

## King Fahd University of Petroleum & Minerals College of Computing and Mathematics Information and Computer Science Department

SWE 206: Introduction to Software Engineering (2-3-3)
Second Semester 2023-2024 (232)

**Lab01 Software Development Processes** 

As a group of 2, solve the following and show your work on the different software development processes (Requirement Specification, Design, Implementation, Testing).

## **Problem**)

At the class room, we have some activies that are done in groups. When we ask the student to form the groups we find out they take long time deciding which group to join and form so we would like to automate this process such that it will randomaly create groups for us. We would like you develop a software for us such that we give it the list of student and the number of groups needed and it will generate the groups for us. Or we feed it the list of student and the maximum number of students in a group and it figures the groups out and generate them for us. Our computer is configured to run Java and Python applications so we are indifferent of whether language used. By the way, we have the list in a text file if you like to use it.

## Task)

- 1) Document the required features needed by your application. (Requirement)
- 2) Write a psude code of the needed methods. (Design)
- 3) Code a program that solve the problem. (Implementation)
- 4) Test your code and take screenshots of the result. (Testing)

## **Submit the following:**

- Report Document contains
  - Cover page has the course name, lab number, lab topic, section number, group members and IDs.
  - o A list of the done tasks and who contriputed in each.
  - Page or more documenting the requirements, design, your code and snapshots of the testing.
- Java or Python files