#### EECS 2030: Lab 5

(2.5 % of the final grade, may be done in groups of up to three students)

#### **Motivation**

The purpose of this lab is to practice implementing classes using aggregation or composition.

## Part 1: Getting Started

Download a zip file containing the Lab 5 Eclipse project.

Import the project into Eclipse by doing the following:

- 1. Under the **File** menu choose **Import...**
- 2. Under General choose Existing Projects into Workspace and press Next
- 3. Click the **Select archive file** radio button, and click the **Browse...** button.
- 4. In the file browser that appears, navigate to your download directory (exactly where this is depends on what computer you working on; on the lab computers the file will probably appear in your home directory)
- 5. Select the file Lab5\_S23.zip and click OK
- 6. Click **Finish**.

Explore the existing methods and the test cases, try to understand the purpose of each line. For example, what parameters the constructors are expected to take, what the output should be, and why some operation(s) should be disallowed.

## Part 2: Design and Implementation

Follow the comments in the **Product.java**, **Invoice.java** and **InvoiceItem.java** to complete the implementation of those classes. A "tester" class is provided just for your convenience. Receiving or not receiving errors while using it does not imply anything regarding your implementation correctness.

If you have questions, don't hesitate to post your questions on the course forum on eClass, or contact the instructor directly (andriyp@cse.yorku.ca).

### Grading

The assignment will be graded using the Common Grading Scheme for Undergraduate Faculties<sup>1</sup>. We look at whether the code passes the unit tests, satisfies the requirements of this documents, and whether it conforms to the code style rules.

#### **Submission**

Find all the java files in your project and submit them electronically via eClass (no zipping is required). There should be 3 files in total (or 4, if the tester class is submitted).

<sup>&</sup>lt;sup>1</sup> https://secretariat-policies.info.yorku.ca/policies/common-grading-scheme-for-undergraduate-faculties/

If working in a group, make only one submission and include a group.txt file containing the names and the student numbers of the group members. The deadline is firm.

# **Academic Honesty**

Direct collaboration (e.g., sharing your work results across groups) is not allowed (plagiarism detection software may be employed). However, you're allowed to discuss the assignment requirements, approaches you take, etc. Also, make sure to state any sources you use (online sources – including web sites, old solutions, books, etc.).