**Project Description**:

Create an Automotive Dealer Website system where customers can find different automotive dealers in their region and search/browse for the cars they are looking for. Customers can also express interest to a dealer on the car they are interested in through a lead form (??? What does lead form means ???). Automotive Dealers should be able to manage their Inventory (ability to add/delete/modify their vehicles on their lot). Automotive Dealers can also create Incentives on certain types of vehicles to create a demand for vehicles.

**Use case 1**: Customers (aka as Car Shoppers) should be able to find the dealers in their proximity and select the dealer they are interested in interacting with.

**Use case 2**: Customers should be able to browse (search) the Inventory on a particular dealer, Customers can search for cars through a free form text (Google style) (??? How does customer search through a free form text, I mean, do customers enter some words and then get results ???) or through a specific set of vehicle filters (like year, make (??? what does make mean???), model, price range etc). Customers should be able to sort the vehicle results through different attributes like by Price, by Year, by Make etc. If a Dealer has thousands of vehicles matching customer’s search request, the system should be able to display a page of vehicles (up to 25) and customers should be able to browse different pages of vehicles

**Use case 3**: Customers should be able to select a vehicle in the vehicle search results and click a vehicle to view the complete details of a vehicle

**Use case 4**: An automotive dealer should be able to manage their Inventory. Provide an ability to create/update/modify their Inventory.

**Use case 5**: An automotive dealer should be able to create Incentives for different types of vehicles. Incentives can be manually applied to a vehicle or a group of vehicles. Incentives are generally of a certain cash value (like $500 discount) or a % off from MSRP (5% of MSRP), these incentives can be applied to a certain vehicle (VIN) or group of vehicles (all vehicles that are new, all vehicles whose price range is between 25000 and 35000). Incentives have a title, description and disclaimer. Incentives can have a start and end date.

**Use case 6**: Apply the Incentives created by an Automotive Dealer for applicable Vehicles and display them to car shoppers when they are searching for cars.

**Use case 7**: Provide a lead form for customers to express their interest in the car. Each lead contains customer name, email, phone number and a message to the dealer.

**Use case 8**: Provide a user interface for the dealer to look at all the leads sent by the customers for a particular car and dealer can respond to the customer from that user interface.

**Use case 9:** Persist all the Dealers, Inventory of a Dealer and Incentives of a Dealer in a persistent storage

**Data Objects**:

**Dealer:**

* Id
* Name
* Address
  + Street1
  + City
  + State
  + Zip code
  + Country

**Vehicle**:

* Id
* VIN
* Dealer ID
* VIN
* Make (Honda, Toyota)
* Model (Accord, Prius)
* Year (2019)
* Category (New/Used)
* Price (25000)
* Color (Blue)
* Miles (10000)
* Image(s)

**Incentive**:

* Id
* Title
* Description
* Disclaimer
* Start Date
* End Date
* Discount value
* Discount type (cash or %)
* VehicleFilters
  + Year > 2018
  + Make = ‘Honda”
  + Price > 25000 and Price <30000

**Sample websites to get an idea of automotive dealer websites**:

* <https://www.lexusofbellevue.com/l-certified-inventory/index.htm>
* <https://www.abelgm.com/VehicleSearchResults>
* <https://kiaofaugusta.com/new-kia-forte>
* <https://kiaofaugusta.com/vehicle-details/new-2020-kia-forte-fe-3KPF24AD1LE165659>
* <https://www.chevrolet.com/dealer-locator#!?searchTerm=98012&searchType=postalCode>

**Github Repo for Project: <TBD>**