

Car search assignment

The overall task is develop a solution as independently as possible. E.g. there is no strict requirements beyond below description. Of course you are more than welcome to request some further explanation. However, the objective of this task is also for you to demonstrate your ability to think independently and come up with a solution. Enjoy.

Input:

SQL DB:

Server: sample.cy11bwd65hf.eu-west-1.rds.amazonaws.com

DB: interview

User: interviewed

Password: df_fhg10

Webservice endpoint: http://195.225.90.66:8881/DmrWebServices_v1.0.0.3/DmrService.svc

Car license plate numbers:

AK42912

AM42276

YM33749

AG35586

ZE33420

AROS

Task description:

There is an open webservice in Denmark that allows to get car information like engine volume, model, mark etc. via car number plate. However, this information lacks details.

There is a SQL database with car models description. This information includes average car price.

The task is:

To build MVC-based web page with text input to enter car number plate and a "search" button. Button click results in render of the most precise list of cars from SQL database including car price found via information from webservice.

List element format: "Manufacturertxt Modeltxt Variant(ModelYear) - Price"

Example: "Citroën Grand C4 Picasso 1,6 HDi Prestige 110HK 5d (2008) - 363.005 DKK" (price has to be formatted)

The most precise list means: no more than 10 elements in list, year, engine volume, model, manufacturer match.

How do you test it:

Danish car register service:

https://motorregister.skat.dk/dmr-front/appmanager/skat/dmr?_nfls=false&_nfpb=true&_pageLabel=vis_koeretoer_side

Choose "Registrerings-nummer", enter car number plate into text field and click Søg.

Help:

Webservice method, that returns car information:

```
new DmrServiceClient().GetVehicleInformationByReg(string)
```

Useful fields:

Egenvaegt - Car own weight (OwnWeight)

Totalvaegt - Car total weight (TotalWeight)

FoersteRegisteringDato - car production year

Maerkenummer - Model number (Markcode)

MotorEffektHK - Horse power (HorsePower)

KoeretoeyJdent - Car identifier. F.ex.: 1001501201012707. Format: xxxxxxxxyyyzzzzz.
Where x - model number, y - production year

Other fields are self-explanatory.

General solution approach is evaluated as well as comments cover, code structure. IoC pattern is highly welcome.