

CONCORDIA UNIVERSITY

DEPARTMENT OF
COMPUTER SCIENCE AND SOFTWARE ENGINEERING

COMP 6231, Winter 2014

Instructor: R. Jayakumar

ASSIGNMENT 3

Issued: Mar. 11, 2014

Due: Mar. 25, 2014

Note: *The assignments must be done individually and submitted electronically.*

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 (*createPlayerAccount*, *playerSignIn*, *playerSignout*, *getPlayerStatus*, *transferAccount*, *suspendAccount*) for the same or different accounts at the same time.

Marking Scheme

[40%] *Design Documentation:* Describe the techniques you use and your architecture, including the data structures. 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 10 pages. Submit the documentation and code by the due date; print the documentation and bring it to your demo.

- [60%] *Demo in the Lab*: You have to register for a 5-minute demo. Please come to the lab session and choose your preferred demo time in advance. You cannot demo without registering, so if you did not register before the demo week, you will lose 40% of the marks. Your demo should focus on the following.
- [30%] *Correctness of code*: Demo your designed test scenarios to illustrate the correctness of your design. If your test scenarios do not cover all possible issues, you'll lose part of mark up to 30%. You will also be evaluated on the implementation of your design.
 - [10%] Demo that the service is published in the server side and a client should download and generate necessary files.
 - [20%] *Questions*: You need to answer some simple questions (like what we've discussed during lab tutorials) during the demo. They can be theoretical related directly to your implementation of the assignment.

Questions

If you are having difficulties understanding sections of this assignment, feel free to email the Teaching Assistant at alexandre.hudon@sympatico.ca. It is strongly recommended that you attend the tutorial sessions which will cover various aspects of the assignment.