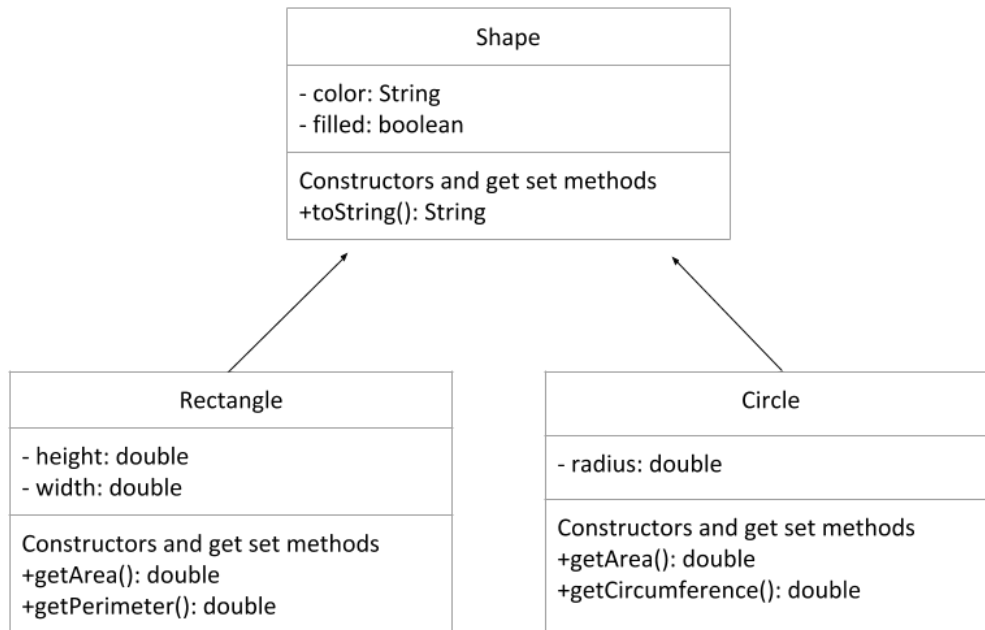**Inheritance:** deriving new classes from existing classes.

The subclass can inherit all the accessible data fields and methods of the superclass.

The "extends" and "super" keyword:

              public class Rectangle extends Shape{

       }

Method overriding:

Modifying a superclass method in a subclass without changing the method signature.

Note: private or static classes cannot be overridden.

Polymorphism:

It means that when you've got a child class, you can use objects of that child class wherever you'd use objects of the parent class. Java will automatically invoke the right method.

Problem to solve:

Design a class named **Person** and its two subclasses named **Student** and **Employee**.
Make **Faculty** and **Staff** subclasses of **Employee**.
A person has a name, address, phone number and email address.
A student has a class status (freshman, sophomore, junior or senior). Define status as a constant.
An employee has a salary and date hired.
A faculty member has office hours and a rank.
A staff member has a title.
Override the **toString** method in each class to display the class name and the person's name.

Write a test program that creates a Person, Student, Employee, Faculty, and Staff, and invokes their toString methods.