Wireless Sensor Networks (CSD337) Lab 9

Instructions

For this lab, you will develop application using Arduino and Processing.

Submission
- Put the code, snapshot of circuit, Processing display & data logged in CSV file.
- Name the document as **GLA3_WSN2017_Group_10.pdf**, in case your group no. is 10.
- **Only one submission per group**.

Due Date: **March 31, 2017 (3:50 pm)**

Grading Criteria
- This assignment has a weightage of 3% (out of a total of 100 points).
- Materials copied from Internet or elsewhere will attract penalty as per the course policy.

Graded Question

Design a data logger for temperature and light intensity; store the results as **<date, time, temperature (Celsius), light intensity>** in CSV file – pay special attention on reading the two analog sensors.

The system should store all values from the time the experiment started. Take readings every 60 sec. At any point of time, display window (developed in Processing) should be:

```
Temperature = x C

Light Intensity = z

Last Updated at <dd/mm/yyyy> <hh:mm:ss>
```

Where x, z are average results of the last 10 values.

Initially the background color is 255,255,255.

Change the background color (R, G, B) of the Processing display as follows: set the R component as z/100; G as 255; B as z.

Also, display a real time graph (line graph) of temperature data.

Use appropriate Arduino libraries.