

Java Web Development Basics

Java EE Workshop – Servlets & JSP

West Compass Car Dealer Shop

West Compass Dealer Shop is an web application where you can add your car offers. There are two main entities, Users and Cars .

1. Database Requirements

The **Database** of the application needs to support **2 entities**:

User

- Has a **Username**
- Has a **Password**
- Has an **Email**
- Has **Cars** (a collection of **cars**)

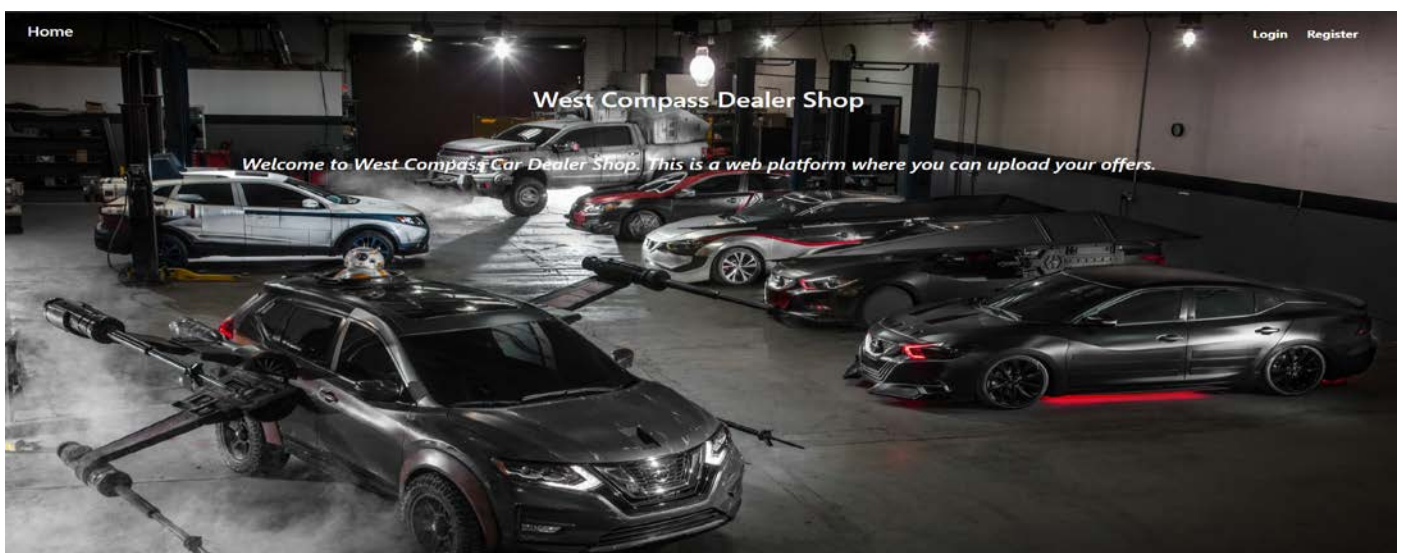
Car

- Has a **Brand**
- Has a **Model**
- Has a **Year**
- Has an **Engine**
- Has **User**

