# Department of Electronic & Telecommunications Engineering University of Moratuwa EN3251 Internet of Things

# **Course Project**

2021 Batch Semester 5

## Overview

The course project is an opportunity for you to put all the learning, tools and techniques that you have obtained into practice. This will contribute towards all of the module's learning outcomes. The project should be a solution to a problem/requirement or a novel IoT application.

You are expected to use standard hardware, protocols and other tools in developing your project.

There are no restrictions to application areas. (Examples: industrial, municipal, entertainment, financial, transport, trade, environmental etc.) However, the choice should feature the aspects outlined in the Guidelines below.

### **Guidelines**

End-devices: Can be virtual (simulated in software) or a live data stream obtained from an open API. (avoid the OpenWeather API). Multiple end-devices are required. Having a hardware end-device for demonstration purposes would be an advantage. (Multiple hardware devices are not needed.)

Management interface: Primarily computer-based. It would be advantageous to have a hardware component as part of the management interface. The live status of the end-devices and analyses as appropriate should visualized.

*User interactions*: Availability of interaction with the end-devices would be an advantage. Interaction with the management system should be possible via a webbased desktop application or with a mobile phone. Alerts or notifications as appropriate for the application should be available.

**Proposal/Report:** Should illustrate the system with appropriate figures, functional descriptions, design details and accompanied by relevant code.

### **Deadlines:**

- 1. Project Proposal Submission : 25th October 2024 (to enable feedback to be received by 29th Oct.)
- 2. Project demonstration and evaluation: To be notified