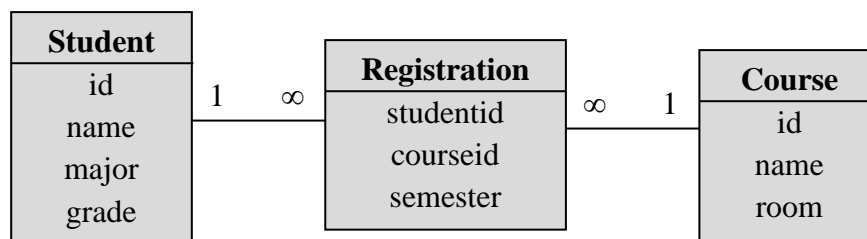


## Chapter 4: Accessing Databases Using JDBC

### Notes:

- You must **record a video** that includes electronic presentation for explaining your programs.
  - The Java program files, and the link for your video on Google drive must be submitted on Moodle.
  - Give your instructor an access on your video using this account (aashgar@iugaza.edu.ps)
1. Develop a data manipulation application with a user-friendly JavaFX GUI for student's database (as shown in the ER diagram below). The user should be able to edit existing data and add new data to the database (obeying referential and entity integrity constraints). Allow the user to edit the database in the following ways:
- Add a new student.
  - Edit the existing information for a student.
  - Delete an existing student.
  - Add a new course registration for a student.



2. Upgrade the application in Q1 to provide an appropriate JavaFX to allow the user to perform a query that is defined in a `TextArea` and the results will be shown in a `TableView`. Sample predefined queries are:
- Select all students studying "Software Engineering" major.
  - Select students who have excellent grades.
  - Select all pass students in ascending order based on their names.
  - For all students studying "Computer Science" major and have grade less than 70%, increase their grades by 3.

*End of Questions*