

## COM644 Full Stack Web and App Development

### Week 4 Challenge

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**Aim:** Import a JSON data file into a MongoDB database and specify a range of queries using the MongoDB Shell.

#### Description:

The file *data\_100.json* contains information about 100 businesses extracted from the Yelp Dataset Challenge ([https://www.yelp.co.uk/dataset\\_challenge](https://www.yelp.co.uk/dataset_challenge)) and will form the data engine of the demonstration application to be built as we progress through the module. In this challenge, you will import the JSON file into a MongoDB database and construct a number of queries to extract information from the collection.

#### Part 1 – Create the database

- a. Create a database called “**businessDB**” and import the data from the file “**data\_100.json**” into a collection called “**business**”.
- b. Use the Mongo Shell to verify that the collection has been correctly populated.
- c. Examine the structure of the documents in the collection by using the command  
**db.business.find( {"business\_id":"iVGkFUAYCfKVTEqU1xcqtw"} )**  
**.pretty()**  
to retrieve information about one of the businesses in the data set.

## Part 2 – MongoDB queries

Study the MongoDB manual for the **find()** operation at <https://docs.mongodb.com/getting-started/shell/query/> and other online resources to help you write MongoDB Shell commands to find the following

- a. The name and location (city) of all businesses
- b. The name, location (city) and number of reviews (review\_count) of all businesses, ordered in descending order by number of reviews.
- c. The list of unique values for the “city” field
- d. The number of businesses located in Edinburgh
- e. The number of Edinburgh businesses with more than 10 reviews
- f. The names of the Edinburgh businesses with more than 10 reviews
- g. The text (only) of the reviews of the business with **business\_id** **iVGkFUAYCfKVTEqU1xcqtw** (the same business as in the earlier **find()** operation)
- h. The names (only) of all Edinburgh businesses with any 5 star reviews.