Introduction Document for Week3 Hand-in Assignment

This project contains three classes:

1. Triangle
   1. This class serves as the blueprint for the Triangle object.
   2. Contains the following private instance variables:
      1. side1, side2, and side3, which store the side lengths of the triangle.
   3. The triangle can be instantiated with the side lengths or without. If done without these values, then all instance variables are initialized to zero.
   4. Contains get and set methods for assessing and assigning values to the above instance variables.
   5. Contains getTriangleType() method, which returns the triangle type of “equilateral”, “scalene”, or “isosceles”, depending on the side lengths:
      1. Equilateral - all sides the same length
      2. Isosceles - two sides the same length
      3. Scalene - no sides the same length
2. Assignment3App
   1. This class is the application class for this project, and is used to create an instance of the Triangle class.
   2. Imports javax.swing.JOptionePane, which allows the program to display messages and receive input from the user using dialog boxes.
   3. Contains instance variables side1, side2, and side3, which are assigned values from the user.
   4. Contains the following public methods:
      1. greeting(), which displays a welcome message and tells the user what the program will do.
      2. askUserForSideLengths(), which asks the user to input the side lengths of the triangle.
      3. displayTriangleType(), which calls the getTriangleType() method of the Triangle class to display the triangle type.
      4. showWarningMessage(), which takes a string message as a parameter and displays it in a dialog box. This is used when the user does not give a valid input.
3. Assignment3Driver
   1. This class is used to create an instance of the Assignment3App class.
   2. All of the Assignment3App’s methods are called in the main method.
   3. The main method wraps a while loop around the Assignment3App class method calls to aksUserForSideLengths(), and displayTriangleType(). The loop control variable is “runAgain”, which is of type Boolean. This while loop will run until runAgain’s value is false. The false value is assigned by the user answering with an “N”, or an “n”.

Screenshots:











