COMP6231/1 – Sections BB – Summer 2020

ASSIGNMENT #3

Due: July 12th

Important Note

- The work can be realized ***individually***.
- Your program should be compiled, executed and return the expected results; otherwise a mark 0 (zero) will be assigned.
- The delivery must be made no later 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 tutorial sessions which will cover various aspects of the assignment.

Web Service Implementation of the Distributed Player Status System (DPSS)

In this assignment, you are going to implement the Distributed Player Status System (DPSS) from *Assignment #2* as a Web service. Specifically, ***design the service*** from *Assignment #2* (using the same functions and exceptions) by following one of these two options:

Option 1

- 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.

Option 2

- Extract the Java client-server implementation by removing the CORBA specific code from your *Assignment 2*.
- Transform the hash table to provide data persistence.
- Use the Eclipse Dynamic Web Project – Web Service to identify and select endpoints and generate wsdl file.

Your ***Server design*** should maximize the concurrency in the application. In other words, use proper synchronization that allows multiple players/administrators perform the operations (*createPlayerAcount, playerSignIn, playerSignout, getPlayerStatus, transferAccount, suspendAccount)* for the same or different accounts at the same time.

Submitting Assignment #3

- Naming convention for zip file: Create one zip file, containing all source files (.java, .doc or .pdf or .txt, etc.) for your assignment using the following naming convention:
  The zip file should be called *a#_studentID*, where # is the number of the assignment *studentID* is your student ID number. For example, for the third assignment, student 123456 would submit a zip file named *a3_123456.zip*
- Submit your zip file at: https://fis.encs.concordia.ca/eas/ as **Programming Assignment** and submission **#3**. Assignments submitted to the wrong directory would be discarded and no replacement submission will be allowed.
- Submit only **ONE version** of an assignment. If more than one version is submitted the last one, before the deadline date, will be graded and all others will be disregarded.

Evaluation Criteria of Assignment #3 (100 points)

Activities	Points
Q1: Describe the techniques you use and your architecture, including the data structures: - Design of architecture: 5 pts. - Description of techniques (including data structures) used: 5 pts.	10 pts.
Q2: Design proper and sufficient test scenarios and explain what you want to: - Design of 10 scenarios: 5 pts. - Explanation of each scenario: 5 pts.	10 pts.
Q3: Describe the most important/difficult part in this assignment	10 pts.
Q4: You must provide the following: - The UML design your architecture (Web Service design, Server design): 5 pts. - The text description of your design: 4 pts. - A document to 10 pages : 1 pt.	10 pts.
Q5: The correctness of code	60 pts.