

Computer Science 507 Software Engineering The College of Saint Rose Spring 2014

### Lab 4: UML Diagrams for Design Due: 6:00 PM, Monday, February 17, 2014

For a lab exercise this week, you will practice creating a few additional types of UML diagrams for our ski school case study.

You may work alone or in groups of up to 5 members for this exercise.

# **UML Design Diagrams**

Your task is to develop several diagrams (in addition to the ones you developed previously) for the school scenario. These diagram types are described in Chapter 5 of Sommerville.

We will assume two "systems" here: a financial system that is involved in customer payments and payroll, and a scheduling system that tracks lesson schedules.

#### **Sequence Diagrams**

Create UML sequence diagrams (see Figure 5.6) for at least two activities relevant to the ski school scenario. (10 points)

#### **Class Diagrams**

Create class diagrams for the ski school scenario at two levels of detail. Create a diagram like the one in Figure 5.9 to show the classes you expect would be used and their associations (10 points). Then, create a class diagram for at least two of the major classes in the system (5 points).

You are encouraged to think about which other UML diagrams in the remainder of the chapter are relevant to this scenario, and how they would be used. However, you are not required to do so.

### Submission

Before 6:00 PM, Monday, February 17, 2014, submit your lab for grading. Package up all required files into an appropriate archive format (.tar.gz, .zip, and .7z are acceptable) and upload a copy of the using Submission Box at http://sb.teresco.org under assignment "UMLDesign".

# Grading

This lab is worth 25 points, as broken down above. 10 points for the sequence diagrams, 10 points for a diagram of all classes and their associations, and 5 points for the detailed class diagrams.