**Project description**

[**Deployment of the project** 2](#_Toc153527921)

[**Purpose of the system** 2](#_Toc153527922)

[**Data base** 3](#_Toc153527923)

[**Car** 3](#_Toc153527924)

[**Clients** 4](#_Toc153527925)

[**Suppliers** 4](#_Toc153527926)

[**Suppliеr\_car** 5](#_Toc153527927)

[**Client\_car\_supplier** 5](#_Toc153527928)

[**Packages:** 5](#_Toc153527929)

[**Controllers** 6](#_Toc153527930)

[**CarController:** 6](#_Toc153527931)

[**ClientController:** 6](#_Toc153527932)

[**OrderController:** 6](#_Toc153527933)

[**Data** 6](#_Toc153527934)

[**Repositories** 6](#_Toc153527935)

[**Services** 6](#_Toc153527936)

[**Static/images/cars** 6](#_Toc153527937)

[**Templates/car** 6](#_Toc153527938)

[**Templates/client** 7](#_Toc153527939)

[**Templates/order** 7](#_Toc153527940)

[**Templates/fragments** 7](#_Toc153527941)

# **Deployment of the project**

The database used in the project is MySQL. In the project settings (application.yml file), you need to change the username and password for the database. Connect the database to the project, which must be called 'carsalon'. It is not necessary to create tables - in their absence, they are created automatically.

Also, uploading images should be allowed in the project, since the project has a function to add an image to the car.

The following files are added to the project: cars, clients, suppliers, supplier\_car, client\_car\_supplier. Completed carsalon database tables that can be exported to the environment to use ready-made data.

# **Purpose of the system**

**Project Name:** Car Dealership Management System

**Description:** The Car Dealership Management System is a web application designed for car dealerships and their administrators to optimize the processes of customer registration, consultation, and assistance in choosing automobiles.

**Key Features:**

1. **Customer Registration:** Administrators can register new customers, saving their preferences for cars and contact information.
2. **Search and Filtering of Cars:** The system allows administrators to quickly find available cars using various filters and search criteria.
3. **Modification of Characteristics**: Administrators can modify customer characteristics as needed, assisting in the selection of optimal configurations.
4. **Collaboration with Suppliers:** The system enables collaboration with car suppliers, updating the assortment, and establishing connections with other companies.
5. **Registration of New Cars:** The system allows adding new automobiles to the inventory.

**Key Advantages:**

• Efficient management of customer base and their needs.

• Convenient system for searching and filtering cars.

• Ability to provide consultations and assistance to customers in their choices.

• Collaboration with suppliers to expand the range of automobiles.

This system is developed to simplify the operations of car dealerships, providing convenient tools for customer service and optimizing the management of the car inventory.Начало формы

# **Data base**

Tables:

1. Cars
2. Clients
3. Suppliers
4. Supplier\_car
5. Client\_car\_supplier

## **Car**

A table for saving data about machines. No field can be null.

**Fields:**

Id (auto increment) - key

Brand (varchar) – brand of the machine

Model (varchar) – machine model

Car\_type (varchar) – car type

Transmission\_type (varchar) – transmission type

Fuel\_type (varchar) – fuel type

Fuel\_consumption (decimal) – fuel consumption

Price (decimal) - the cost of the machine

Used (Boolean) - is the car used (1 - yes, 0 - new car)

Photo\_path (varchar)

Year (int) – year of production of the machine

## **Clients**

A table for saving customer data and saving customer wishes. The client's wishes can be null - there are no wishes for this characteristic.

**Fields:**

Id (auto increment) – the key

Client\_name (varchar) – first and last name of the client

Email (varchar) – e-mail

Car\_type (varchar) – preferences for the car type

Transmission\_type (varchar) – transmission type

Fuel\_type (varchar) – fuel type

Max\_fuel\_consumption (decimal) – fuel consumption

Max\_price (decimal) – the price of the machine

Used (Boolean) - is the car used (1 - yes, 0 - new car)

Photo\_path (varchar)

Year (int) – year of production of the machine

## **Suppliers**

A table for storing data about suppliers.

**Fields:**

Id (auto increment) – key

Name – name of the supplier

Email – supplier's email

Price - delivery price

Deliver\_days - delivery time

## **Suppliеr\_car**

A table to display the many-to-many relationship between machines and suppliers.

**Fields:**

Id (auto increment) – key

Supplier\_id – reference to the supplier

Car\_id – reference to the car

## **Client\_car\_supplier**

Table for recording existing orders.

**Fields:**

Id (auto increment) – key

Supplier\_id – reference to the supplier

Client\_id – reference to the client

Car\_id – reference to the car

Comments – comments to the order

Created\_at – time of order creation

# **Packages:**

## **Controllers**

### **CarController:**

for managing pages displaying machines and interacting with machines

### **ClientController:**

to manage client display pages and client interactions

### **OrderController:**

for managing pages displaying orders and interacting with orders

## **Data**

contains entity classes from the database – Car, Client, Supplier, SupplierCar, ClietnCarSupplier.

## **Repositories**

contains spring repositories for database entities – CarRepository, ClientCarSupplierRepository, ClientRepository, SupplierCarRepository, SupplierRepository.

## **Services**

contains service classes – CarService, ClientCarSupplierService, ClientService, SupplierCarService, SupplierService.

## **Static/images/cars**

Directory to save images to machines.

## **Templates/car**

contains html pages for displaying machines and working with machines:

add\_car – form for adding a car;

car\_filter – display of cars according to the client's requirements;

car\_info – display of information about the selected car;

cars – display of all cars;

no\_car – a page for displaying a message that no car was found according to the client's requirements

## **Templates/client**

Contains html pages for displaying customers and working with machines:

add\_client – ​​form for adding a new client;

client\_info – display of information about the selected client;

clients – display of all clients who have not yet placed an order.

## **Templates/order**

Contains html pages for displaying orders and working with orders:

order\_info – display of order information;

orders – display of all orders.

## **Templates/fragments**

Contains html page fragments to prevent code duplication:

header – the top menu with links to various pages of the application;

modify\_client – ​​a form for changing the client's wishes;

order\_modul – order form.