Car Buying App

This documnet outlines a task in the Car Buying App, We need to allow the customer (consider already existing and use ID directly as input) to request buying a car (either importing or buy a local car). The customer has to specify the Inspecting Company that they need to check the car upon creating the request.

Multiple suppliers can submit offers on the request (each supplier can submit only one offer per request). Specifying the price and a free text description for the car condition and whether it is imported or locally sold. After submitting the offer, a request is sent to the selected inspection company specified in the customer request (**no need to implement real API integration, only show how you will handle different Companies**).

Find below a summrization of APIs, and Models required in the application.
1. Models & Attributes

1.1 CustomerRequest

Attribute	Description
id	Unique identifier for the request
customerId	Identifier of the customer who created the request
status	State of the Request.
description	Description of requested car as plain text
checkedByCompany	One of `AUTO_CHECK_CO`, `VEHI_VERIFY_INC`

1.2 SupplierOffer

Attribute	Description
id	Unique identifier for the offer
supplierId	Identifier of the supplier submitting the offer

Attribute	Description
status	One of PENDING, ACCEPTED, REJECTED
inspectionScore	Score (0–100) returned by the inspection adapter
carDetails	General details abou the car condition as plain text
price.	Proposed Price.

Feel free to add any necessary relation / attributes to the modles ##
2. Functional Requirements

A. CustomerRequest Actions

1. **Create Request**
   - Inputs: Car Specification, Inspecting Company
2. **List & View Requests**
   - Support filtering by status and pagination.
   - Return Number of offers for each request.
3. **Update Request**
   - Update Request Status

C. SupplierOffer Actions

1. **Submit Offer**
   - Preconditions: A supplier can submit offer if request is still active.
   - Inputs: Car Description and proposed price
2. **List Offers for a Request**
   - Retrieve all SupplierOffers by requestId.
3. **List Supplier Offers**
   - Retrieve all Supplier Offers by supplierId

3. Non-Functional & Deliverables

- **Scale** Consider having large number of records (+100K Customer requests and more than 50 offer per request)
- **Migration Scripts** (Flyway or Liquibase) reflecting table schemas and indexes.
- **Validations** to:
  - Validate Request Status before submitting offer.
- **Tests[Bonus]**:
  - Unit tests for services and adapters.
- **README** with setup, build, and run instructions.