



The University of Jordan
Faculty of Engineering and Technology
Department of Computer Engineering

Object-Oriented Problem Solving: CPE 342

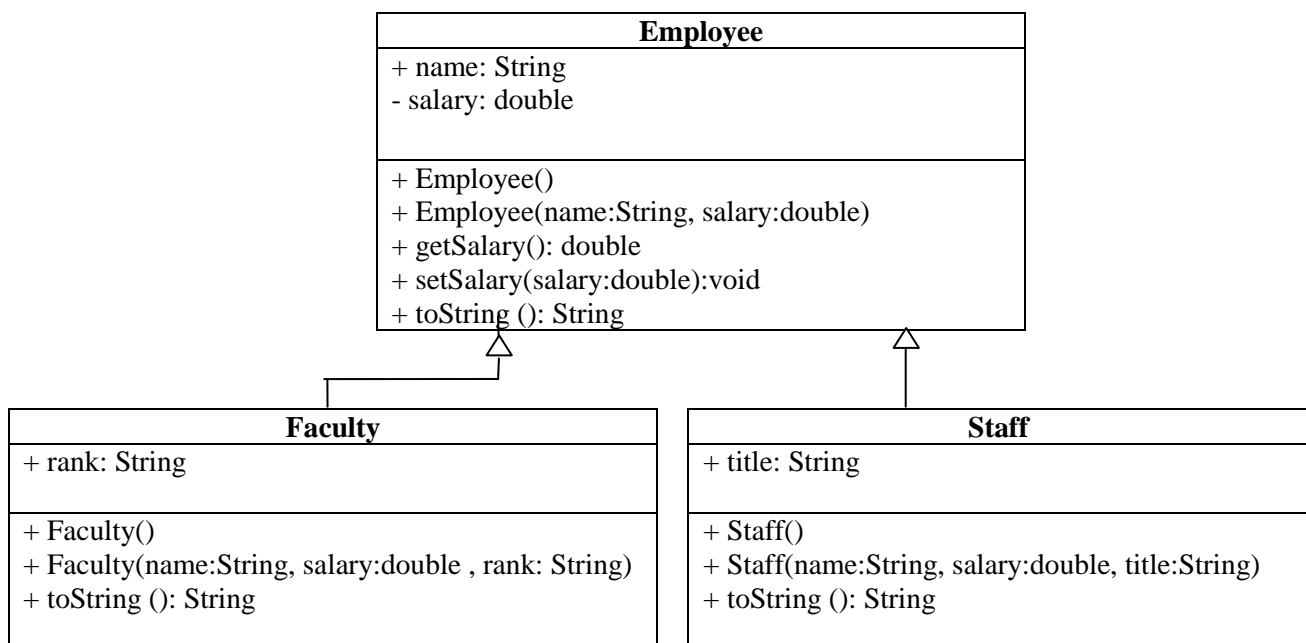
Lab 8

Eng. Asma Abdel Karim

❖ **Lab Objectives:**

- Define classes that extend other classes to form the inheritance relationship.
- Override methods of the superclass in its subclasses.
- Use the super keyword to call constructors and overloaded methods of the superclass.

❖ Implement the following classes using Java:



Note:

- The no-arg constructors of the three classes should obtain initial values of data fields from the console.
- The toString() method of the three classes should return a String that includes the object details:
For the Employee class it should return: Name is:, Salary:
For the Faculty class it should return: Name is:, Salary:, Rank:
For the Staff class it should return: Name is:, Salary:, Title:
- You should use the super keyword to invoke constructors of the super class, and the toString of the super class when needed.

In your main method:

- 1) Define one object of type Employee, one object of type Faculty, and one object of type Staff using the no-arg constructors of the three classes.
- 2) Define the following objects using the constructors that takes the required arguments:
 - a. An Employee object with the name: Salim and salary: 500.
 - b. A Faculty object with the name: Laila and the salary: 2000 and the rank: Lecturer.
 - c. A staff object with the name: Maha and the salary: 1200 and the title: Admin.
- 3) Show the details of each object by invoking the toString method and printing the String it returns to the console.