

Comp 3711 Object Oriented Analysis and Design – Assignment 2

Instructor: Richard Chau

Due: November 7, 2008, 5:30pm

Work Effort: The assignment must be done with a *partner* from your set. If there is an odd number of students in your set and you are the odd person left out, talk to your lab instructor. He will give you permission to do the assignment by yourself or help arrange a partner from another set. If your partner drops out of the program or does a vanishing act, talk to your lab instructor immediately.

Submission: (1) Submit a printed copy (stapled) in word document format (Word 2003 format) to instructor's red assignment submission box between SW2 and SW3 on the third floor (marked under the name Richard Chau). The relevant diagrams must be pasted in the Word document. Hand written assignment will not be marked. You must use the front cover page template (which includes the marking guideline) provided in the end of this assignment outline and personalize the required detail (First and Last names, Student_ids and Set_id).

(2) When you submit your printed copy, you also submit a electronic copy in a file to the share-in drive identified by *<LastName><FirstName><Student_ID><SetID>C3711Assg2.zip* with setID=setXX where XX is your set identifier. Your zip folder should contain all the relevant mdl files and the word document. Make sure you save your work in the lab to a file and paste to the Word document. Make sure you post your electronic copy in the respective set folder in the share-in drive.

Assignment 2

Your Assignment Deliverables:

1. Working in pairs, you are to continue from your OOA in the Inception phase to Elaboration phase by iteratively applying OOD to the Domain Model and Use-Case Model artifacts you have created in Assignment 1 using Rational Rose.
2. In your OOD, identify the software classes and the methods and construct the UML Design Class Diagram for the “Select Courses to Teach” use case. You are to show all relevant attributes and methods for each software class and the associations between the classes. Attributes must include data types. Your methods and attributes must follow the standard naming conventions. Use UML keyword or Stereotype to categorize your model elements where appropriate (e.g. boundary, controller, entity, etc.). Show reasons for your RDD by citing the GRASP patterns you have applied in your use-case realization.
3. Add a class to validate instructor logins, called ValidIDList. Add another class to provide an interface to a database system, called DBCourseOffering. Choose one class from your Design Class Diagram and implement it (including its methods) in Java.
4. Construct the UML Sequence Diagram and the corresponding Collaboration Diagram for the “Add Course Section to Teach” stated in the S-1 scenario of the “Select Courses to Teach” Use Case given in Assignment 1.

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Submission Cover Sheet

Due by: November 7, 2008, Friday, 5:30 pm

SET: _____

Name: _____

Student_Id: _____

Name: _____

Student_Id: _____

Design Artifacts and Patterns	Max	Your Mark
Design Class Diagram	10	
Sequence Diagram	10	
Collaboration Diagram	10	
Justify GRASP patterns used	10	
A class implementation in JAVA	10	
Total	50	

Comments: