

Some more discoveries about this major assessment

Construct

When the question paper asks you to construct in paper 2, you should use java codes to construct an algorithm. However, the rules are very strict: you should use as few codes as possible to describe the algorithm.

There should be as few times of copying as possible; the best possible case would be 0 times of copying.

In order to achieve the best mark, we should look at the problems more carefully and spend more time thinking about it. We should be more careful with the aim of the problems.

Advantages

Encapsulation:

- Safer access to the essential data like names and ID numbers

- It can be preserved more safely since outside the function it can't be altered.

Polymorphism:

With polymorphism, we can do dynamic bonding, that is how we can let the code run fluently when we need to decide the type of the class based on what a human user enters. If we do not use that, we may not be able to do it.

Inheritance:

Since the inheritance provides the son-class with all the public variables and methods that belong to the father-class, we can write less code.

Composition:

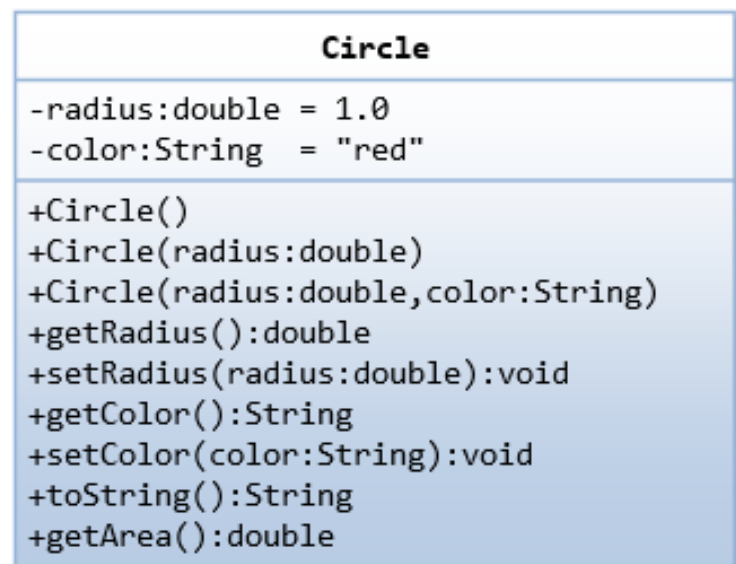
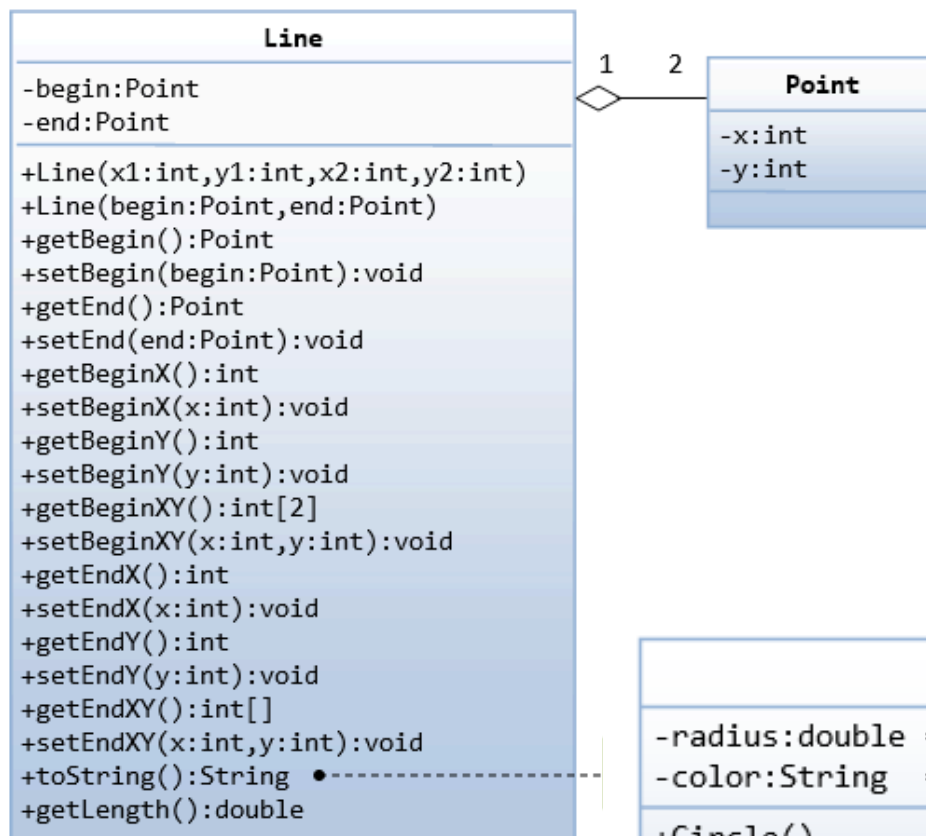
It is much easier to include another class inside one class, so that the class can be used elsewhere and there are fewer codes to write.

UML Diagrams

Composition:

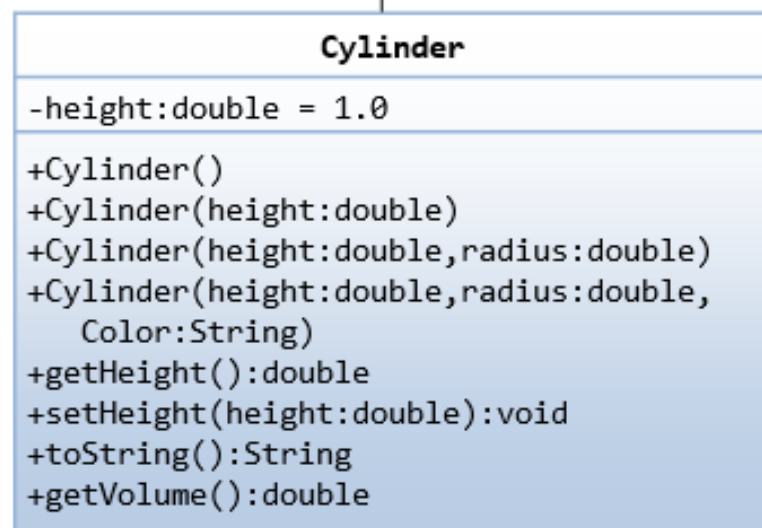
Notice the position of the class that lies in another class.

The shape of the arrow is a rhombus.



Superclass
Subclass

extends

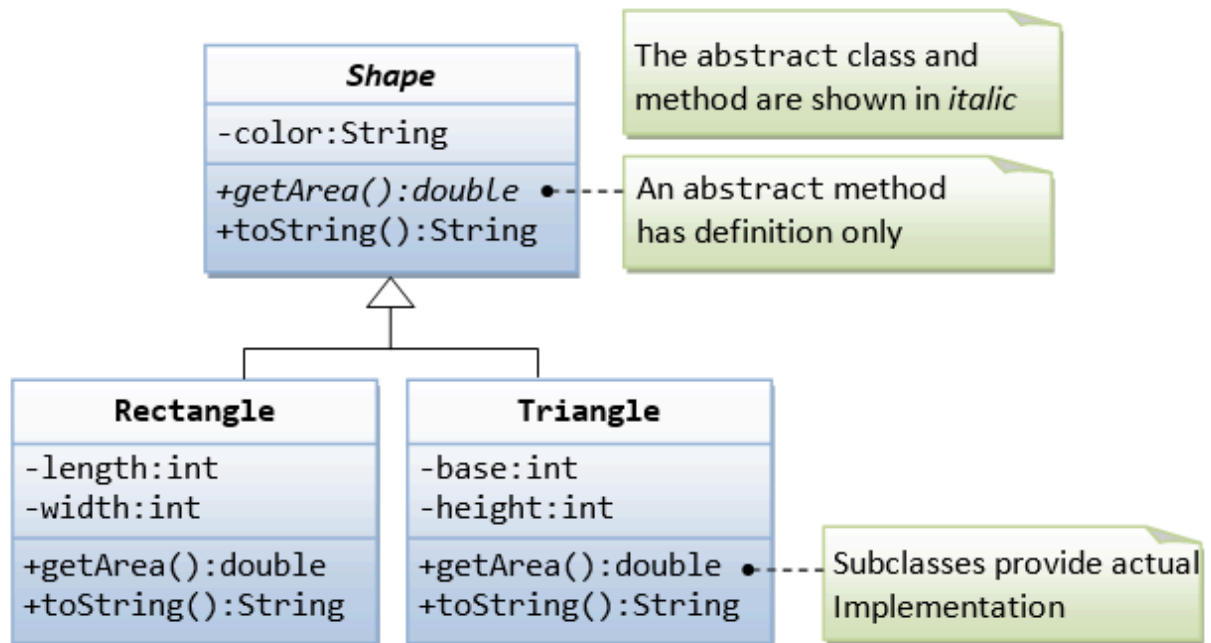


Inheritance:

Never mess up the direction of the arrow

Abstract:

Italic title

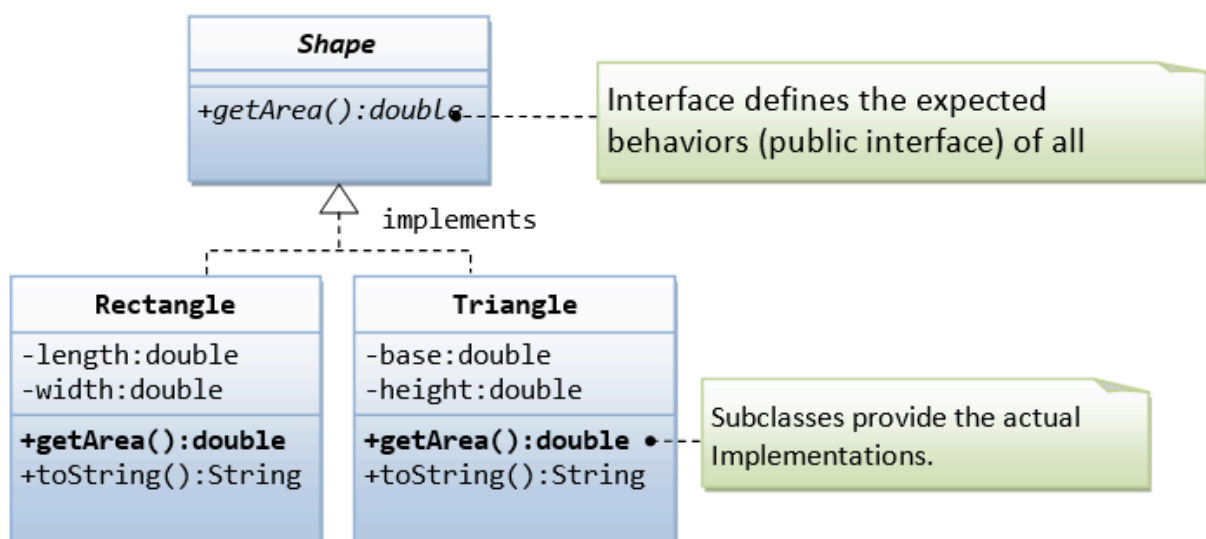


Interface:

Italic title

The arrow line

the word implements



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