



Sistem de Recomandare și Vânzare de Mașini

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Rezumat

În dezvoltarea aplicației vom folosi o arhitectura împărțită între back-end și front-end fiecare rulând pe câte un port. Clienții vor fi cei care utilizează aplicația iar serverul va fi cel care gestionează baza de date și răspunde clienților.

Fiecare user va avea propria lor accesibilitate la program, singurul user cu accesibilitate completă asupra programului, va fi administratorul.

Userul va putea căuta în funcție de preț o mașină, iar aplicația îi va afișa mașinile disponibile în ordine descrescătoare în funcție de un rating (notare) pe care l-au dat anumiți clienți.

Se va face conexiunea la server, de unde, pe baza acestui filtru se va face o repartizare cu mașinile aflate în stoc.

Toate mașinile disponibile pot fi vizualizate în showroom, iar dacă cineva e interesat de vreo mașină acesta se poate loga în contul de utilizator și o poate achiziționa.

De asemenea, clienții care sunt înregistrați pot oferi anumite note mașinilor disponibile, astfel încât să ajute alți utilizatori să aleagă mai ușor mașina dorită.

A.Miniproiect

Implementare:

Controllerul:

```
package org.carsworld.controllers;

import org.carsworld.data.CarRepository;
import org.carsworld.models.Car;

public class CarController {

    public String displayAllEvents(Model model) {
        model.addAttribute("title", "All cars");
        model.addAttribute("cars", carRepository.findAll());
        return "cars/index";
    }

    public String processCreateCarForm(@ModelAttribute Car newCar) {
        carRepository.save(newCar);
        return "cars/create";
    }
}
```

Data:

```
package org.carsworld.data;

import org.carsworld.models.Car;
import org.springframework.data.repository.CrudRepository;
import org.springframework.stereotype.Repository;

@Repository
public interface CarRepository extends CrudRepository<Car, Integer> {

}
```

Model:

```
package org.carsworld.models;

import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.Id;
import java.util.Objects;

@Entity
public class Car {
    @Id
    @GeneratedValue
    private int id;
```

```

private static int nextId=1;
private String company;
private String model;
private String color;
private long rolledKilometers;
private int year;
private String fuel;
private String gearbox;
private int price;
private double grade;

public double getGrade() {
    return grade;
}

public void setGrade(double grade) {
    this.grade = grade;
}

public void setId(int id) {
    this.id = id;
}

public String getFuel() {
    return fuel;
}

public void setFuel(String fuel) {
    this.fuel = fuel;
}

public String getGearbox() {
    return gearbox;
}

public void setGearbox(String gearbox) {
    this.gearbox = gearbox;
}

public int getPrice() {
    return price;
}

public void setPrice(int price) {
    this.price = price;
}

public Car(String company, String model,String color,long
rolledKilometers,int year,int price,String gearbox,String fuel,double
grade){

    this.company=company;
    this.model=model;
    this.color=color;
    this.rolledKilometers=rolledKilometers;
    this.year=year;
    this.price=price;
    this.fuel=fuel;
    this.gearbox=gearbox;
    this.grade=grade;
}

```

```

    }

    public Car(){}
    public String getCompany() {
        return company;
    }

    public void setCompany(String company) {
        this.company = company;
    }

    public String getModel() {
        return model;
    }

    public void setModel(String model) {
        this.model= model;
    }

    public int getId() {
        return id;
    }

    public String getColor() {
        return color;
    }

    public void setColor(String color) {
        this.color = color;
    }

    public long getRolledKilometers() {
        return rolledKilometers;
    }

    public void setRolledKilometers(long rolledKilometers) {
        this.rolledKilometers = rolledKilometers;
    }

    @Override //2 cars with same id but different names and descriptions
are not considered the same objects
    public boolean equals(Object o) {
        if (this == o) return true;
        if (o == null || getClass() != o.getClass()) return false;
        Car car = (Car) o;
        return id == car.id;
    }

    public int getYear() {
        return year;
    }

    public void setYear(int year) {
        this.year = year;
    }

    @Override
    public int hashCode() {
        return Objects.hash(id);
    }

