Lab 4

You are building an application for an online sports store which sells various products.

All products have a name, a price, and a stock availability. Also, each product has a functionality that prints in the console all the details of the product. The store sells 2 main types of products: vehicles and equipment for them.

All vehicles have information about the model, and if they are limited edition. There are 2 types of available vehicles to buy: bicycles and cars.

A bicycle has a specification about the height, in cm.

A car has specifications about the color and the engine. For the engine, details about the type of transmission, the maximum power and the number of cylinders is available.

All equipment has specification about the supplier's name and country.

The Shop therefore can have a list of Products of maximum 100.

Use the Builder design pattern to create objects of one of the following types: Car, Bycicle, Equipment.

The user should be able to interact with the application via the system console (use a Scanner object (new Scanner(System.in)) for this and scan a line with: .nextline() method) .

There are 3 available uses cases (for th service of the shop):

- Add a product in the store's list of products, using an input structure like this one:

Please type command: add

What type of product do you want to add? bicycle

Please type the <product> details: <name/price/stock/supplierName/supplierCountry>

Eg: BMX/3500/10/BMX-500/no/110

- View all specifications for all products, using an input structure like this one:

Please type command: view

- Exit the application, using an input structure like this one:

Please type command: exit

Note: before exiting the application, display a greeting in the console.