Car Showroom

This offline assignment is an extension to the Car Warehouse Database System.

The car warehouse database loads a text file from the system, uses a list to maintain the Car information, and stores the list's contents back to the file. This will be implemented in a separate server and the clients (mentioned below) will communicate with them through Java networking concepts (Socket and ServerSocket). The Car warehouse database in the server will also have pre-loaded user login information (mentioned below).

There will be two types of user/client to the system - manufacture and viewer. The manufacturers will log in to the system with their username and password. The viewers will log in to the system with a default username of 'viewer' and no password. Each Car will have some extra fields, such as quantity and price. The graphical login screen must be designed with JavaFX.

The manufacturer will have the following functionalities available:

- View all cars
- Add a car
- Edit a car
- Delete a car

There can be multiple manufacturers running. So, the car information must be up to date for all the manufacturers. The graphical home screen of the manufacturer and all the functionalities mentioned above must be designed with JavaFX.

The viewer will have the following functionalities available:

- View all cars
- Search car by registration number
- Search car by make and model
- Buy a car (only if the quantity is available as the quantity will be reduced with buying)

There can be multiple viewers running as well. So, the car information must be up to date for all the viewers so that viewers don't end up buying a car that is not available for selling. The graphical

home screen of the viewer and all the functionalities mentioned above must be designed with JavaFX.

The clients will have no information about the cars on their own. All their functionalities require sending requests over the network, including the login. The proper use of threading is also essential.

Bonus:

- Add image option for Car
- User management through a separate admin user
- Use a standard database and JDBC in the server instead of file and list