

Tutorial 5: Unit test

Part I: Tutorial Exercises

1. University program: a program to manage information of Hanoi university. Hanu has several departments. Each department is managed by one professor. Professors must be assigned to one, but possibly more departments. At least one professor teaches each course, but a professor may be on sabbatical and not teach any course. Each course may be taught more than once by different professors. We know of the department name, the professor's name, the professor employee id, the course names, the year that the course is taught, the departments the professor is assigned to, the department that offers the course. This program can provide some features (public API):

- Get information from a department file and create new departments. Implement similar features for professors, courses and students. **Notes:** You need to implement **ReadInfoFile** class to provide public function to handle all read files and get information
- Set professor to take charge of a department.
- Set students to attend a course.
- Assign professors to a course.
- Assign courses to a department.
- Assign professors to a department.
- Search courses that are taught by a professor.
- Search courses that a student attend to.
- Search professors that teach a course.
- Search students that attend to a course.

After that, implement unit test case for this program by using JUnit 5 and Mockito.

Submission

Submit a **zip** file containing all Java programs to this tutorial's submission box in the course website on FIT Portal.