

Programming Technique II

Tutorial 7.1

Association, Composition and Aggregation

Tasks

1. Determine type of relationship, composition or/and aggregation
2. Draw the UML diagram
3. Write the main code that implements the relationship.
Modify the codebase provided.

Problem 1

Each student has an address. Determine the relationship between class Student and Address

Student
- name
- matric

Address
- area
- city
- state
- postCode

Problem 2

Each student will be assigned with an advisor. Different students may be assigned to the same advisor. Determine the relationship between class Student and Advisor

Student
- name
- matric

Advisor
- name
- staffId
- department

Problem 3

Each student will enroll to a course or more. A course may be enrolled by different students. Determine the relationship between class Student and Course

Student
- name
- matric

Course
- code
- name

Problem 4

Each student will be assigned with an advisor. Different students may be assigned to the same advisor. That means, an advisor may have more than one student under him or her. The advisor needs to keep tracks his or her students. Determine the relationship between class Student and Advisor

Student
- name
- matric

Advisor
- name
- staffId
- department