Read Me for Parking Lot Application

Overview: The project I have coded has following functionality.

1. Create file for Staff with name Staff.dat
2. Create file for Admin with name Admin.dat
3. Create file for SuperAdmin with name SuperAdmin.dat
4. Create file for for Customer with name Customer.dat
5. Create file for Parkinglot with name Parkinglot.dat
6. Park vehicle functionality
7. Occupy parking spot functionality
8. Add Customer to Custome.dat with vehicle information by customer ID.
9. There are options to store by vehicle type such as Car/Truck/Motorcycle
10. There is functionality to add Staff, Admin and SuperAdmin data when the application is run
11. The classes in java files are as follows:
12. Admin.java
13. Customer.java
14. MainApp.java (Has main function to run the app)
15. ParkingLot.java
16. ParkingSpot.java
17. Staff.java
18. SuperAdmin.java
19. User.java
20. Vehicle.java
21. VehicleType.java

12 ) The functions in the MainApp.java are as follow:

1. public void saveData (String parkingLotFileName, String customerFileName)

To save customer and parking lot data in files

1. public void loadData (String parkingLotFileName, String customerFileName)

load parking lot and customer files.

1. public void loadAllUserData1()

Load all user data for Staff, Admin and Super Admin.

1. private void loadStaffData (String filename)

load staff data to file

1. private void loadAdminData (String filename)

load admin data to file

1. private void loadSuperUserData1(String filename)

load SuperAdmin data to file

1. public void saveAllData ()

Save data to parkinglots.dat, customers.dat, staff.dat, admin.dat and superuser.dat

1. private void saveUserData (String filename, Map<Integer,? extends User> accounts)

save user data to file for user accounts.

1. public void run ()

This function has the functionality to run the app.

J) **public** **void** addUser

Code to save User such as Staff, Admin and SuperAdmin data to files by menu options for each user type.

.k) **private** **void** saveToFile(String filename, Map<Integer, ? **extends** User> accounts)

One more function save user date to file output object.

.l) **public** **void** displayParkingStatus(ParkingLot lot)

Display parking lot status showing occupied and available spots.

m) **public** **static** **void** main (String[] args)

main function that runs the function run().

n) **public** **void** addNewCustomer()

add new customer.

o) **public** **void** addVehicleToCustomer(**int** customerId, ParkingLot lot)

add vehicle data to customer by customer ID and parking lot spot information.

p) **public** **void** findAvailableSpot(ParkingLot lot)

find the next available spot for parking.

Screen Shots are as follows of the run program.

A screen shot of a computer

Description automatically generated

A screenshot of a computer screen

Description automatically generated

A screenshot of a computer program

Description automatically generated

A screenshot of a computer program

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