Take-Home Lab

Design a class called **Driver**. This class has the following instance variables:

* name
* driverLicenseNumber, example (NDL1234)
* speedInKilometerPerHour
* driverStanding of type String

Provide a constructor that takes parameters to initialize (name, driverLicenseNumber and speedInKilometerPerHour), the constructor will validate the speedInKilometerPerHour parameter and uses it if was positive and greater than 0; if the passed parameter was invalid an IllegalArgumentException will be thrown with a message explaining what the problem is. The parameters of each of name and driverLicenseNumber will be validated and used only if it was not null. If the passed parameter was null an IllegalArgumentException will be thrown with a message explaining what the problem is. DriverStanding will be set to string (“unknown”). Include appropriate Javadoc comments in your class

Provide accessor methods for each instance variable in the class, with appropriate Javadoc comments.

Provide a mutator method for fields name, driverLicenseNumber, speedInKilometerPerHour and driverStanding.

* The mutator for speedInKperHour will check the passed parameter and uses it only if it was not a negative number and greater than 0. If the passed parameter was invalid an IllegalArgumentException will be thrown with a message explaining what the problem is.
* The mutator of driverStanding **takes no parameters**. It checks the instance variable speedInKilometerPerHour – if it was 60 or less, standing will be set to “no ticket”, if the speed was 80 or less, standing will be set to “small ticket” and if the speed was more than 80, the standing will be set to “big ticket”.
* The mutators of each of driverName and driverLicenseNumber will validate the passed parameter and uses it only if it was not null, if the passed parameter was null an IllegalArgumentException will be thrown with a message explaining what the problem is.

Provide a method to display the driver’s details, example below.

Driver name: John James

Driver License Number: 123456

Speed: 70 K/H

Driver Standing: small ticket

When you test your project invoke method setDriverStanding() before method printDriverDetails()

Once you have completed your lab zip the lab folder and upload it to D2L drop box before the dead line. A suggested solution will be discussed in class and labs not already in the drop box will not receive any points.