## CIS2168 F22 Midterm Review and Study Guide, Part 3

## **Object Oriented Programming**

- 1. Abstraction
  - Abstract method
    - i. a method without a method body
    - ii. does not provide implementation details
  - Concrete method
    - i. a method with a method body
    - ii. provide implementation details
  - Concrete class
    - i. Can not contain an abstract method
    - ii. Can be instantiated
- 2. Interface
  - Java construct
  - Can contain constants, abstract methods, default methods (marked with keyword default), static concrete methods (not covered in the course)
  - Cannot contain non-default non-static concrete method
  - Intended to specify a service contract (API) about how the implementing classes will be used by their client classes

## 3. Generics

- Generic class: class that takes in a type parameter
- Generic interface: interface that takes in a type parameter
- Generic method: a method that uses a type parameter