# **Java Enterprise Edition**

### Fall Semester 2020

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### **HOME TASK 1**

#### **Problem 1**

Your aim is to develop a simple web application for searching cars by their criteria.

As a database, you can use simple **ArrayList** of **Cars** class, inside of **DBManager.java** class, where you must create all methods to manage with them.

#### Cars.java

- Long id;
- String name;
- String model;
- int year;
- int price;

Create constructors, getters and setters for parameters.

Inside of **DBManager.java** class, create static **ArrayList** of **Cars** class.

Also, create static methods to manage with footballers:

void addCar(Car car); //this method adds new car into list

Car getCar (Long id); //this method returns an object of car by id

ArrayList<Car> getAllCars(); //this method returns a list of all cars

void deleteCar(Long id); //this method deletes car from list by id

ArrayList<Car> getCarsByName(String name); //this method returns a list of cars filtered by name

ArrayList<Car> getCarsByModel(String model); //this method returns a list of cars filtered by model

ArrayList<Car> getCarsByYear(int yearFrom); //this method returns a list of cars filtered by year ArrayList<Car> getCarsByPrice(int priceTo); //this method returns a list of cars filtered by price

In main page, you will have a list of all cars shown as in example:

## **Mercedes E280**

price: **15000** USD

year: 2013

<u>details</u>

# **Toyota Land Cruiser 200**

price: 45000 USD

year: 2016

<u>details</u>

# **Kia Rio**

price: 12000 USD

year: 2015

<u>details</u>

At the top of main page, you will have a form for filtering cars by their criteria.

SEARCH BY: [NAME V] CRITERIA: [ SEARCH ]