Assignment / Assessment Specification

Module

Title	Lecturer	Class group
Databases 2	Patricia O'Byrne	TU856/3, TU857/3, TU858/3, DT844/1

Assignment

Name	Worth: 10% of module	Due date/time
MongoDB		Friday night, week 10
Submission mechanism *(Only submit through mechanisms listed here – other submissions will be ignored)*	**INDIVIDUAL** Brightspace submission	**Late submission penalty** 10% per week for 1 week. No submissions allowed after that.

Description of task:

- You will be given instructions relating to the dataset you must use.
- Develop a design for the data, and derive a collection from the design. The design should have embedded arrays. Use the design advice given in lectures.
- Document your design in a Word document and describe what validation you want to implement. Create and populate a database and collection in MongoDB using Python to convert the data, to show them working, introducing validation where appropriate.

Write MongoDB queries to query your collections. Your queries should show:

- Selection of all documents in a collection, in JSON format.
- Selection of embedded array data, based on selection criteria.
- Selection showing Projection
- Selection with sorted output
- Aggregation

Manipulating data:

- Write insert, update and delete statements for one of your collections (Look this up yourselves).

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 may be done on your own laptop.**

Submission requirement

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

Demo requirement

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

Marking scheme:

Schema designs and creates: 4 marks
Queries: 3 marks, Manipulating data: 3 marks.