

Fall 2022: CS 203 - Object-Oriented Programming

Lab11

Objectives:

- Develop a simple Object-Oriented Program with abstract classes and interfaces

In this lab, we will not be giving a specific project to you. Instead, we will be providing the requirements and you will implement them in your project.

You can mimic a real life concept such as animal, vehicle, etc. You can be creative!

Or if you don't feel creative, you could just use random names for the class names like AbstractClass, ConcreteClass1, ConcreteClass2, ConcreteClass3, and MainClass :(

- 1) At least one **abstract class**
 - a. This abstract class needs to have at least:
 - i. One concrete method
 - ii. One abstract method
- 2) At least three **concrete classes**
 - a. Each class should have at least:
 - i. One constructor
 - ii. Two methods
 - b. One class should inherit from the abstract class
 - c. One class should inherit from another concrete class
- 3) Create a **driver class** (which also means main class) that includes the main method
 - a. Inside this class, it should:
 - i. Create one object for each class
 - ii. Run the implemented methods.
- 4) Bonus: Create one **interface**
 - a. This Interface should have at least one method
 - b. At least one concrete class should implement the Interface and its methods

Deliverables: a .zip file with all .java source code files

Grade: Each class is worth 20 points.

Bonus: The interface will be an extra 20 points!

Good Luck