

**Lab Assignment 01, Data Abstractions and Structures, CSE 274, Fall 2018**  
**Department of Computer Science and Engineering, Miami University**

**Warm-up Lab (Interface, Container, and JUnit Test)**

In this lab, we will implement a simple container. More specifically, we will use an array to implement our container. It will be a container of integers. We want to perform the following operations on container:

- Add an integer
- Remove an integer
- Find the size or number of entries (integers)
- Check if an integer is in the container
- Check whether the container is empty or not

**What you need to do:**

[We will complete this lab together.](#)

1. Create a new project named **Lab1WarmUp** in Eclipse
2. Download the **ContainerInterface** class and add it to your project.
3. Create a new class in your project named **IntegerContainer**. This class will implement the **ContainerInterface**.

**JUnit Test:**

We are going to write some code to test **IntegerContainer** class, specifically the methods of the **IntegerContainer** class. To test our code, we are going to use a library called JUnit.

4. Create a new class **IntegerContainerTester** and add it to your project.
5. Add JUnit library to your project.
6. Create test methods to test your code.
7. Run and test your code.

**What to do when you are done:**

Submit java files to the appropriate submission folder on Canvas.

**Grading Rubric:**

Complete the methods of the **IntegerContainer** class (each 14 points) and **IntegerContainerTester** class (each 15 points). Total 100 points.