COMP6231/1 – Sections BB – Summer 2018

ASSIGNMENT #3
Due: Sunday, July 8th by midnight 11:59 PM

Important Note

- The work is realized in a **team of 4 students**.
- Submit code by the due date.
- Your program should be compiled, executed and return the expected results; otherwise a mark 0 (zero) will be assigned.

Web Service Implementation of the Distributed Class Management System (DCMS)

In this assignment, you are going to implement the Distributed Class Management System (DCMS) from *Assignment #2* as a Web service. Specifically, design the service from *Assignment #2* (using the same functions and exceptions) by doing the following:

- Extract the Java client-server implementation by removing the CORBA specific code from your *Assignment #2*.
- Properly annotate your Java implementation to adapt it as a Web service.
- Build the end point files using the **wsgen** command before publishing the service.
- Import the **wsdl** files using the **wsimport** command.

Your server design should maximize the concurrency in the application. In other words, use proper synchronization that allows multiple managers to *createTRecord, createSRecord, getRecordCounts, editRecord, transferRecord* for the same or different records at the same time.

MARKING SCHEME

- [**40%**] ***Design Documentation*:**
  - Describe the techniques you use and your architecture, including the data structures and how you separate the client and server code.
  - Design proper and sufficient test scenarios and explain what you want to test.
  - Describe the most important/difficult part in this assignment.
  - You can use UML and text description, but limit the document to o a reasonable number of pages (maximum 10).
- [**60%**] ***The correctness of code:*** your designed test scenarios to illustrate the correctness of your design. If your test scenarios do not cover all possible issues, you will lose part of marks up to 50%.

EDUCATIONAL GUIDELINES

- The work is realized in a **team of 4 students**.
- The delivery must be made no later than **Sunday, July 8th, 2018 by midnight 11:59** PM using the Website submission as mentioned in the course outline.
- If you are having difficulties understanding sections of this assignment, feel free to email the Teaching Assistants It is strongly recommended that you attend the Lab sessions which will cover various aspects of the assignment.