**ParkingLotSystem**

I have created 4 different classes in my code, a class for the admin, class for the operators, class for the parking lots and of course the main method class.

In the main class I had the main function designed only to loop and keep the software running as long as the user wants to, and it jumps to 3 different methods where each one corresponds for one of the consoles. (admin, operator and customer). Each one of the methods prompt the user to choose the service wanted and then prompt him correspondingly to enter the needed data, and when done, it goes back to the main method and ask the user again which console he would like to choose this time.

In the admin class, I had created Arraylists for the operators and the parking lots, each list has the methods where we can identify the number of the list, add/delete and print it. Also, a save to file method where it saves both lists to a text file is available in the class.

For the operator class (inherited from Admin class for the purpose of the Arraylist of operators to check whether a log in is successful or not) .it had the parameters of an operator such as username and password and an Arraylist of the lots that this specific operator holds control of. Methods of Adding and deleting parking lots under custody are available as well as a method to check the operator is valid or no when logging in. also, a printing method where the list of the parking lots under custody is printed is available.

The parking lot class holds the parameter of a parking lot, its ID, number of spaces as well as the hourly rate, this class was important because it was used by both the admin and operator class and made things easier in manipulation.