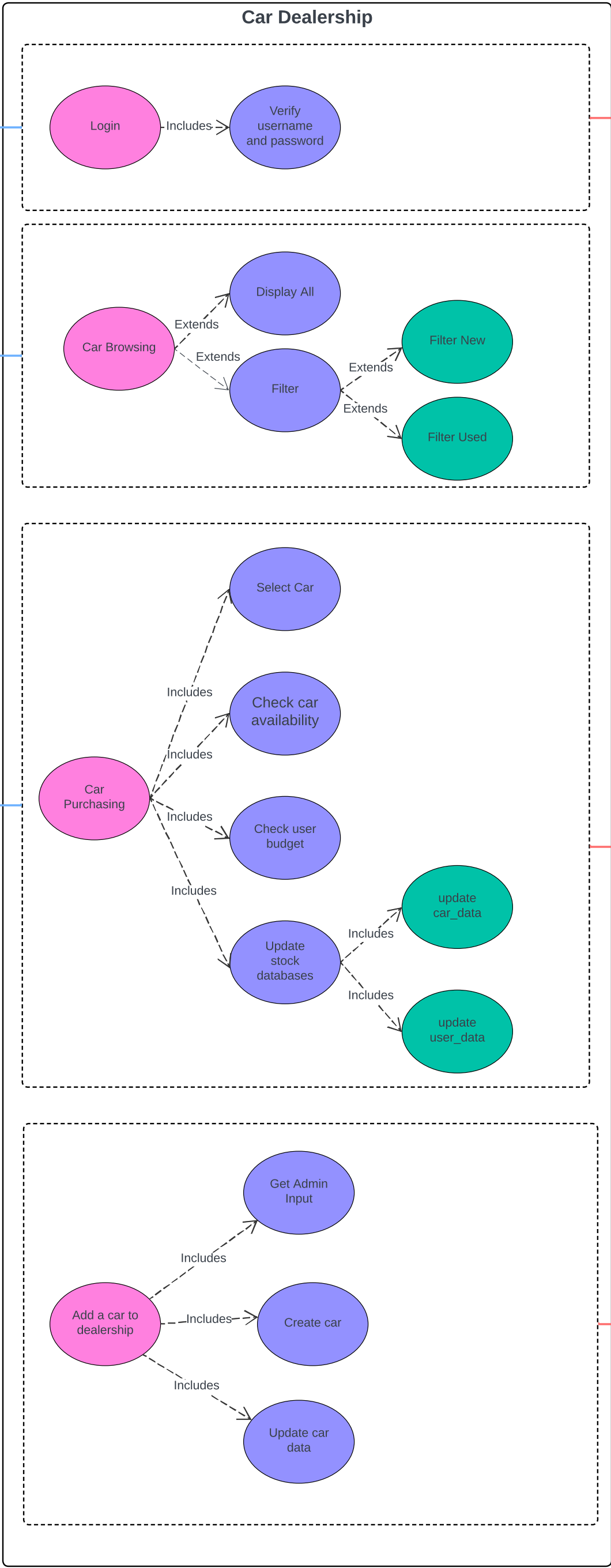


Assumptions

Dynamic System Design
The provided class diagram and system design are considered provisional and will undergo iterative refinement as the project progresses and requirements evolve. This flexibility allows for adjustments to be made in response to changing needs and feedback. We assume that the user's input is always correct for adding a car.

Financial Transaction Handling
If the user possesses sufficient budget to afford the selected car, it is assumed that the dealership will handle the intricacies of payment processing.

Ownership Transfer Responsibility
Upon the successful completion of a car purchase, the dealership is assumed to take charge of initiating and overseeing the necessary paperwork for transferring ownership.



Use cases description

Login:
Users and administrators can log in to the system using their respective credentials. Upon logging in, the system verifies the username and password provided for authentication.

Car Browsing:
Users can browse through the inventory of cars available in the system. They have the option to view all cars or filter them based on whether they are new or used.

Car Purchasing:
If a user decides to purchase a car, the system follows these steps:
1. Check Stock: The system verifies if the selected car is in stock.
2. Check Budget: It checks if the user has sufficient budget to purchase the car.
3. Update Databases: Upon successful purchase, the system updates both the car database and the user database under the administration privileges. This includes deducting the purchase amount from the user's budget and updating the stock availability of the car in the inventory.