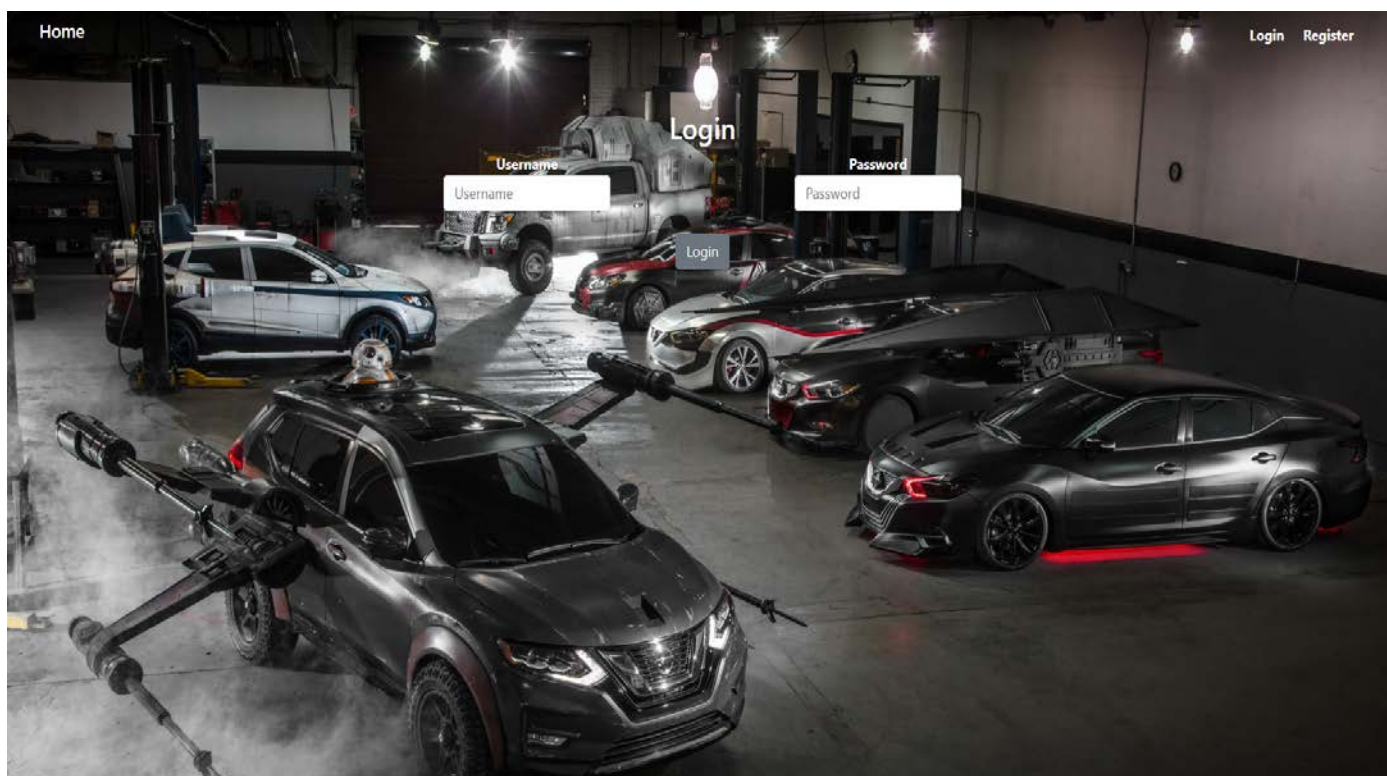
Implement the entities with the **correct datatypes**, and implement **repositories** for them.

2. Templates

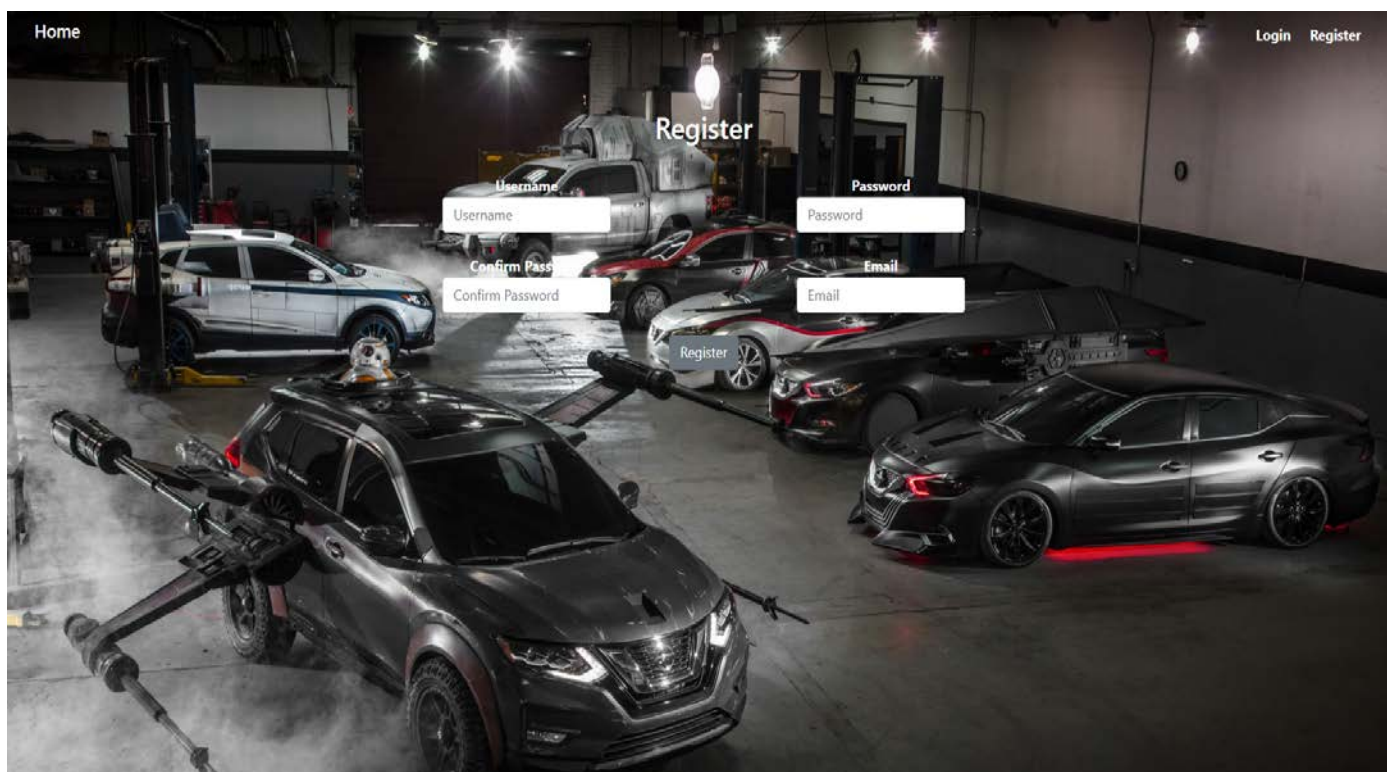
Index Template (route = “/index”) (logged out user)



