

New Functionalities to be used as an in-memory key-value storage:

A shopping cart

To implement the a shopping cart I will use a Redis set with key "Cart:userId", car ids as the values and a score of the numbers of cars they want)

Used Car Trading System

View Marked Cars View Appointment View Cart Logout

Make
Model
Year
Price
Max Mileage
Location
Seller ID

Search Reset

Mercedes-Benz SL-Class
Car ID: 65654fffc13ae11884cd3ed
Year: 1903
Price: \$17794
Mileage: 2288602 miles
Report URL: [View Report](#)
Location: Pakxong
Seller ID: 65654fffc13ae11884cd3ec
Mark ☐
Appointment for Test Drive Add to Shopping Cart

Mitsubishi Endeavor
Car ID: 65654fffc13ae11884cd3ee
Year: 2009
Price: \$3090
Mileage: 2613346 miles
Report URL: [View Report](#)
Location: Piedrancha
Seller ID: 65654fffc13ae11884cd3ec
Mark ☐
Appointment for Test Drive Add to Shopping Cart

Chevrolet Venture

Lexus SC

Shopping Cart

Home Logout

Shopping Cart

Car ID: 65654fffc13ae11884cd3ed
Quantity: 2
Remove

Project Description

The project is a second-hand trading system designed to provide a method for customers and sellers of cars to connect with each other. The system allows customers to search for cars based on their preferences such as make, model, year, price, maximum mileage, location, and seller information. Customers can mark cars they like and view all their marked cars on a single page. Sellers can post their cars on the system and can view all their posted cars on a single page. Sellers can also choose to delete a posted car if they no longer wish to sell it or need to make modifications. The system includes a registration system that prompts users to specify whether they want to register as a seller or a customer. Sellers are required to provide their Social Security Number (SSN). Usernames must be unique among customers and sellers. Customers can make an appointment for test drives for cars they are interested in. Scheduling a test drive involves selecting a time slot and requires logging in.

Possible Nouns and Actions

Nouns: buyers, sellers, cars, make, model, year, price, mileage, location, registration system, SSN, appointment

Customer

- customerID
- username
- password
- email
- phone
- marked cars<list>

Seller

- username: TEXT
- password: TEXT
- email: TEXT
- phone: int
- ssn: int

Appointment

- year
- month
- day
- clock

Car

- car ID
- make
- model
- year

- price
- mileage
- location
- sellerID

Actions: post, search, mark, view, delete, log in, post, schedule, register

Rules

- Customer can mark any number of cars including zero.
- Sellers can post any number of cars including zero.
- A car can only have one appointment with a seller per day.
- Customer can delete marked cars which is marked by himself.
- Users must select whether they want to register as a seller or a customer during the registration process.
- Sellers are required to provide their SSN during registration.
- Usernames must be unique among customers and seller tables.
- Customers can schedule test drives and select a time slot.
- Each car should have a unique identifier or number.
- Each car must be associated with one and only one seller.

