

# 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) Lab03 Version Control System (GIT)

## **Objectives:**

To gain experience with:

• Using Git for Version Control Systems

## **Individual Task:**

- 1. Clone the section repository found in <a href="https://github.com/AlothmanTeaches">https://github.com/AlothmanTeaches</a>
- 2. Make sure the cloned repository is working fine in your machine.

#### Tasks:

Work in teams of 2.

Note: The character at the start of each task resemble the computer who needs to do this step namely Computer 1(A) and Computer 2(B)

- 1. A: Create a java file named Sorter.java
- 2. A: initialize the git repository at the directory
- 3. A: add and commit your file
- 4. A: Create a repository at github and push your file to github
- 5. B: Clone the repository
- 6. Do the following separately (you may look the details of the algorithms)
  - a. A: Create and implement a method called selectionSort(Array)
  - b. B: Create and implement a method called insertionSort(Array)
- 7. A: Add, commit and push your files to the repository
- 8. B: Add, commit, pull and then push your files to the repository
- 9. B: Create a method named sort(array) that calls insertion sort

- 10. B: Add, commit and then push your work
- 11. A: Create a method named sort(array) that calls selection sort
- 12. A: pull and solve any conflicts
- 13. A: Push your changes

### **Submission Details:**

- 1. Submit one single PDF file (in Blackboard) that has the following structure:
  - a. Cover page has the course name, lab number, lab topic, group section and number, students' names, and IDs.
  - b. Table shows who is computer A and who is Computer B and their github account
  - c. The link for your github repository (make sure it is public repository).

# Additional Reading and tasks:

- 1. Pro Git book (<a href="https://git-scm.com/book/en/v2">https://git-scm.com/book/en/v2</a>)
- 2. Have fun playing <a href="https://learngitbranching.js.org/">https://learngitbranching.js.org/</a>