```

```
}
```

View:

```
<!DOCTYPE html>
<html lang="en" xmlns:th="http://www.thymeleaf.org/">
<head>

<meta charset="ISO-8859-1">
  <title>CautMasina.ro</title>
  <style>

    .font-36{

      font-size: 24px;

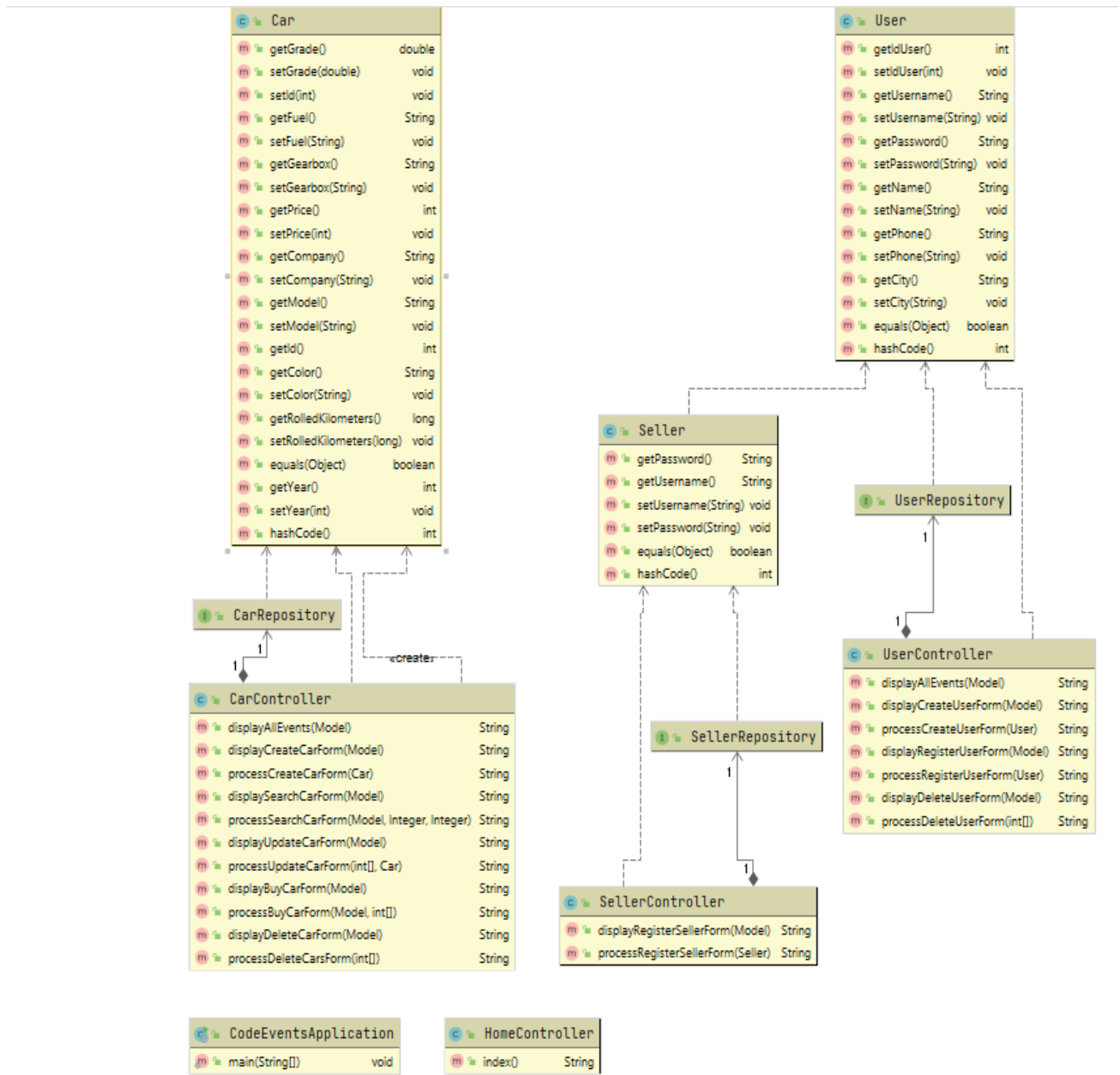
    }

  </style>
</head>
```

B.Proiectul Final

Design:

Diagrama UML:



Modelarea Cazurilor de Utilizare

Sistem de recomandare si vanzare de masini

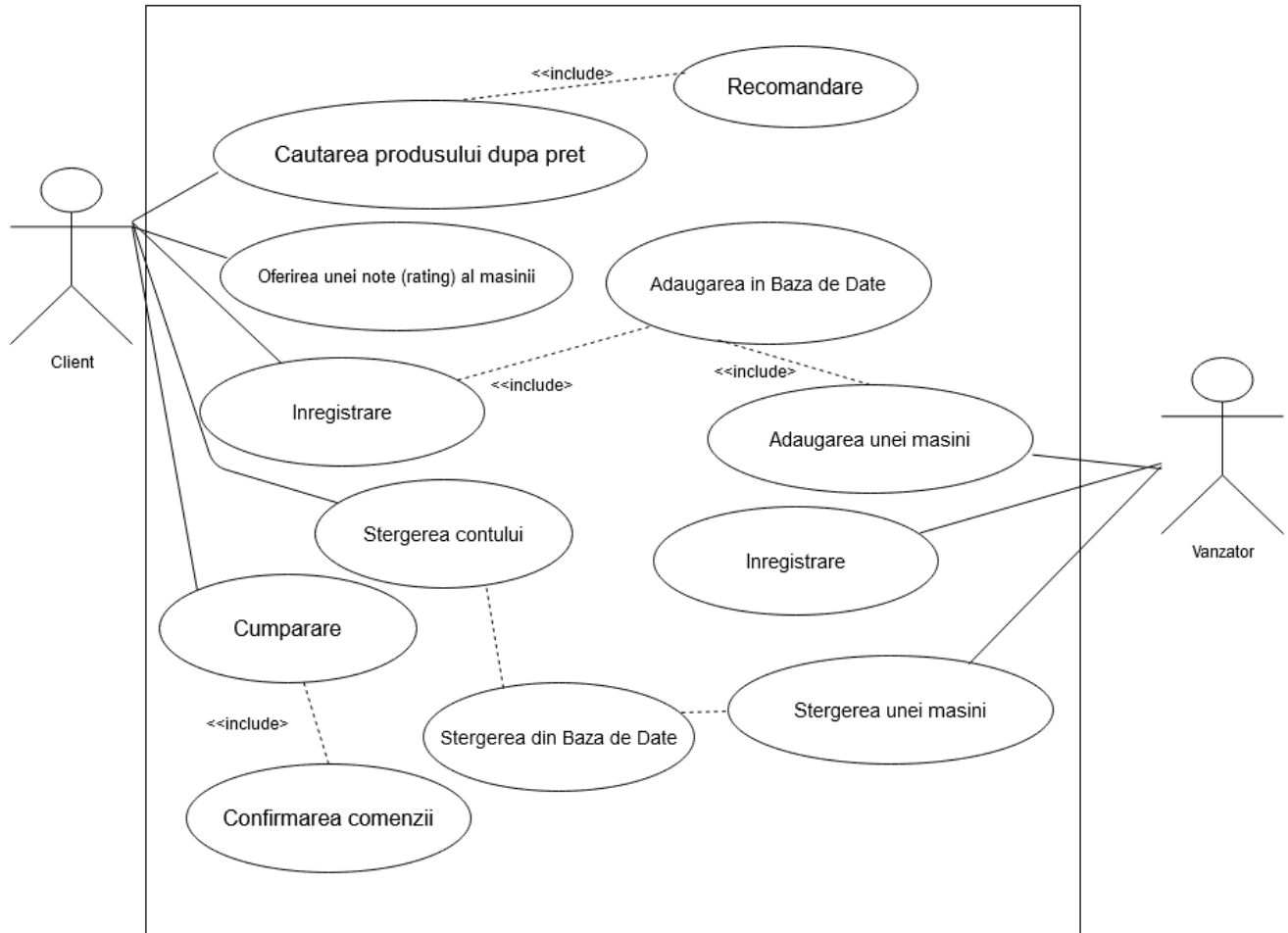
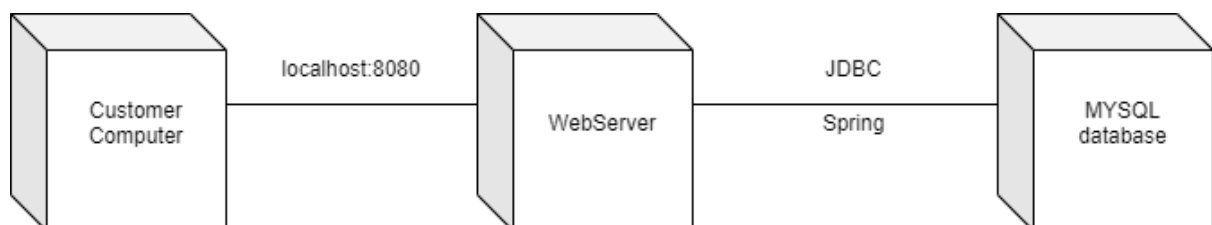


