Car Martketplace

It will start with a menu where it asks for login or continue as a guest, if they picked login then they will have a box to enter username and password

* There will be 4 type of users in this program ( Guest, User, Seller, Admin)
* Guest: does not have to log in! will only be able to view and browse the cars that are being sold/rented
* Guest menu will look like:
* 1) Browse cars
* 2) Become a user
* 3) Exit
* User: will be able to buy/rent cars, this user will have to login with username/password, but will have a first name, last name, DOB and will have a balance.
* User menu will look like:
* 1) Browse cars ( will take show him all listings )
* 2) sell a car ( as a user will only be able to sell 1 car)
* 3) become a seller
* 4) Check mail
* 5) Check balance
* 6) Deposit money
* 7) Exit
* Seller: Seller will be able to sell/rent out cars, sellers will have to verify a SSN, and must need at least 100k balance to become a seller, they can have a listing up to 15 cars
* Seller Menu will look like
* 1) Browse cars
* 2) Create a listing ( will have the option to either rent out or sell a car)
* 3) Check balance
* 4) Check mail
* 5) Exit
* Admin: Admin will be able to do the following
* 1) Delete listing
* 2) Remove users/sellers
* 3) check user information ( will list all users Firstname/Last name/Type (seller,user,guest) /
* 4) Deactivate a user ( will have to enter a first name and last name to deactivate)
* 5) Activate a user ( will have to enter a first name and a last name to activate )
* 6) Make announcements ( will be sent to every user mailbox)
* 7) exit

MAIL:

An admin will be able to make an announcement where everyone will receive that message, it will be of type string, it will also show the time the message was sent!

FILE IO:

This was an interesting subject, I could easily done serializable like the one we did on pet program but I always heard of XML encoders, so I gave it a go, it took me a lot of time to get it to work, i like how it turned out to be, inorder to use those I had to include some libraries to make it to work!

Renting:

In order to rent a car you need to have atleast x3 of the price in your balance, with that you will be able to rent out a car

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The admin file will include the logic behind all his options that he has, including the menu

The Car file will include all the aspects of the car, from make,model,year,color,owners,price and if its for sale or rent

Model.java is a really interesting class, I got to understand how “->” are used, it cuts the lines of code by half or even more. I already have comments on the lines on my code but I will explain it here too!

For example we have car.sremoveif(c -> getOwner().equals(p)

The way I understood how -> that it makes “c” act like the unkown, we have to find if that car is indeed owner by that person, it like iterates through it and see if owner matches to this car in our database.

The guest will also have the menu and will be able to become a user by the changing the type of that person

The guest will be able to become a user by providing information, when they become a user they will be able to buy a car. We can change types of users as each type has a string for example admin is identified by “Admin” and user is “User” etc…

In order to browse a car the user must be activated, if user is deactivated they will be able to do most things except of browsing the car, as you need to be an active user to do so.

When deleting a listing the admin will have to check if the user exists, if not that means you entered the wrong information.

As far as of right now, I am happy of how my program turned out to be, I wish if I had more time to fix some of the minor bugs or logic errors, and to implement a GUI, but unfortunately I have 2 final projects and 2 final exams that I was also working on along side this project.