COMP 1409 Lab 3-a (2 points)

In-class lab

Design a class called **Student**. Include the appropriate comments for each class element. All students have the following attributes:

- studentName
- studentID
- testGrade
- courseFees
- isEligibleForADiscount

Choose appropriate data types and make sure the instance variables are all private.

Provide two constructors for the Student class. The default constructor (takes no parameters) assigns the instance variable to the corresponding default value (depending on the data type), except that the String variables should be empty strings (“”) instead of null.

The non-default constructor takes parameters to initialize (studentName, ID, testScore and courseFees). The parameters testScore and courseFees must be validated and used only if they are positive, otherwise initialize the instance variable to zero. isEligibleForADiscount should be initialized to false.

Provide accessor methods for each instance variable with appropriate Javadoc comments.

Provide a mutator method for each instance variable. The mutator methods of testScore and courseFees validate the passed parameters and use them only if they are positive. Include the appropriate Javadoc comments.

Write a method **public void checkForDiscount()**. This method checks the courseFees. If the courseFees is greater than $700 the student gets a 15 % discount. courseFees will be modified accordingly (deduct 15%) and isEligibleForADiscount will be set to true. If the student does not get a discount a message stating that the student is not eligible for a discount will be displayed and isEligibleForADiscount will be set to false.

Provide a method to display the student details, example below

Student name: John James
Student ID: A00123456
Test Score: 70
This student gets a discount of 15 %

Or if the student does not get a discount

This student does not get a discount

Demonstrate your completed project to your instructor or TA before leaving the lab and be sure we have checked it off . A suggested solution will be given during the next class and labs that have not been checked off will not receive any points. Once you have completed your lab zip the lab folder and upload it to D2L dropbox. This lab is due 11:59 pm the night before the next session.