Diagrama Deployment:



Spring

Spring oferă un model cuprinzător de programare și configurare pentru aplicații de întreprindere moderne bazate pe Java - pe orice tip de platformă de implementare. Un element cheie al Spring este suportul infrastructural la nivel de aplicație: Spring se concentrează pe „instalarea” aplicațiilor de întreprindere, astfel încât echipele să se poată concentra pe logica de afaceri la nivel de aplicație, fără legături inutile cu medii de implementare specifice.

Thymeleaf

Thymeleaf este un motor modern de șabloane Java pentru server, atât pentru medii web, cât și pentru medii independente. Scopul principal al Thymeleaf este de a aduce șabloane naturale elegante în fluxul dvs. de lucru de dezvoltare - HTML care poate fi afișat corect în browsere și, de asemenea, poate funcționa ca prototipuri statice, permițând o colaborare mai puternică în echipele de dezvoltare. Cu module pentru Spring Framework, o serie de integrări cu instrumentele dvs. preferate și posibilitatea de a vă conecta la propriile funcționalități, Thymeleaf este ideal pentru dezvoltarea web modernă HTML5 JVM - deși poate face mult mai mult.

AspectJ

AspectJ se referă la un stil de declarare a unor aspecte ca și clase obișnuite de Java declarate cu anotații speciale. Stilul acestui aspect a fost introdus odată cu ieșirea pe piață a AspectJ 5. Spring interpretează aceleași anotații utilizând o bibliotecă suplinită de către AspectJ pentru potrivirea și analiza Pointcut-urilor. Deși executabilul AOP este pur Spring, acesta nu folosește nicio dependență față de compilatorul AspectJ.

Acest aspect se poate configura atât prin suport Java, cât și prin suport XML. În acest proiect am folosit configuratorul Java.

Implementare:

```
package org.carsworld.controllers;

import com.mysql.jdbc.SocketFactoryWrapper;
import org.aspectj.lang.annotation.Around;
import org.aspectj.lang.annotation.Before;
import org.aspectj.util.UtilClassLoader;
import org.carsworld.data.CarRepository;
import org.carsworld.models.Car;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.*;

import java.util.ArrayList;
import java.util.Iterator;

@Controller
@RequestMapping("cars")

public class CarController {

    private final Class<SocketFactoryWrapper> aClass =
SocketFactoryWrapper.class;
    @Autowired
    private CarRepository carRepository;

    @Around("index")
    @GetMapping("index")
    public String displayAllEvents(Model model) {
        model.addAttribute("title", "All cars");
        model.addAttribute("cars", carRepository.findAll());
        return "cars/index";
    }
    @Around("create")
    @GetMapping("create")
    public String displayCreateCarForm(Model model){
        model.addAttribute("title", "Create car");
        return "cars/create";
    }

    @PostMapping("create")
    public String processCreateCarForm(@ModelAttribute Car newCar) {
        carRepository.save(newCar);
        return "cars/create";
    }

    @Around("search")
    @GetMapping("search")
    public String displaySearchCarForm(Model model){
        model.addAttribute("title", "Search");
        return "cars/search";
    }
    @PostMapping("search")
    public String processSearchCarForm(Model model, @RequestParam(required =
false) Integer price, @RequestParam(required = false) Integer price2) throws
InterruptedException {

        ArrayList<Car> carsList = new ArrayList<Car>();
        Car carsList2[] = new Car[50];
```

```

        int carsNr = 0;
        Iterator cars = carRepository.findAll().iterator();
        for (Iterator it = cars; it.hasNext(); ) {
            Car c = (Car) it.next();
            if (c.getPrice() >= price && c.getPrice() <= price2) {
                carsList2[carsNr] = c;
                carsNr++;
                carRepository.save(c);
            }
        }
        for (int i = 0; i < carsNr - 1; i++)
            for (int j = i + 1; j < carsNr; j++)
                if (carsList2[i].getGrade() < carsList2[j].getGrade()) {
                    Car aux = new Car();
                    aux = carsList2[i];
                    carsList2[i] = carsList2[j];
                    carsList2[j] = aux;
                }
        for (int i = 0; i < carsNr; i++) {
            carsList.add(carsList2[i]);
        }
        model.addAttribute("cars", carsList);

        return "cars/search";
    }

    @Around("update")
    @GetMapping("update")
    public String displayUpdateCarForm(Model model) {
        model.addAttribute("title", "Create car");
        model.addAttribute("cars", carRepository.findAll());
        return "cars/update";
    }

    @Around("update")
    @PostMapping("update")
    public String processUpdateCarForm(@RequestParam(required = false)
int[] carIds ,@ModelAttribute Car newCar) {
        Iterator cars=carRepository.findAll().iterator();
        for (Iterator it = cars; it.hasNext(); ) {
            Car c = (Car) it.next();
            for (int id : carIds) {
                System.out.println(c.getId()+" " + c.getCompany()+ " "+id);
                if(id == c.getId()){
                    c.setGrade((newCar.getGrade()+c.getGrade())/2);
                    carRepository.save(c);
                }
            }
        }

        return "cars/update";
    }

    @Around("buy")
    @GetMapping("buy")
    public String displayBuyCarForm(Model model) {
        model.addAttribute("title", "Buy car");
        model.addAttribute("cars", carRepository.findAll());
        return "cars/buy";
    }

