Introduction to IoT Project Details

Number of People in a Team: 4 (one team may have only 2 as there are 166 students)

Selection of Team members: Students can choose

Overall Description of Project Requirement:
An end-to-end implementation of an IoT system including
a) building hardware for sensing of physical quantity/quantities and transmit the sensed data using some communication protocol to a cloud platform (here you can start with ThingSpeak, but have to use oneM2M eventually),
b) collect the sensed data (you can perform some actuation if your idea requires that), and
c) you may perform some analytics on the data collected.

Timeline for the Project:

1) Project Idea Submission (5 marks): (**Deadline - 25/04/22**)
   Write a 1 page high level overview of what is the IoT project you will implement with the components in the kit.
   The necessary contents in this report should be
   a) Overall objective
   b) What are the inputs/physical quantities measured?
   c) How are you going to use the input?
   d) Description of the output if any

2) Mid Evaluation (5 marks): (**Deadline – 31/05/22**)
   TAs will evaluate the progress of your implementation. Ideally you should have finished the hardware implementation and be able to transmit the data to ThingSpeak.

3) Final Evaluation (15 marks): (**To be announced later**)
   Full final demonstration of the project with oneM2M integration and data analysis with 2-3 weeks of data. You should also submit a report (max 3 pages) on what your initial objectives were, description of your implementation with the code, what were the challenges and whether you were able to address all the objectives.