OO Design and Implementation

Workshop Instructions

Implementation Workshop

PRMS IMPLEMENTATION ASSIGNMENT

Objective

The objective of this workshop is to implement the Design model using Java EE technology. It is part of the Unit 3 Continuous Assessment and its deliverables will contribute towards the final mark.

The assignment consists of building a part of the PRMS system using Java EE platform. The development environment is as follows:

1. NetBeans 8.0.1 or greater
2. Glassfish Application Server (part of NetBeans download and install)
3. Will be using JavaEE 7 and JavaSE 7 (or greater) for development
4. MySQL server 5.5 or greater

You are not expected to build the whole system, but are responsible for implementing a number of features (details below). Your implementation will be based exclusively on the High Level Design, Use Case Realization Reports and Class Reports that you have produced earlier.

In addition to implementing the code requested, you are also required to write API documentation and a Unit Testing suite for part of the system. The Java API documentation using Javadoc and test classes using JUnit, Hamcrest and Mockito are also the deliverables for this assignment.

The Assignment

There will be three parts to this assignment.

Part 1: Code Implementation

You are required to implement all the classes for the use cases that were included for the Design Modeling assignment. (Refer to the Design Modeling assignment)

Part 2: Unit Testing

Pick any **5 significant classes, *excluding*** the JSPs and Servlets, and provide a suite of unit tests using JUnit to test them. Marks will be awarded for comprehensiveness, good design of the test suite, correct operation and compliance to the design.

Part 3: Code Documentation

You need to create Javadoc-based API documentation of the **5 significant classes picked in Part 2**. Make sure no Javadoc is generated for your JUnit test classes. Marks will be awarded for thoroughness, good style and compliance to the design. The Javadoc must be built by the same script you use to compile the system.

Deliverables

You will work in your usual teams and split the work amongst yourselves equally. The author of the individual classes/modules must be clearly specified in the source.

1. The final deliverable will be the ZIP file containing a directory tree with all the sources, test classes, data files, build files. You will name this ZIP file ***PRMS_Bnn.zip***,
   where B is the Batch (PT for Part-time teams and FT for Full-time teams) and
   nn is the Team number (01, 02, etc.)

   Please omit the compiled class tree, and the generated Javadoc from the ZIP files, as these will be generated from your scripts and will just bloat up the size of your ZIP file. Your system must be compile-able without errors. The ZIP file should be uploaded to the team project folder of IVLE by the deadline (which will be communicated in class and posted in IVLE). No late submissions can be accepted.

During the assignment period, any questions must be posted through the discussion group at IVLE. Email questions will not be answered.