```

```

        @Around("buy")
        @PostMapping("buy")
        public String processBuyCarForm(Model model, @RequestParam(required =
false) int[] carIds ) throws InterruptedException {

            ArrayList<Car> carsList =new ArrayList<Car>();
            if (carIds != null) {
                for (int id : carIds) {
                    for (Car car:carRepository.findAll())
                        if(car.getId()==id){
                            // System.out.println(car.getId());
                            carsList.add(car);
                            // model.addAttribute("cars",carsList);
                        }
                }
            }
            model.addAttribute("cars",carsList);
            return "cars/buy";
        }

        @Around("delete")
        @GetMapping("delete")
        public String displayDeleteCarForm(Model model){
            model.addAttribute("title","Delete Cars");
            model.addAttribute("cars",carRepository.findAll());
            return "cars/delete";
        }

        @Around("delete")
        @PostMapping("delete")
        public String processDeleteCarsForm(@RequestParam(required = false)
int[] carIds )
        {
            if (carIds != null) {
                for (int id : carIds) {
                    carRepository.deleteById(id);
                }
            }
            return "cars/delete";
        }
    }
}

```

```

package org.carsworld.controllers;

import org.aspectj.lang.annotation.Around;
import org.carsworld.data.CarRepository;
import org.carsworld.data.SellerRepository;
import org.carsworld.models.Car;
import org.carsworld.models.Seller;
import org.carsworld.models.User;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.ModelAttribute;

```

```

import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestMapping;

@Controller
@RequestMapping("seller")
public class SellerController {
    @Autowired
    private SellerRepository sellerRepository;

    @Around("register")
    @GetMapping("register")
    public String displayRegisterSellerForm(Model model) {
        model.addAttribute("title", "Register seller");
        return "seller/register";
    }

    @Around("register")
    @PostMapping("register")
    public String processRegisterSellerForm(@ModelAttribute Seller seller) {
        if(seller.getUsername().equals("seller") &&
seller.getPassword().equals("seller")) {
            return "seller/choose";
        }

        return "seller/register";
    }
}

```

```

package org.carsworld.controllers;

import org.carsworld.data.UserRepository;
import org.carsworld.models.User;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.*;

@Controller
@RequestMapping("users")
public class UserController {
    @Autowired
    private UserRepository userRepository;

    @GetMapping("index")
    public String displayAllEvents(Model model) {
        model.addAttribute("title", "All users");
        model.addAttribute("users", userRepository.findAll());
        return "users/index";
    }

    @GetMapping("create")
    public String displayCreateUserForm(Model model) {
        model.addAttribute("title", "Create user");
    }
}

```

```

        return "users/create";
    }

    @PostMapping("create")
    public String processCreateUserForm(@ModelAttribute User newUser) {
        userRepository.save(newUser);
        return "users/create";
    }

    @GetMapping("register")
    public String displayRegisterUserForm(Model model) {
        model.addAttribute("title", "Register user");
        return "users/register";
    }

    @PostMapping("register")
    public String processRegisterUserForm(@ModelAttribute User user) {
        for (User user1:userRepository.findAll()) {
            if(user1.getUsername().equals(user.getUsername()) &&
user1.getPassword().equals(user.getPassword())) {
                return "users/choose";
            }
        }
        return "users/register";
    }

    @GetMapping("delete")
    public String displayDeleteUserForm(Model model) {
        model.addAttribute("title", "Delete User");
        model.addAttribute("users", userRepository.findAll());
        return "users/delete";
    }

    @PostMapping("delete")
    public String processDeleteUserForm(@RequestParam(required = false)
int[] userIds )
    {
        if (userIds != null) {
            for (int id : userIds) {
                userRepository.deleteById(id);
            }
        }
        return "users/delete";
    }
}

```

```

package org.carsworld.controllers;

import org.aspectj.lang.annotation.Aspect;
import org.springframework.stereotype.Controller;
import org.springframework.ui.Model;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RequestMapping;

@Aspect
@Controller
@RequestMapping("/home")
public class HomeController {

```

```

    @GetMapping
    public String index(){
        return "index";
    }
}

```

```

<!DOCTYPE html>
<html lang="en" xmlns:th="http://www.thymeleaf.org/">
<head>
    <!-- <style>
        body {
            background-image: url("static/images/carr.jpg");
            background-repeat: no-repeat;
            background-attachment: fixed;
            background-size: cover;
        }
    </style>
-->
<meta charset="ISO-8859-1">
<title>CautMasina.ro</title>
<style>

    .font-36{

        font-size: 24px;

    }

</style>
</head>

<body class="container"
    style="background: antiquewhite" >

<!--
<div class="font-36" align="center">
    
</div>
-->

<div class="font-36" align="right" style="font-family: 'Century Gothic'">
    <a href="users/create"> Sign in </a>
</div>
<div class="font-36" align="right" style="font-family: 'Century Gothic'">
    <a href="users/register"> Log in </a>
</div>

<div class="font-36" align="center">
    
</div>

<div class="font-36" align="center"
    style="color: cornflowerblue; font-family: 'Arial Black'">
    <h1 href="/home"> CautMasina.ro</h1>
</div>

```



```

<div class="font-36" align="left" style="font-family: 'Century Gothic'">
  <a href="seller/register"> Ai o masina de vanzare? </a>
</div>

<div class="font-36" align="left" style="font-family: 'Century Gothic'">
  <a href="users/index"> Aici urmaresti toti userii </a>
</div>

  <div class="font-36" align="left" style="font-family: 'Century Gothic'">
    <a href="users/delete"> Daca vrei sa iti stergi contul, intra aici
  </a>
  </div>

<!--
  <div class="font-36" align="left" style="font-family: 'Century Gothic'">
    <a href="cars/update"> Update</a>
  </div>
-->

<p>

</p>
<div class="row">
  <div class="column">
    
    
    
  </div>
  <!--
  <div class="column">
    
  </div>
  <div class="column">
    
  </div>-->
</div>

<div class="font-36" align="center"
  style="color: crimson; font-family: 'Arial Black'">
  <cite> <h1 href="/home"> Gaseste masina visurilor tale! </h1> </cite>
</div>

<div class="font-36" align="center" style="font-family: Elephant; font-
size:30px"; >
  <a href="cars/index"> Showroom de masini </a>
</div>

</body>
</html>

