DriftRent - Car Rental Management System

Overview

DriftRent is a Spring Boot-based web application that facilitates car rental management. The system allows users to create, manage, and search for car rental advertisements.

Technical Stack

• Backend Framework: Spring Boot 3.4.0

• Database: MySQL

• Build Tool: Maven

• Java Version: 23

• Dependencies:

- Spring Data JPA
- Spring Web
- MySQL Connector
- Lombok
- Spring Boot Test

Core Features

- User Management
- Car Management
- Advertisement Management
- Search and Filter Functionality

API Documentation

1. User Management (/user)

• Endpoints:

- GET /user/email/{email} Get user by email
- POST /user/create Create new user
- DELETE /user/delete/{email} Delete user
- POST /user/login User login
- PUT /user/update Update user details

2. Car Management (/car)

• Endpoints:

- POST /car/create Create new car
- DELETE /car/delete Delete car
- PUT /car/update Update car details
- GET /car/all Get all cars with optional filters

3. Advertisement Management (/ad)

• Endpoints:

- $GET /ad/id/{id}$ Get ad by ID
- POST /ad/create Create new ad
- DELETE /ad/delete/{id} Delete ad
- PUT /ad/update Update ad
- GET /ad/all Get all ads
- GET /ad/filter Filter ads based on criteria

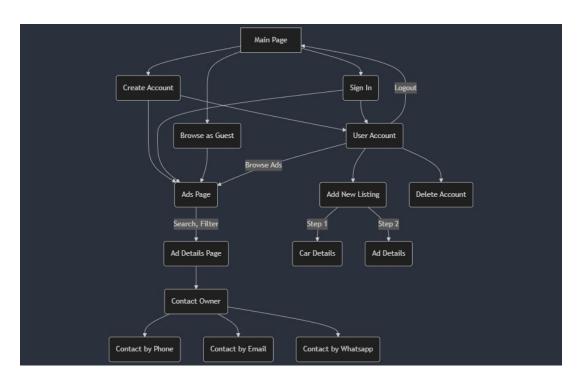


Figure 1: Use Case Diagram for DriftRent

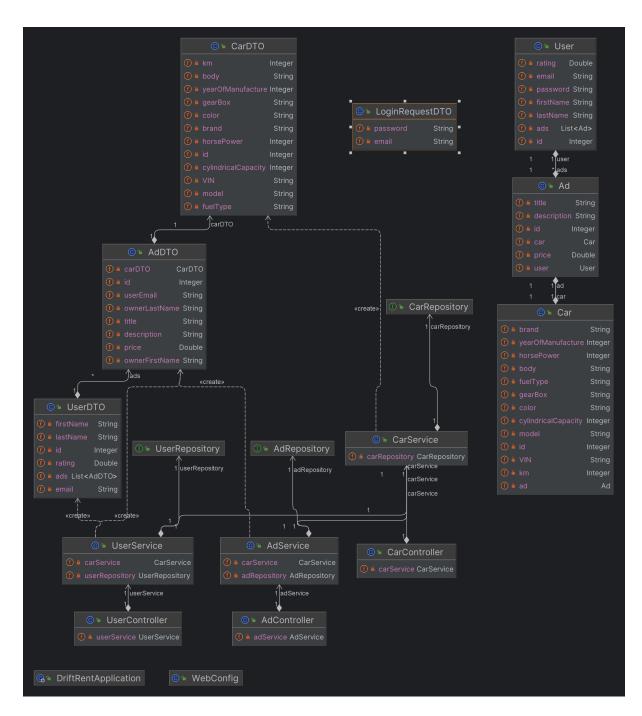


Figure 2: UML Diagram for DriftRent