

Object Oriented Analysis and Design

Assignment 2

Assignment Due Date: Week 10,11 review - due Week 12

Marking Guide for the Assignment

#	Category	Maximum	Mark
1	Submission instructions followed	5	
2	Design classes	15	
3	Sequence diagram	15	
4	Correct Relationships	10	
5	Correct attributes	15	
6	Correct data types	5	
7	Correct methods	15	
8	Method signatures correct	5	
9	Rational Rose Model	10	
10	Naming convention followed for attributes and methods	5	
	Total	100	

Assignment Objective:

The purpose of this assignment is to review and practice on how we create UML design class diagrams.

Assignment:

Create a new model with the following design specifications.

Use for <u>reference only</u> the Asg2.mdl Rose model, which is essentially the solution to Assignment 1.

- 1. Construct a design class diagram for the "Review schedule scenario", where the Instructor will review his course sections so that there are not more than 4 sections per week and they don't overlap. The system will check if the sections are overlapping or if there are more than 4 and it will prompt the instructor. The instructor will be able to select a section and send a message to the admin, that the section needs to be rescheduled or removed. The Instructor will be able to see how many students are in a section and put a request for a Teacher Assistant is there are more than 18 students.
- 2. Create the sequence diagram or diagrams to support the design and show the sequence of events for the "Review schedule scenario".
- Add a class to validate instructor logins, called ValidList. Add another class to provide an interface to a database system, called DataServiceProvider (DSP). Add any other design classes you may need.
- 4. Add relationships with multiplicities to your class diagram.
- 5. Add the operations and attributes that are needed to implement the "Review schedule scenario". Attributes must include data types. Your operations and attributes must follow the standard naming conventions.

Submitting your assignment:

- 1. Print your class diagram. Staple the marking guide, which will be posted to the front of your assignment. Do not use any binders or folders with your assignment
- Upload a Word Document containing the design to the Dropbox. You must use Rational Rose or a similar UML tool to build your model.
- There will be marks awarded for submitting the assignment correctly.

All assignments must be done using a word processor or other computer tool. Hand written assignments won't be marked. Print the assignment marking guide and staple it to the front of the assignment pages.

No late assignments will be accepted.