```

```

<!DOCTYPE html>
<html lang="en" xmlns:th="http://www.thymeleaf.org/">
<head>
  <meta charset="ISO-8859-1">
  <title> Inregistreaza-te ca user </title>
  <style>

```

```

        .font-36{

            font-size: 24px;

        }

    </style>
<body class="container"
    style="background: antiquewhite" >

<div align="center" style="color: cornflowerblue">
    <h1 href="/users/register"> Inregistreaza-te ca user </h1>
</div>
<form method="post" >
<div class="form-group font-36" align ="center" >
    <label>Username
        <input type="text" name="username" class="form-control">
    </label>
</div>

<div class="form-group font-36" align="center">
    <label>Password
        <input type="text" name="password" class="form-control">
    </label>
</div>

<div class="form-group font-36" align="center">
    <input type="submit" value = "Register" class="btn btn-success">
</div>
</form>
</body>
</html>

```

```

<!DOCTYPE html>
<html lang="en" xmlns:th="http://www.thymeleaf.org/">
<head>
    <meta charset="ISO-8859-1">
    <title>Create user</title>
</head>
<body>
    <div align="center" style="color: cornflowerblue">
        <h1 href="/users/create">Creaza un cont de user</h1>
    </div>

    <form method="post" >
        <div class="form-group font-36" align="center" >
            <label>Username
                <input type="text" name="username" class="form-control">
            </label>

```

```

    </div>
    <div class="form-group font-36" align="center">
        <label>Password
            <input type="text" name="password" class="form-control">
        </label>
    </div>
    <div class="form-group font-36" align="center">
        <label>Name
            <input type="text" name="name" class="form-control">
        </label>
    </div>
    <div class="form-group font-36" align="center">
        <label>Phone
            <input type="text" name="phone" class="form-control">
        </label>
    </div>
    <div class="form-group font-36" align="center">
        <label>City
            <input type="text" name="city" class="form-control">
        </label>
    </div>
    <div class="form-group font-36" align="center">
        <input type="submit" value = "Create" class="btn btn-success">
    </div>
</form>
</body>
</html>

```

```

<!DOCTYPE html>
<html lang="en" xmlns:th="http://www.thymeleaf.org/">
<head>
    <meta charset="ISO-8859-1">
    <title> Inregistreaza-te ca vanzator </title>
    <style>

        .font-36{

            font-size: 24px;

        }

    </style>
<body class="container"
    style="background: antiquewhite" >

<div align="center" style="color: cornflowerblue">
    <h1 href="/seller/register"> Inregistreaza-te ca vanzator </h1>
</div>
<form method="post" >
    <div class="form-group font-36" align ="center" >
        <label>Username
            <input type="text" name="username" class="form-control">
        </label>
    </div>

    <div class="form-group font-36" align="center">
        <label>Password
            <input type="text" name="password" class="form-control">
        </label>
    </div>

```

```

    </div>

    <div class="form-group" align="center">
        <input type="submit" value = "Register" class="btn btn-success">
    </div>
</form>
</body>
</html>

```

```

<!DOCTYPE html>
<html lang="en" xmlns:th="http://www.thymeleaf.org/">
<head>
    <meta charset="ISO-8859-1">
    <title>Create/Delete car</title>
    <style>

        .font-36{

            font-size: 24px;

        }

    </style>
<body class="container"
    style="background: antiquewhite" >

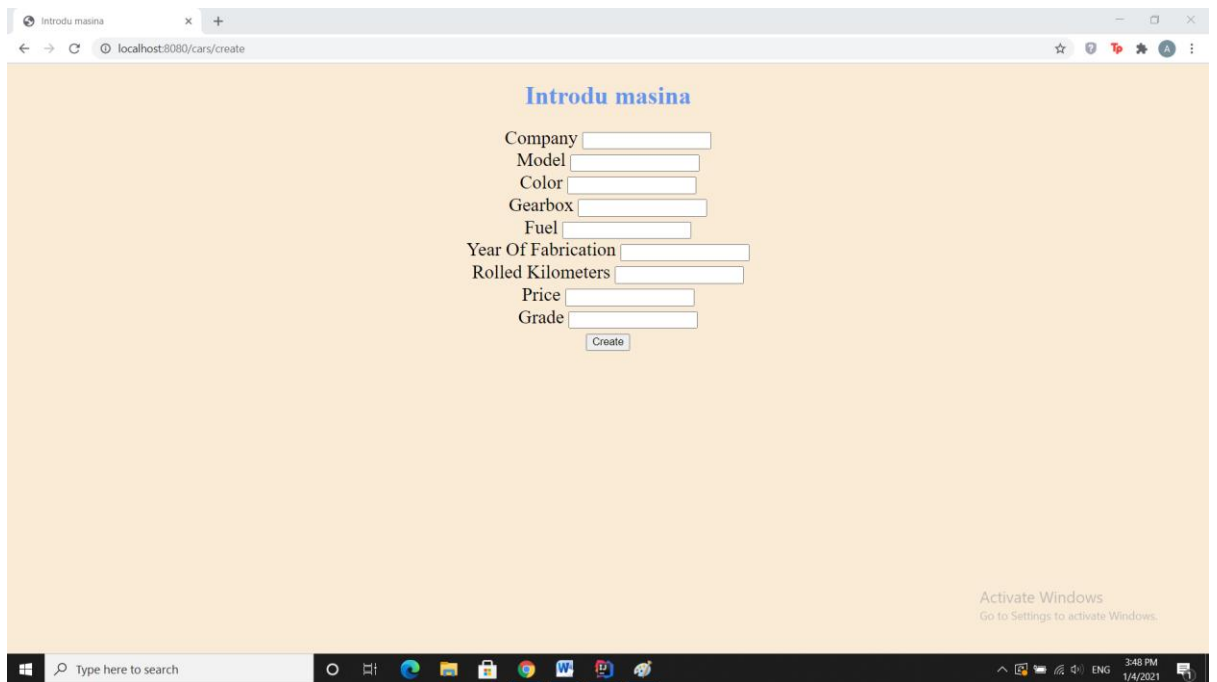
<div class="font-36" align="center">
    <h1 href="home"></h1>
</div>

<div class="font-36" align="center" >
    <a href="/cars/create">Click here to create a car</a>
</div>

<div class="font-36" align="center">
    <a href="/cars/delete">Click here to delete a car</a>
</div>

</body>
</html>

