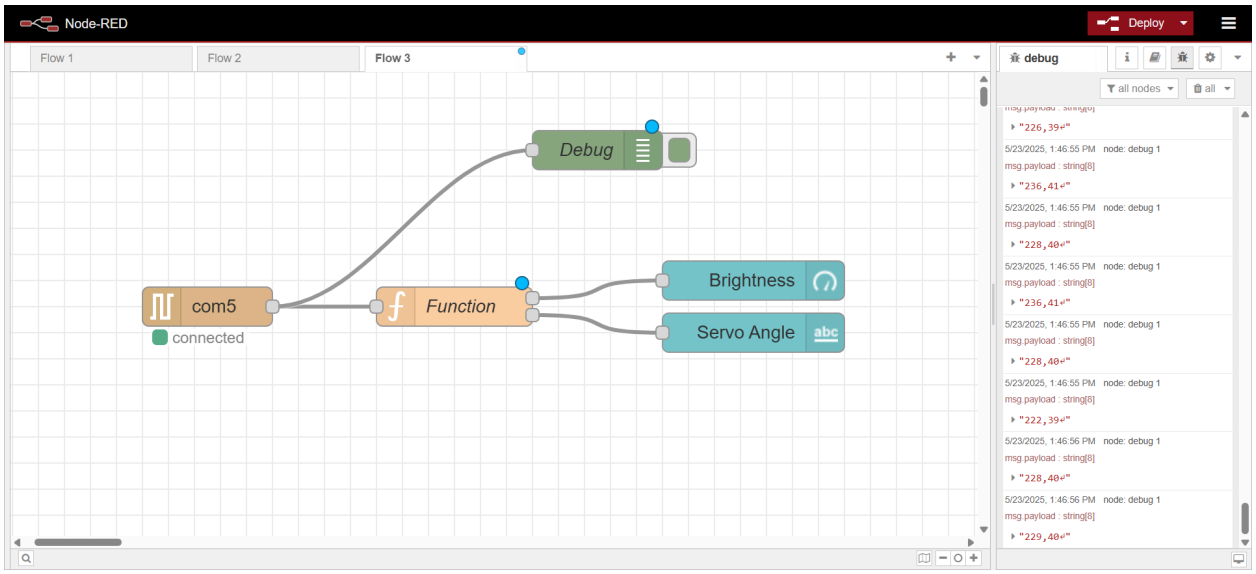
Group Number: 6

Instructor: Ms. Bintang Annisa Bagustari

NAME	MATRIC NUMBER
NORFHAZLEYN MARYAM BINTI SYAMSUDDIN	22002638
NUR FARAH WAHEEDA BINTI MOHD HISAM	22003042
NORLYDIA FARNIZA BINTI NAZARULEZUAN	22002422
NURUL IZZANI BINTI AHMAD SHAYURI	22001685
SITI HAJAR BINTI MOHD NOR AZMAN	22002035

Exercise 3 - Sending Temperature Data from Arduino Nano 33 IoT to ThingsBoard

Screenshot of Node-RED Flow



Code

```
#include <Servo.h>

const int photoresistorPin = A0;
const int servoPin = 9;

int lightValue = 0;
int servoAngle = 0;
Servo myServo;

void setup() {
  Serial.begin(9600);
  myServo.attach(servoPin);
}


void loop() {
  lightValue = analogRead(photoresistorPin); // Read light
  servoAngle = map(lightValue, 0, 1023, 0, 180); // Map to angle
  myServo.write(servoAngle); // Move servo
```

```
  // Send data to serial in the format "light,angle"
  Serial.print(lightValue);
  Serial.print(",");
  Serial.println(servoAngle);

  delay(200);
}
```

Video link

1. **Node-Red Dashboard in action:** https://drive.google.com/file/d/142qQ13l8D5iO6L-hnSkbDlnJQR2YYNVa/view?usp=sharing
2. **Circuit Connection:** https://drive.google.com/file/d/1hdFaeR90G2Y58lYDamKMl1krhlVwPQ6M/view?usp=drivesdk