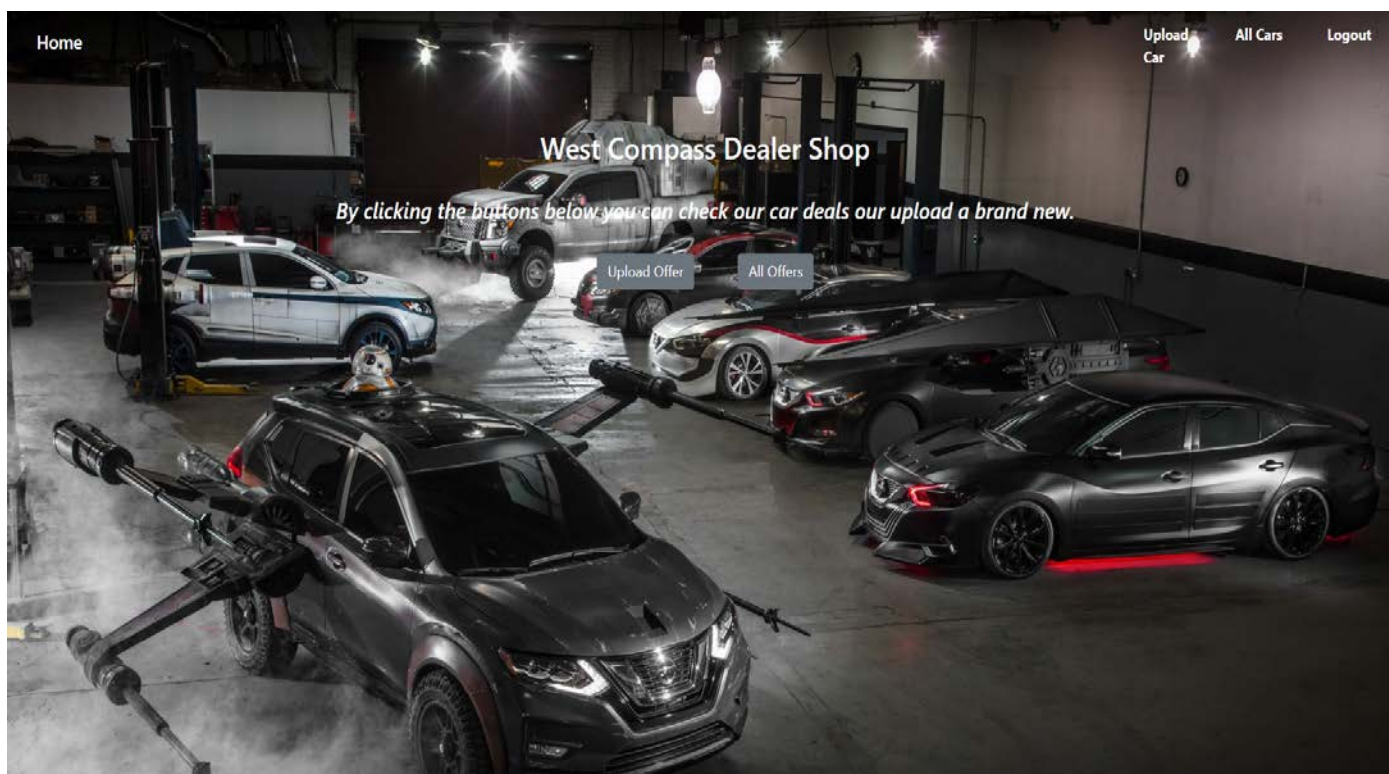
Login Template (route = “/users/login”) (logged out user)