```



Sterge masina

localhost:8080/cars/delete

Sterge masina

Company	Model	Color	Rolled	Kilometers	Year of Fabrication	Gearbox	Fuel	Price	Grade
Audi	A6	Black	200000	2012	Automatic	Diesel	13500	8.899999999999999	<input type="checkbox"/>
Citroen	C8	red	273000	2003	Manual	Diesel	2000	5.9	<input type="checkbox"/>
Dacia	Duster	Green	171400	2012	Manual	Gasoline	7790	7.2	<input type="checkbox"/>
Chevrolet	Caprice	Black	75000	1984	Automatic	GPL	24000	9.3	<input type="checkbox"/>
BMW	X5	Black	240000	2015	Automatic	Diesel	25190	8.5	<input type="checkbox"/>
Fiat	Coupe	Yellow	229000	1994	Manual	Gasoline	13000	7.8	<input type="checkbox"/>
Alfa Romeo	Giulia	Blue	147500	2017	Automatic	Diesel	15000	7.6	<input type="checkbox"/>
KIA	Cerato	Blue	145600	2007	Manual	Diesel	2400	5.3	<input type="checkbox"/>
Jeep	Compass	Gray	206000	2008	Manual	Diesel	4500	6.8	<input type="checkbox"/>
Ford	Fiesta	Black	174000	2014	Manual	Diesel	6000	7.1	<input type="checkbox"/>
Audi	Q7	Black	189000	2016	Automatic	Diesel	29700	9.1	<input type="checkbox"/>
Alfa Romeo	GT	Blue	210000	2008	Manual	Diesel	3000	5.1	<input type="checkbox"/>
Opel	Tigra	Red	147000	2005	Manual	Gasoline	4500	7.3	<input type="checkbox"/>
Mercedes-Benz	A	White	148000	2011	Automatic	Gasoline	5200	7.4	<input type="checkbox"/>
Land Rover	Range Rover	Gray	272000	2008	Automatic	Diesel	8400	7.9	<input type="checkbox"/>
Audi	S8	White	202000	2008	Automatic	Gasoline	11200	8.1	<input type="checkbox"/>
Volkswagen	Touareg	Blue	238350	2004	Automatic	GPL	3900	6.75	<input type="checkbox"/>
Mazda	CX-7	White	230000	2007	Manual	GPL	4200	7.3	<input type="checkbox"/>
Suzuki	Vitara	Gray	61247	2007	Manual	Gasoline	17300	8.9	<input type="checkbox"/>
Hyundai	I30	Black	191000	2012	Manual	Gasoline	4600	6.7	<input type="checkbox"/>
BMW	M3	Blue	90000	2009	Automatic	Gasoline	14500	8.0	<input type="checkbox"/>

