

COMP 1409 Lab 3-b (4 points)

Take-home lab

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

- name
- driverLicense
- speedInKperHour
- driverStanding – of type String

The class has two constructors. 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 string ("") instead of null.

The second constructor takes parameters to initialize (name, driverLicense and speed), validates the speed parameter and uses it if it's positive; otherwise speed will be set to 0. driverStanding will be set to an empty string. Include appropriate Javadoc comments.

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

Provide a mutator method for each instance variable in the class. The mutator for speedInKperHour will check its parameter and use the parameter only if it is not a negative number. The mutator for driverStanding takes no parameters. It checks the speed – if speed is 60 or less, standing will be "no ticket", if speed is 80 or less, standing will be "small ticket" and if speed is more than 80, the standing will be "big ticket".

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

Driver name: John James
Driver License: 123456
Speed: 70 K/H
Driver Standing: small ticket

Once you have completed your lab zip the lab folder and upload it to D2L dropbox. The take-home lab is due at 11:59 pm the night before the next class. A suggested solution will be discussed in class and labs not already in the dropbox will not receive any points.