Module				
Title Databases 2	Lecturer Ciaran Kelly		Class group DT211C/3, DT282/3	
Assignment				
Name MongoDB submission		Worth: 10%		Due date/time As indicated on Webcourses
Submission mechanism (Only submit through mechanisms listed here – other submissions will be ignored)		INDIVIDUAL webcourses submission		Late submission penalty 10% per day.

Description of task: DO:

Add your name to the google sheet <u>here</u>. Up to 6 students can use the same dataset, but the submissions are individual. You may use a dataset you have sourced yourself, but you must check its suitability with your lab supervisor.

There is a description of these datasets in the document here

- 1. Part 1: Flat upload. (1 mark). Using the dataset you chose, upload the contents into the collection(s) that you have created for it. Please note: If there are > 1,000 rows in the dataset you may just take the first 1,000.
- 2. Part 2: Design one or more collections to store the data from your dataset into MongoDB, using a 1:few, 1:many or 1:squillions design, create a new collection or set of collections to contain your new documents. State whether or not you are restricting the data to be inserted. Write and run a program (in any language) to convert the dataset into your new design and load it into your new collection(s). The same data should be held in these collections as are held in the collection you created in part 1 (4 marks).
- 3. Write MongoDB queries to query your collections (3 marks). Your queries should show: All documents in the collection; embedded array data, based on selected criteria; projection; sorted output and finally, aggregation.
- 4. Find out how to update your document and implement an update (2 marks).

Each student should design their own schemas and all queries must produce a result. **Where there** is a filter / projection, the result must show a difference from the original document.

This work can be done on your own laptop.

Submission requirement

Every student must submit and comment all scripts to create, populate and query the document collection(s) to Webcourses.

Demo requirement

Each student must demonstrate their work to the lab supervisor. Failure to do so gives a zero mark.

Marking scheme:

Straight upload (1); New schema design (2); New schema create and populate (2); queries (3), update (2)