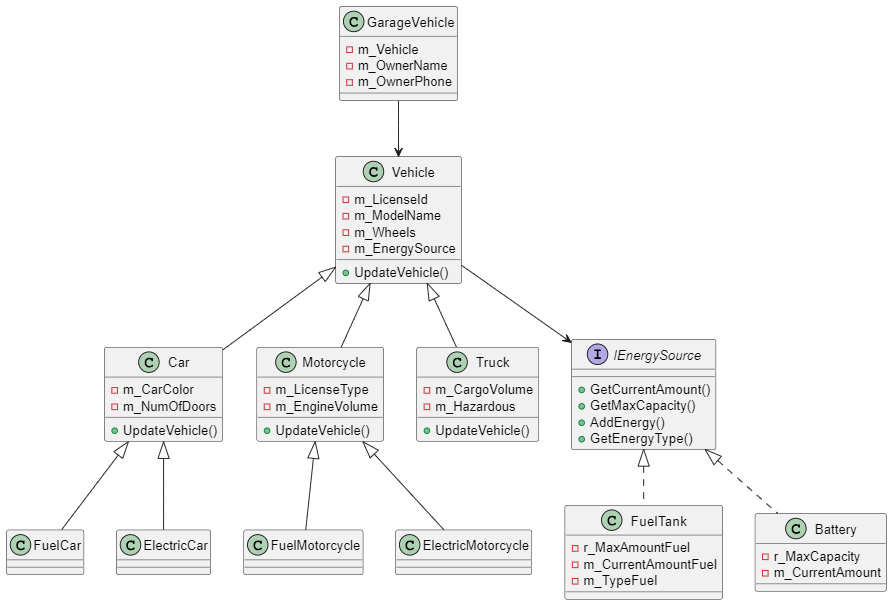
|  |  |
| --- | --- |
| **TYPE(ENUM/CLASS)** | **EXPLAINATION** |
| **Vehicle** | **Abstract base class - stores license ID, model name, a reference to an IEnergySource, and a list of Wheel objects.** |
| **Car** | **Inherits from Vehicle - adds the car color (from eCarColor enum) and the number of doors.** |
| **Motorcycle** | **Inherits from Vehicle - adds a *license type* (eLicenseType) and *engine capacity*** |
| **Truck** | |  | | --- | | **Inherits from Vehicle - adds *cargo volume* and a boolean flag that indicates if it carries hazardous materials.** |  |  | | --- | |  | |
| **IEnergySource** | **Interface that defines generic energy-source operations: GetCurrentAmount, GetMaxCapacity, AddEnergy, and GetEnergyType.** |
| **FuelTank** | |  | | --- | | **Concrete implementation of IEnergySource for fuel-powered vehicles (stores fuel type and litres capacity).** |  |  | | --- | |  | |
| **Battery** | |  | | --- | | **Electric implementation of IEnergySource - tracks remaining hours and maximum battery time.** |  |  | | --- | |  | |
| |  | | --- | | **Wheel** |  |  | | --- | |  | | |  | | --- | | **Holds wheel manufacturer and both *current* and *maximum* air pressure.** |  |  | | --- | |  | |
| **GarageService** | |  | | --- | | **Logic layer that manages the garage’s vehicle collection, statuses, and operations.** |  |  | | --- | |  | |
| **GarageVehicle** | |  | | --- | | **Wraps a Vehicle and adds owner name, phone number, and current garage status.** | |
| **VehicleFactory** | **Parses vehicle data from a CSV line and creates the appropriate GarageVehicle instance, including its owner and specific attributes.** |
| **eVehicleStatus** | **‎Enum – ‎InRepair / Repaired / Paid.** |
|  |  |
| **eTypeFuel** | |  | | --- | | **‎Enum – ‎Soler / Octan95 / Octan96 / Octan98.** |  |  | | --- | |  | |
| **eCarColor** | **Enum – Yellow / Black / White / Silver.** |
| **eLicenseType** | |  | | --- | | **‎Enum – ‎A / A2 / AB / B2.** |  |  | | --- | |  | |
| **ValueRangeException** | **Custom exception class – inherits from Exception. Thrown when a value (such as fuel amount, air pressure, or number of doors) exceeds a defined minimum or maximum range.** |

**Diagram:**

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