CSE 215L: Programming language II Lab
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Sec: 06
Lab - 07 [Class And Object], Spring-2021
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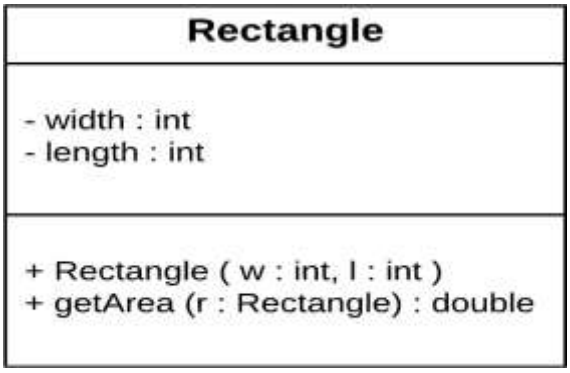
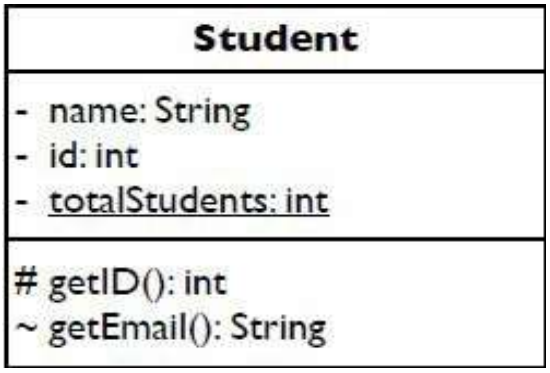
Objective:

- To demonstrate how to define classes and objects
- To access objects via object reference variables
- To access an object's data and methods using the object member access operator (.)
- To define private data fields with appropriate getter and setter methods

A UML class diagram is a picture of

- the classes in an OO system
- their fields and methods
- connections between the classes that interact or inherit from each other



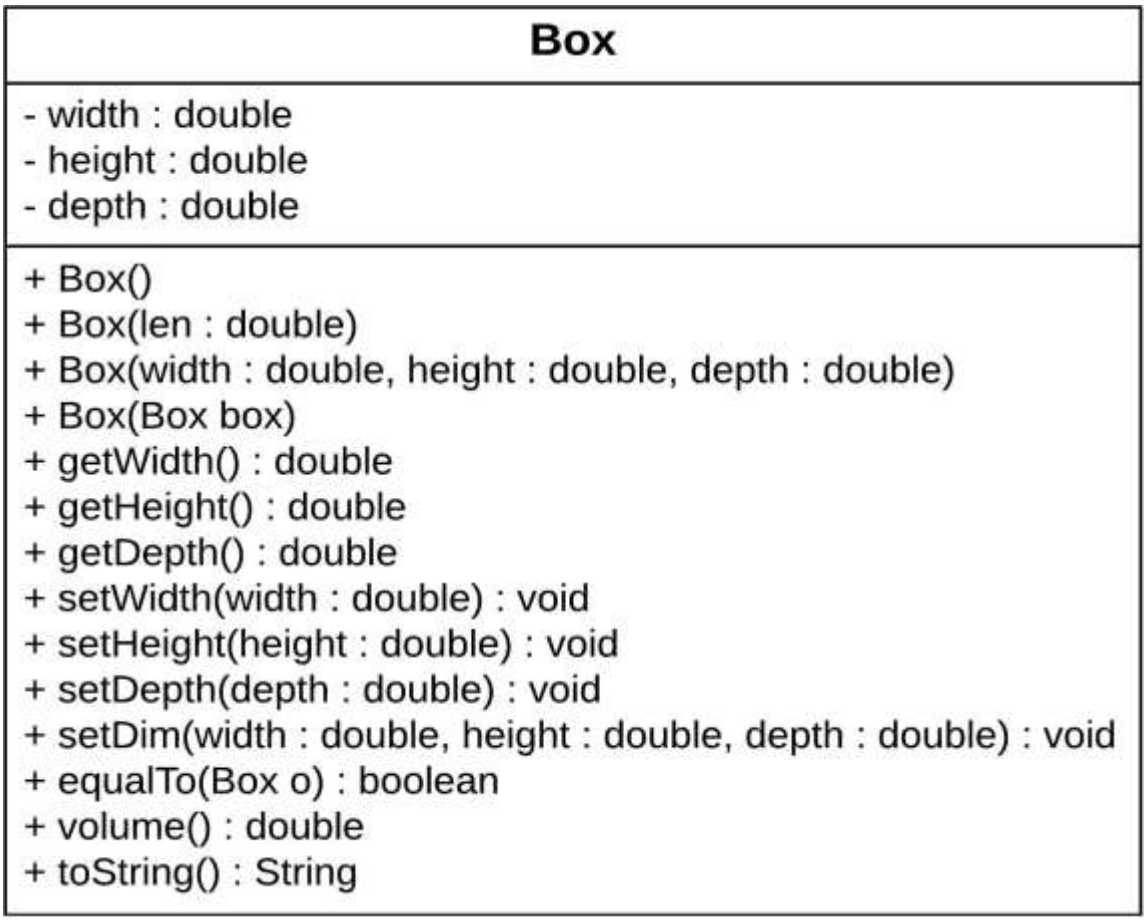


visibility

+ public
# protected
- private
~ package (default)

- underline static methods
- omit return_type on constructors and when return type is void

Task: Implement the following class and test its methods



Now create a Test Driver for the Box class and test all its methods.

```
// Returns a String description of Box instance
public String toString() {
   return "Box[width=" + width + ",height=" + height + “,depth=” + depth + "]";
}
```

In your TestBox class, you can get a description of a Box instance via:

```
Box box1 = new Box();

// Test constructors and toString()

System.out.println(box1.toString()); // Explicitly calling toString()

System.out.println(box1);              // Implicit call to box1.toString()

// Test → volume(), equalTo(), setDim() and toString() methods
```