Deliverable 1

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Scenario

- The project is a simulation of a car dealership. The user can reach out to different dealerships (online or in person) to see various cars (gas or electric). The user can search, view, and compare different vehicles as well as different dealerships. This program also allows for the loading and storing of information from files regarding dealerships.

Design paradigm

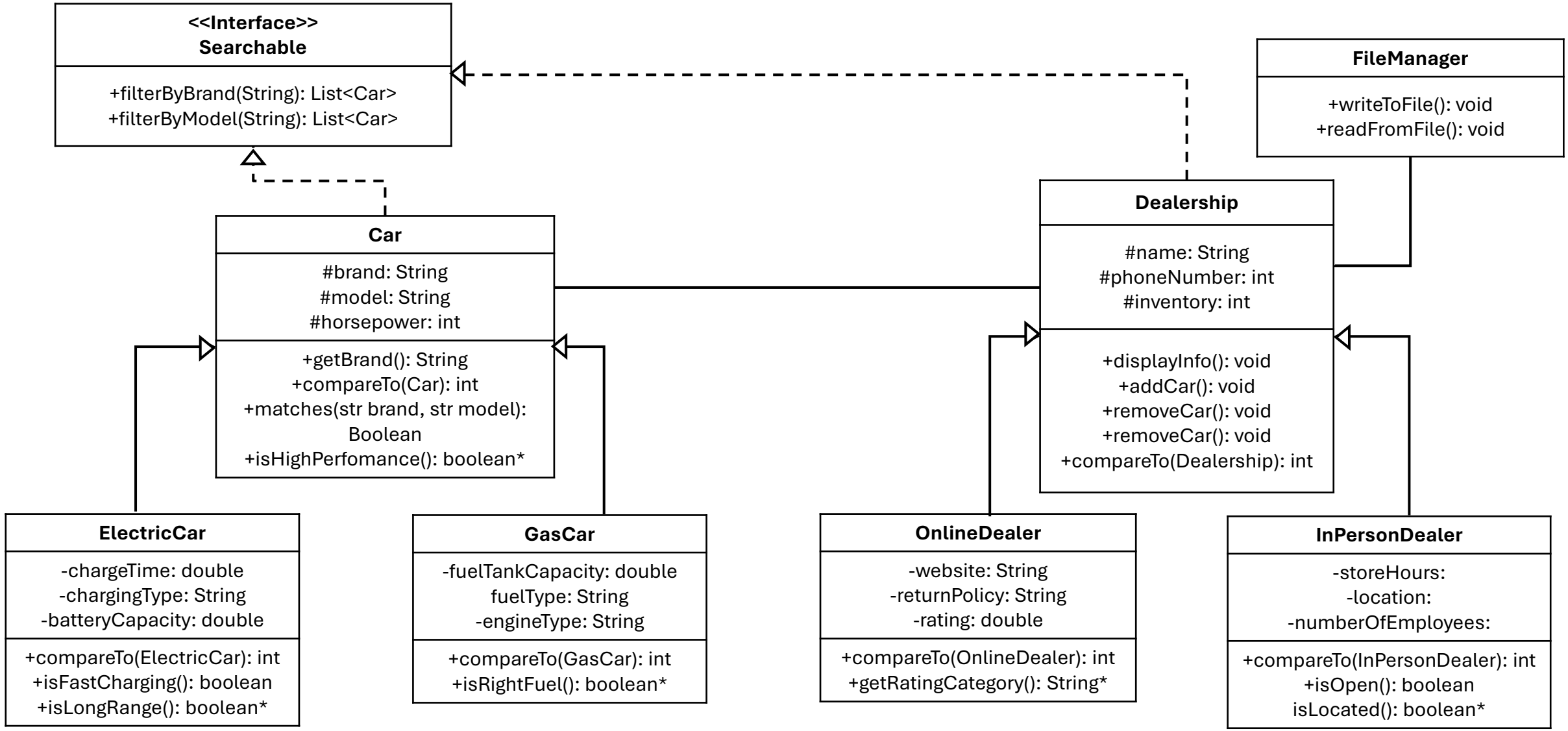
- Class hierarchy (inheritance and abstract classes)
- Interfaces (searchable and comparator in this case)
- Polymorphism (overloading and overriding methods)
- ArrayList, Queue, Map
- Exception handling
- Stream API (Lambda expressions)
- Text IO (dealership data)
- JUnit testing

Expected output

- View different online/in-person dealerships
- Filter cars by brand and model
- Add new cars to the inventory
- View dealer information
- View car information
- Save and load dealership info from text files

Specifications

- Car (abstract class) that has ElectricCar and GasCar as subclasses
- Dealership (abstract class) that has OnlineDealer and InPersonDealer as subclasses
- Searchable interface to be able to filter cars by model or brand
- The compareTo() from the subclasses has runtime polymorphism
- Text IO will be used in the Dealership class to save and load information on the dealership inventory
- Comparable is implemented by Car
- Comparator will be used in Dealership, OnlineDealer, InPersonDealer, ElectricCar, and GasCar



**Include all the generic methods such as setters and getters, equals, toString, etc.*

Deliverable 2 implementations

- Car, ElectricCar, GasCar
- Dealership, OnlineDealer, InPersonDealer
- Searchable Interface
- FileManager
- Documentation
- Methods without body
- Comparable/Comparator