Delete

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Create user

localhost:8080/users/create

Creaza un cont de user

Username

Password

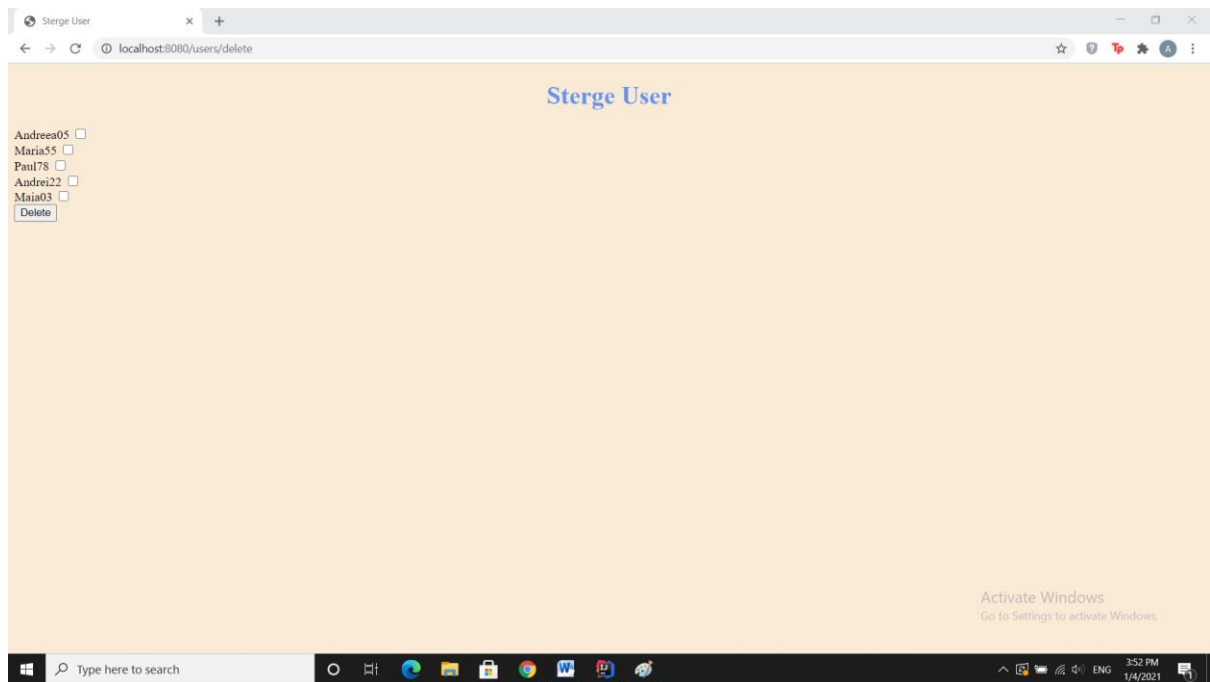
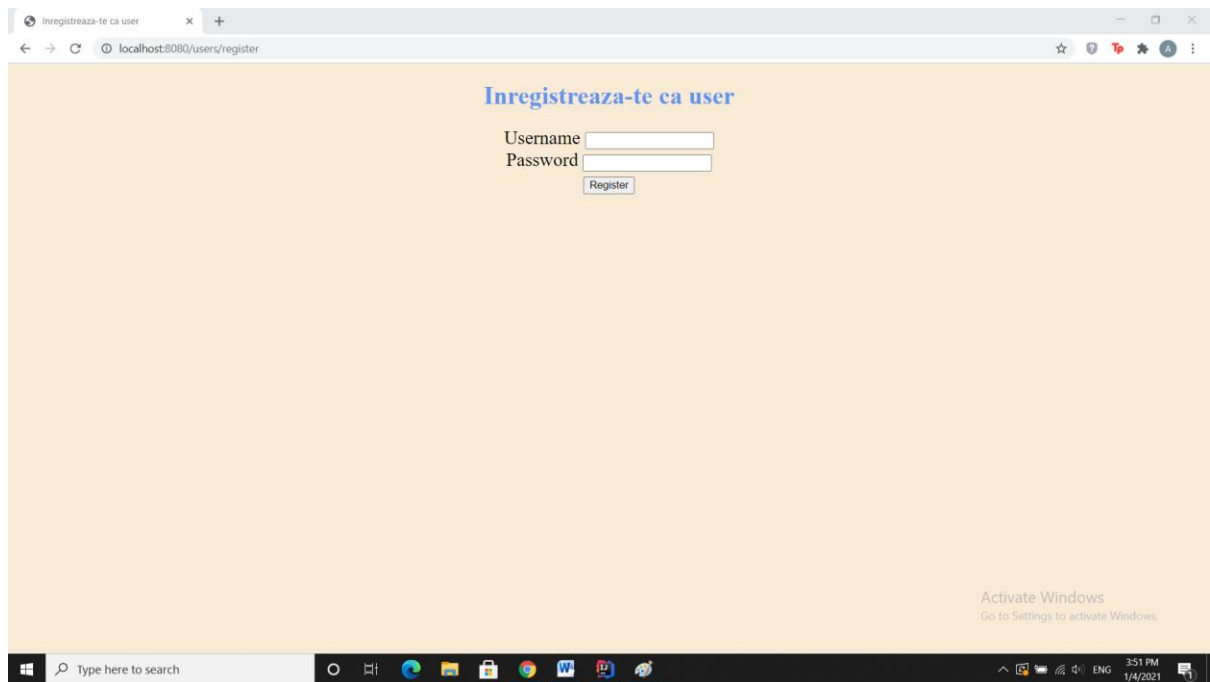
Name

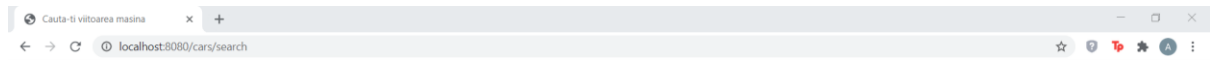
Phone

City

Create

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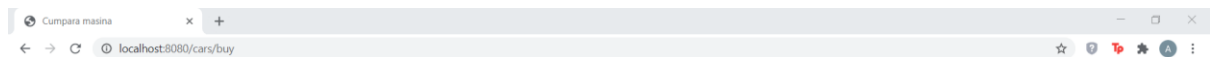


Cauta-ti viitoarea masina

Pret minim
Pret maxim

Company	Model	Color	Rolled Kilometers	Year of Fabrication	Gearbox	Fuel	Price	Grade
Land Rover	Range Rover	Gray	272000	2008	Automatic	Diesel	8400	7.9
Mercedes-Benz	A	White	148000	2011	Automatic	Gasoline	5200	7.4
Opel	Tigra	Red	147000	2005	Manual	Gasoline	4500	7.3
Mazda	CX-7	White	230000	2007	Manual	GPL	4200	7.3
Dacia	Duster	Green	171400	2012	Manual	Gasoline	7790	7.2
Ford	Fiesta	Black	174000	2014	Manual	Diesel	6000	7.1
Jeep	Compass	Gray	206000	2008	Manual	Diesel	4500	6.8
Volkswagen	Touareg	Blue	238350	2004	Automatic	GPL	3900	6.75
Hyundai	I30	Black	191000	2012	Manual	Gasoline	4600	6.7
Citroen	C8	red	273000	2003	Manual	Diesel	2000	5.9
KIA	Cerato	Blue	145600	2007	Manual	Diesel	2400	5.3
Alfa Romeo	GT	Blue	210000	2008	Manual	Diesel	3000	5.1

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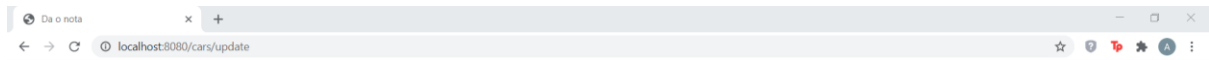
localhost:8080 says
Comanda dumneavoastra a fost preluata cu succes ! Pentru mai multe
detalii,consultati mailul!

