Tutorial-3

The tutorial shows Scenarios and Domain Model Class Diagrams Class , using the Camel back notations in writing class Names and Class Attributes and with emphasis on Association Class for the many to many Associations .

Class Diagrams

**Tutorial-3 : Class Diagrams**

**Question-1**

Given the domain model class diagram shown in figure-1, answer the given questions:

1. Does the model allow a Student to enroll in more than one CourseSection at a time?.

Yes , a Student can enroll in zero to many sections.

1. Does the model allow a CourseSection to have more than one Student?

Yes , a CourseSection can have zero to many Students.

1. Does the model allow a Student to enroll in several CourseSections and get a grade for each enrollment?

Yes, there is no mention that this is constrained .

1. Does the model save all grades earned by all Students in all CourseSections?

Yes , the CourseEnrollment associative class allows this to occur.



**Question-2 Scenario**

The Domain model class Diagram in question-1 above, needs to be modified based on the following scenario:

A FacultyMember usually teaches many CourseSections, but some semesters, a FacultyMember may not teach any. Each CourseSection must have at least one FacultyMember teaching it, but sometimes, faculty teams teach CourseSections. To make sure that all CourseSections are similar, one FacultyMember is assigned as a course coordinator to oversee the Course, and each FacultyMember can be the coordinator of many courses.

Required: Draw a modified Domain Model Class diagram

See figure-2 “Modified Domain Model Class Diagram based on Question-2 Scenario”.



**Question-3 Scenario**

The Domain model class Diagram in question-1 above, needs to be further modified based on the following scenario:

Each FacultyMember teaching a CourseSection is required to have specific hours set as officeHours for each CourseSection, that he teaches. Further, a facultyMember who teaches a CourseSection has some sort of evaluation for each CourseSection.

Required: Draw a modified Domain Model Class diagram

See figure-3 “Modified Domain Model Class Diagram based on Question-3 Scenario”.

