Java Object-Oriented Concepts Unit

Lesson 8 Lab 1: Shapes and Perimeters

SOFTWARE GUILD

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Lesson 8 Lab 1: Shapes and Perimeters

Requirements

Create a set of classes to represent a square, rectangle, triangle and circle. Have these classes inherit from a base class called Shape. Each of them will implement at least two methods — one called area(), which will return the area of the shape; and another called perimeter(), which will return the perimeter of the shape.

Tips

The base class — Shape — will have a property called color and the two methods area() and perimeter(), but they will be empty. They are designed to be overridden by inherited shapes, so make sure that any shape that you inherit from the base class implements their own versions of area() and perimeter() based on the type of shape it is. It is suggested you start with a square because this should be the easiest to implement. Create a Shape base class, inherit a square from it, and override the two methods. If you have done this correctly, it should give you the idea for the others.