

SYS466 Fall 2017
Lab 4: Case Study – College Student Management System
Due: At the end of lab
Object Level Sequence Diagrams

For this lab, you are to complete an Object Level Sequence Diagram for each of the following scenarios.

Assume that the following your domain model has the following entities.

Class Student – attributes: number, name, program, grade point average

Use the layer pattern discussed in class and ensure that you use *controllers* as interfaces between classes. Use the **Entity Manger Controller** to access data from the persistence layer. Follow conventions noted in the course materials.

When you are done, upload your model to Blackboard with your “Group”*GroupNumberLab3.uml* as the file name, with the lab number (e.g. *GroupxxLab3.uml*). Ensure that your group members’ names are on each diagram.

Tips to Help Get Started

- Create your controller and entity classes in the **use case model** before making any diagrams
- Controller classes should be set with the stereotype <<control>>.
- Create your sequence diagrams (one for each scenario) in the **design model**.
- Drag the required classes from **use case model** into the sequence diagrams. When controller classes are dragged into your diagram change the icon by
 - right clicking the class
 - selecting *Format > Stereotype Display > Iconic*

Scenario 1: View specific student

Actor (Administrator)	System
Enter student number and requests to view student	Retrieves the student information from the data store and displays the student details

Scenario 2: Add a new student

Actor (Administrator)	System
Enters student number, name, program, and grade point average	Creates a student object with the entered number, name, program and grade point. Adds the student to the data store. Displays number, name, program and grade point. and along with confirmation of addition

Scenario 3: Remove a student

Actor (Administrator)	System
Enters a student number and requests to delete.	Retrieves the requested student details and displays them. Requests for confirmation
Confirms.	Deletes student from the data store and delete object in the domain layer