Company	Model	Color	Rolled Kilometers	Year of Fabrication	Gearbox	Fuel	Price	Grade
Audi A6	Black	200000	2012	Automatic	Diesel	13500	8.899999999999999	<input type="checkbox"/>
Citroen C8	red	273000	2003	Manual	Diesel	2000	5.9	<input type="checkbox"/>
Dacia Duster	Green	171400	2012	Manual	Gasoline	7790	7.2	<input type="checkbox"/>
Chevrolet Caprice	Black	75000	1984	Automatic	GPL	24000	9.3	<input checked="" type="checkbox"/>
BMW X5	Black	240000	2015	Automatic	Diesel	25190	8.5	<input type="checkbox"/>
Fiat Coupe	Yellow	229000	1994	Manual	Gasoline	13000	7.8	<input type="checkbox"/>
Alfa Romeo Giulila	Blue	147500	2017	Automatic	Diesel	15000	7.6	<input type="checkbox"/>
KIA Cerato	Blue	145600	2007	Manual	Diesel	2400	5.3	<input type="checkbox"/>
Jeep Compass	Gray	206000	2008	Manual	Diesel	4500	6.8	<input type="checkbox"/>
Ford Fiesta	Black	174000	2014	Manual	Diesel	6000	7.1	<input type="checkbox"/>
Audi Q7	Black	189000	2016	Automatic	Diesel	29700	9.1	<input type="checkbox"/>
Alfa Romeo GT	Blue	210000	2008	Manual	Diesel	3000	5.1	<input type="checkbox"/>
Opel Tigra	Red	147000	2005	Manual	Gasoline	4500	7.3	<input type="checkbox"/>
Mercedes-Benz A	White	148000	2011	Automatic	Gasoline	5200	7.4	<input type="checkbox"/>
Land Rover Range Rover	Gray	272000	2008	Automatic	Diesel	8400	7.9	<input type="checkbox"/>
Audi S8	White	202000	2008	Automatic	Gasoline	11200	8.1	<input type="checkbox"/>
Volkswagen Touareg	Blue	238350	2004	Automatic	GPL	3900	6.75	<input type="checkbox"/>
Mazda CX-7	White	230000	2007	Manual	GPL	4200	7.3	<input type="checkbox"/>
Suzuki Vitara	Gray	61247	2007	Manual	Gasoline	17300	8.9	<input type="checkbox"/>
Hyundai I30	Black	191000	2012	Manual	Gasoline	4600	6.7	<input type="checkbox"/>
BMW M3	Blue	90000	2009	Automatic	Gasoline	14500	8.0	<input type="checkbox"/>

Buy

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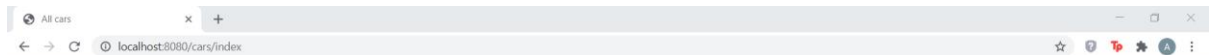
Da o nota

Company Model Color Rolled Kilometers Year of Fabrication Gearbox Fuel Price Grade

Audi A6 Black 200000 2012 Automatic Diesel 13500 8.899999999999999 ☐
Citroen C8 red 273000 2003 Manual Diesel 2000 5.9 ☐
Dacia Duster Green 171400 2012 Manual Gasoline 7790 7.2 ☐
Chevrolet Caprice Black 75000 1984 Automatic GPL 24000 9.3 ☐
BMW X5 Black 240000 2015 Automatic Diesel 25190 8.5 ☐
Fiat Coupe Yellow 229000 1994 Manual Gasoline 13000 7.8 ☒
Alfa Romeo Giulia Blue 147500 2017 Automatic Diesel 15000 7.6 ☐
KIA Cerato Blue 145600 2007 Manual Diesel 2400 5.3 ☐
Jeep Compass Gray 206000 2008 Manual Diesel 4500 6.8 ☐
Ford Fiesta Black 174000 2014 Manual Diesel 6000 7.1 ☐
Audi Q7 Black 189000 2016 Automatic Diesel 29700 9.1 ☐
Alfa Romeo GT Blue 210000 2008 Manual Diesel 3000 5.1 ☐
Opel Tigra Red 147000 2005 Manual Gasoline 4500 7.3 ☐
Mercedes-Benz A White 148000 2011 Automatic Gasoline 5200 7.4 ☐
Land Rover Range Rover Gray 272000 2008 Automatic Diesel 8400 7.9 ☐
Audi S8 White 202000 2008 Automatic Gasoline 11200 8.1 ☐
Volkswagen Touareg Blue 238350 2004 Automatic GPL 3900 6.75 ☐
Mazda CX-7 White 230000 2007 Manual GPL 4200 7.3 ☐
Suzuki Vitara Gray 61247 2007 Manual Gasoline 17300 8.9 ☐
Hyundai I30 Black 191000 2012 Manual Gasoline 4600 6.7 ☐
BMW M3 Blue 90000 2009 Automatic Gasoline 14500 8.0 ☐

Grade

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Company	Model	Color	Rolled Kilometers	Year of Fabrication	Gearbox	Fuel	Price	Grade
Audi	A6	Black	200000	2012	Automatic	Diesel	13500 8.899999999999999	
Citroen	C8	red	273000	2003	Manual	Diesel	2000 5.9	
Dacia	Duster	Green	171400	2012	Manual	Gasoline	7790 7.2	
Chevrolet	Caprice	Black	75000	1984	Automatic	GPL	24000 9.3	
BMW	X5	Black	240000	2015	Automatic	Diesel	25190 8.5	
Fiat	Coupe	Yellow	229000	1994	Manual	Gasoline	13000 7.8	
Alfa Romeo	Giulia	Blue	147500	2017	Automatic	Diesel	15000 7.6	
KIA	Cerato	Blue	145600	2007	Manual	Diesel	2400 5.3	
Jeep	Compass	Gray	206000	2008	Manual	Diesel	4500 6.8	
Ford	Fiesta	Black	174000	2014	Manual	Diesel	6000 7.1	
Audi	Q7	Black	189000	2016	Automatic	Diesel	29700 9.1	
Alfa Romeo	GT	Blue	210000	2008	Manual	Diesel	3000 5.1	
Opel	Tigra	Red	147000	2005	Manual	Gasoline	4500 7.3	
Mercedes-Benz	A	White	148000	2011	Automatic	Gasoline	5200 7.4	
Land Rover	Range Rover	Gray	272000	2008	Automatic	Diesel	8400 7.9	
Audi	S8	White	202000	2008	Automatic	Gasoline	11200 8.1	
Volkswagen	Touareg	Blue	238350	2004	Automatic	GPL	3900 6.75	
Mazda	CX-7	White	230000	2007	Manual	GPL	4200 7.3	
Suzuki	Vitara	Gray	61247	2007	Manual	Gasoline	17300 8.9	
Hyundai	I30	Black	191000	2012	Manual	Gasoline	4600 6.7	
BMW	M3	Blue	90000	2009	Automatic	Gasoline	14500 8.0	

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