ASSIGNMENT 3: SENSOR DATA GATHERING

CS7NS4, Trinity College Dublin

Deadline: 22:00 01/11/2019
Submission: Submit via blackboard:

1. the short assignment report in pdf or word
2. your source code (.zip), including instructions how to run it.

Goals:

- Learn how to use an existing cloud infrastructure
- Continue building a practical application

Task 1 – Gathering your data (3 marks)

For this task, you are required to store some of your own data (for example from assignment 1) to a cloud service (Google Firebase or Amazon Web Services, if you want to use anything else, check with me first) in real-time.

You can choose the platform and format you store it in, but should specify it clearly in the report. Consider that you will want to build an application on this data for assignment 3

Task 1 mark allocations	
Technical diagram(s) showing how the data is submitted to the cloud for your own source of data.	1
Own data on the cloud (note, you should mention in your report if it works, and whether it is real-time or only historical data. You can be asked to demonstrate this at any time and will be penalised if it does not correspond to what you reported)	2

Task 2 – Gathering open data (3 marks)

For this task, you are required to add some source of open data to your own data. You can choose any open data source (see for example the open data source padlet from last year [1] and this year [2]). Ideally this should be updated and fed in real-time.

[1] https://padlet.com/melanie_bouroche_tcd/zzxg5b9r01kf

[2] https://padlet.com/melanie_bouroche_tcd/b9wuwfuahg3x

Task 2 mark allocations	
Architectural diagram(s) showing how the data is submitted to the cloud for the open source of data.	1
Some open data on the cloud (note, you should mention in your report if it works, and whether it is real-time or only historical data. You can be	2

asked to demonstrate this at any time and will be penalised if it does not correspond to what you reported)	

Plagiarism and code reuse

This assignment is to be performed individually. Students are allowed to discuss their understanding of the assignment instructions, and their general approach. They are not allowed to share, or look at each other's code. Sharing code will result in reduced marks for all students involved and the consequences described in the College rules [2]. If you discuss an assignment with fellow students then you must write the names of the students in your report. All students must complete the College's online seminar about plagiarism before submitting any assignment.

Similarly, students are allowed to look at existing code, but should either:

- Reuse the code (potentially with small adaptations), and identify clearly in the report which components or pieces of code come from existing code. In this case, students should demonstrate significant effort in addition to the existing work, potentially by going beyond the requirements of the assignment.
- Or use the code only as inspiration and write their own code without looking at the online code.

In either case, students should list any piece of code consulted (with a link if appropriate) in their report

[2] http://tcd-ie.libguides.com/plagiarism/levels-and-consequences