

# University of Windsor

School of Computer Science - Fall 2019

COMP-3220-1: Object-Oriented Software Analysis and Design

Assignment-4

Due: November 11, 2019 @11:59pm

## Objective:

The objective of this assignment is to write unit test cases using **JUnit**.

## Assignment Specification:

A company wants you to write an application that performs its payroll calculations. Requirement specifications are given below:

*A company pays its employees on a weekly basis. The employees are of five types: **Salaried employees** are paid a fixed weekly salary regardless of the number of hours worked, **hourly employees** are paid by the hour and receive overtime pay (i.e., 1.5 times their hourly salary rate) for all hours worked in excess of 40 hours, **commission employees** are paid a percentage of their sales and **base-salaried commission employees** receive a base salary plus a percentage of their sales, **piece worker employees** are paid based on the number of pieces of merchandise produced. For the current pay period, the company has decided to reward salaried-commission employees by adding 10% to their base salaries and pieceWorker employees by adding 1% to their wage per piece.*

A sample solution of this problem is uploaded in Blackboard. So you do not need to write/use your own solution. Use the uploaded solution and perform the following tasks: (54 marks)

- Create `CompanyEmployeePayrollTest.java` in the above uploaded solution.
- Write test cases for each method (including getter and setter methods) in `CompanyEmployeePayrollTest.java`.
- If you run `CompanyEmployeePayrollTest.java`, all the test cases should pass.

\*\*\*There are some sample test cases uploaded in Blackboard under Lecture-6. See those sample test cases as reference.\*\*\*

## Submission Instructions:

Unzip and use **Eclipse** to open the uploaded java application. After adding `CompanyEmployeePayrollTest.java`, rename your project with `A4_yourSID`, compressed (zipped) your project folder, and submit to the Blackboard. For example, if your SID is "123456789", then the submission file is "A4\_123456789". You can submit multiple times but the mark will be posted based on your latest attempt.