# CS2613: Programming Languages Laboratory (FR02A) Lab #20 – Winter 2024

Language: Octave (#4)

# of Tasks: 1

Topics:

- Class Definition
- Object Instantiation
- Accessors and Mutators
- Methods

All tasks are to be completed individually in line with the academic offense guidelines detailed on the syllabus and are **due before the end of the lab period** unless stated otherwise.

#### Task #1

Task Style: Exploration

**Submission Method:** Show to Course Instructor

# **Description:**

For this lab, you will create an Octave object-oriented program that meets at least the following requirements:

- 1. At least 2 classes:
  - a. Each should have at least 1 accessor and 1 mutator.
  - b. Each should have at least 1 additional method that performs functionality for the class.
  - c. Overwrite the disp() function for each class.
- 2. Instantiate an object of each class.
- 3. Test all methods of each class.
- 4. Print each object using a disp() function that you created.
- 5. Save each object to a file.

Everything else in the program is optional, but remember that this may be a great opportunity for you to review for the final exam.

## **Extra Challenge** (Not Mandatory):

- Create a new class that inherits from one of the other classes. Include some methods. Test this class out.

### **Resources:**

- GNU Octave Documentation
  - o 34 Object Oriented Programming
  - o Specifically, 34.1, 34.2, and 34.5