

## **CSC4000W/4016W/4003W – BigDB Assignment 2 – 2018**

This assignment is to be done in groups of EXACTLY 4 (four) students each  
**Please use the same groups for both BigDB assignments**

Design and implement a MongoDB system for an online dating site. Your client, being old, is not particularly knowledgeable as regards the kind of data or processing this would involve, so is entrusting the design to you completely. She simply stipulated that there must be at least 2 collections, one of People (subscribers) and one of Ratings (when one person rates another after looking at their profile – or, if you so advise, possibly also after meeting up with them). She has particularly specified MongoDB so that any design errors or omissions on your part can be rectified later due to MongoDB's flexible schemas.

- (A) In whatever way is most convenient, show the design you have chosen for your document collections, and motivate why this design is best. [5]
- (B) To show your knowledge of MongoDB load just a few documents into each collection and test as much of the MongoDB operations as you are able to in the time available. [10]
- (C) Write a very simple program, in any of the programming languages MongoDB supports, which implements any one of the statements you tested in (B) above. [5]
- (D) For each of the other 3 types of NoSQL store, outline the pros and cons of using it for the above application. [9]
- (E) Choose any of the other 3 types of NoSQL store and show the design you would use if it were to replace a document store in this context; briefly motivate your design. [5]
- (F) State the contribution of each member of your group. [1]