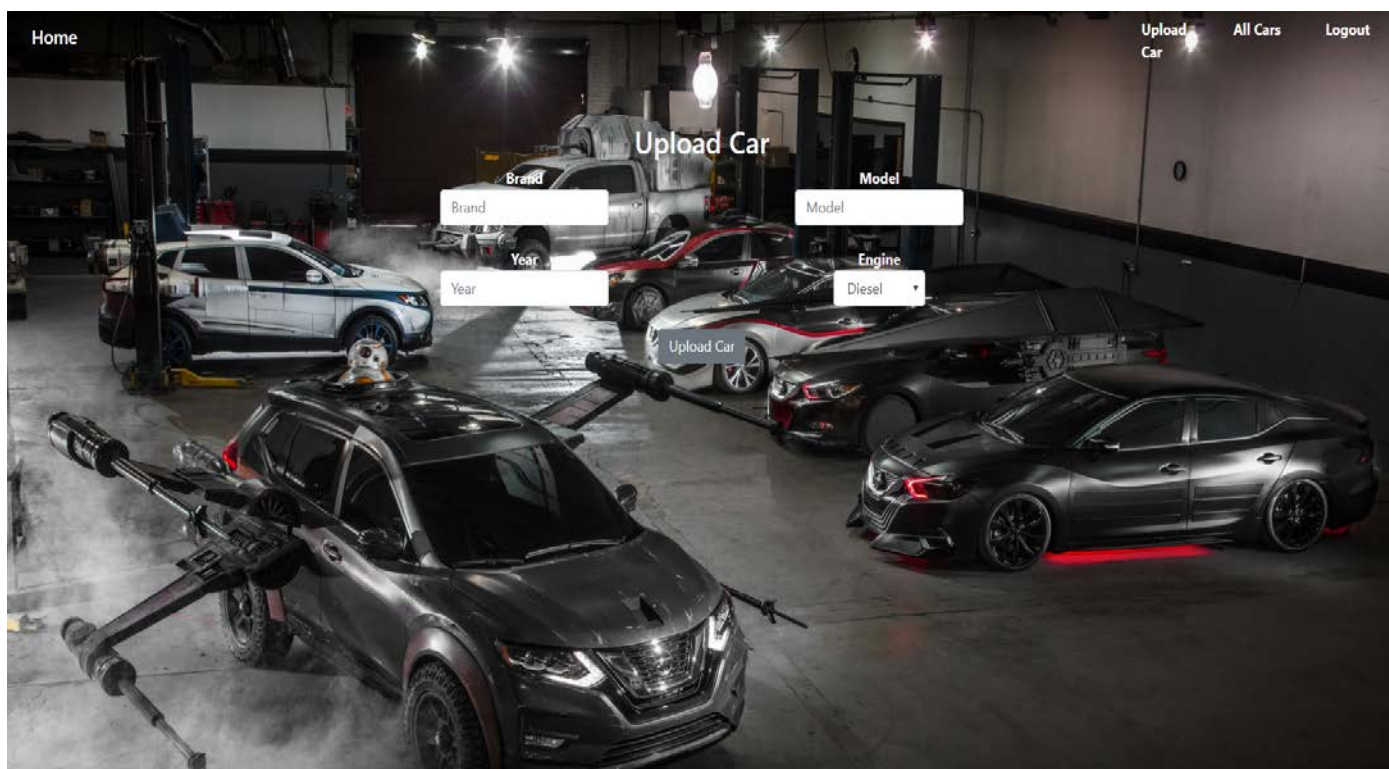
Register Template (route = “/users/register”) (logged out user)



