COMP 1409 Lab 4-b (4 points)

Take-home lab

A number of Book sellers have a book club that awards points to its customers based on the number of book purchased each month.

Design a class called **BookClub**. Here are the relevant attributes.
- clientName
- numberOfPurchesedBooksPerMonth
- bookPriceInCAD
- static int totalNumberOfPurchasedBooks

Be sure to include JavaDoc comments for constructors and methods.

Provide a default constructor and a second constructor. The default constructor initializes all instance variables to the default value, except that the String variables should be empty strings ("") instead of null.

Pass all the necessary information to the non-default constructor. This constructor must check all the numeric input to insure it's not negative. If one of the passed parameter is negative set the corresponding field to the default value. The constructor also will add the numberOfPurchesedBooksPerMonth to the totalNumberOfPurchasedBooks of it has a positive value.

Provide an accessor (get) and a mutator (set) for each instance variable. Provide a get method for the static variable.

Write a method called calculateBookPoints(). The method calculates and **returns** the number of points awarded. The points are awarded as follows:
- If a customer purchases 0 books, he or she gets 0 points.
- If a customer purchases 1 book, he or she gets 5 points.
- If a customer purchases 2 books, he or she gets 15 points.
- If a customer purchases 3 books, he or she gets 30 points.
- If a customer purchases 4 or more books, he or she earns 60 points.
- If the total number of books purchased was 10 or more the customer gets an extra 20 points.

The take-home lab is due at 11:59 pm the night before the next class. Upload it to the appropriate D2L dropbox. A suggested solution will be discussed in class and labs not already in the dropbox will not receive any points.