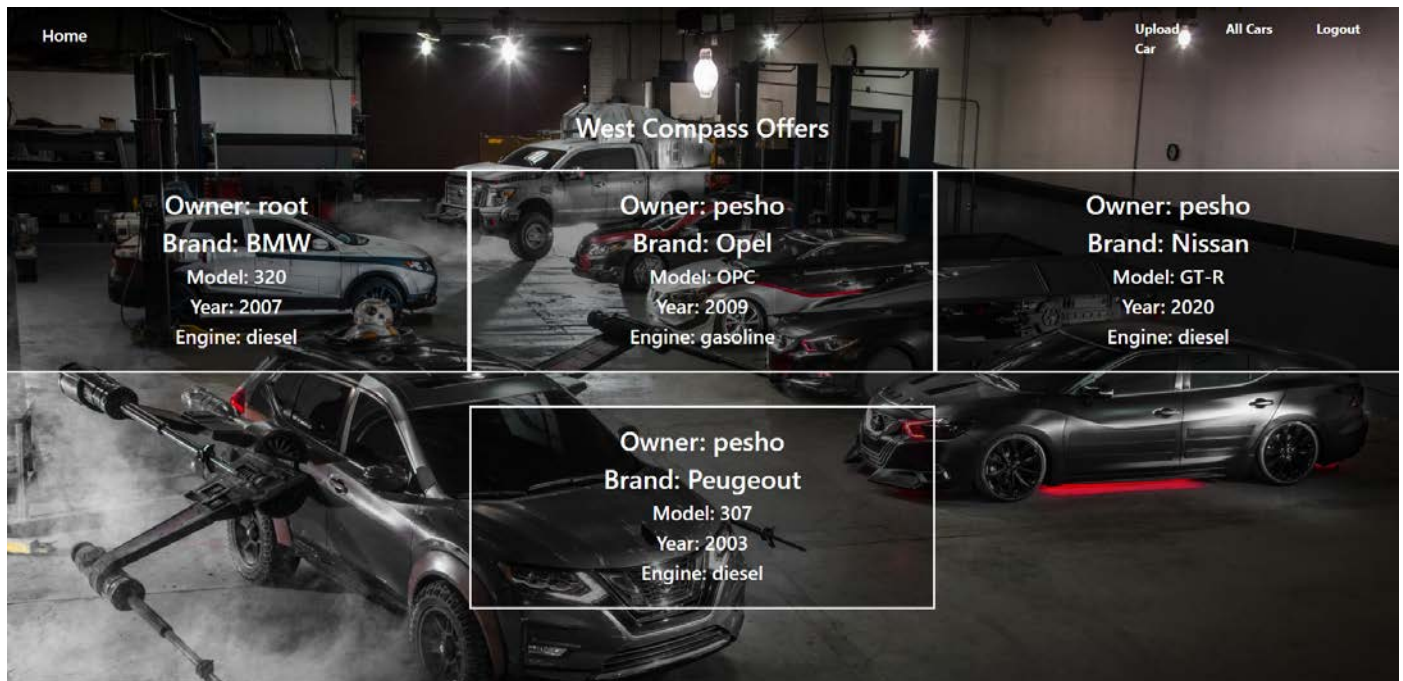
Home Template (route="/home") (logged in user)



Cars Create Template (route="/cars/create") (logged in user)



Cars All Template (route="/cars/all") (logged in user)



NOTE: All the templates have been given to you as **.html** files. You need to make **.jsp** files from them.

NOTE: The templates do **NOT** require additional **CSS** for you to write. Only **bootstrap** and the **given css** are enough.

NOTE: To include the proper **CSS** use "`{pageContext.request.contextPath}/css/style.css`".

1. Functional Requirements

The **Functionality Requirements** describe the functionality that the **Application** must support.

For **Index** you should use exactly `"/index"` as URL, not `"/`".

The **application** should provide **Guest** (not logged in) users with the functionality to:

- **Login**
- **Register**
- **View the Index** page.

The **application** should provide **Users** (logged in) with the functionality to:

- **Logout**
- **Home**
- **View all Cars** (**All Cars** page)
- **Create a Car**.

The **application** should store its **data** into a **MySQL** database, using **Hibernate** native.

2. Security Requirements

The **Security Requirements** are mainly access requirements. Configurations about which users can access specific functionalities and pages.

- **Guest** (not logged in) users can access **Index** page.
- **Guest** (not logged in) users can access **Login** page.

- **Guest** (not logged in) users can access **Register** page.
- **Users** (logged in) can access **Home** page.
- **Users** (logged in) can access **Cars Create** page.
- **Users** (logged in) can access **Cars All** page.
- **Users** (logged in) can access **Logout** functionality.