

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. 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.

*****Pictures are for reference only. You can design your own.*****

Dealers in Seattle, WA

☒ Select this option to enter Dealers Name

☐ Select this option to search Dealers near you. Enter your Zipcode

Distance Range

10

Search

DealerInventory

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) or through a specific set of vehicle filters (like year, make, 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 (upto 25) and customers should be able to browse different pages of vehicles

The screenshot displays a web interface for searching vehicles. On the left, under the heading 'D5', there are filter sections. The 'Model' section has a dropdown menu with 'A4' selected. The 'Make' section has a dropdown menu with 'Acura' selected. Below these are three radio buttons for 'New', 'Used', and 'All', with 'All' being selected. A 'Search' button is positioned at the bottom of the filter section. On the right, a list of search results is shown. Each result is a horizontal card containing a radio button, 'VehicleId', 'Price', 'Condition', 'Make', and 'Year'. The first result is 'VehicleId: V15', 'Price: \$34,890', 'Condition: New', 'Make: Mazda', and 'Year: 2018'. The second result is 'VehicleId: V16', 'Price: \$44,135', 'Condition: New', 'Make: Mazda', and 'Year: 2018'. At the bottom of the interface, there are three buttons: 'Add', 'Modify', and 'Delete'.

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

The screenshot shows a single vehicle details card. It is a horizontal bar with a light gray background and a thin blue border on the left. The card contains the following information: 'VehicleId: V1', 'Price: \$42,492', 'Condition: New', 'Make: Audi', 'Year: 2019', and 'Mileage: 0'.

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

VehicleID:	<input type="text"/>	VehicleID:	<input type="text"/>
Model:	<input type="text"/>	Model:	<input type="text"/>
Price:	<input type="text"/>	Price:	<input type="text"/>
Year:	<input type="text"/>	Year:	<input type="text"/>
Category:	<input type="text"/>	Category:	
SeatCount:	<input type="text"/>		
Make:	<input type="text"/>		
Mileage:	<input type="text"/>		
Type:	<input type="text"/>		
<input type="button" value="Add"/>		<input type="button" value="Modify"/>	

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.

Data Objects:

Dealer:

- Id
- Name
- Address

Vehicle:

- Id
- VIN
- Make
- Model
- Year
- Category (New/Used)
- Price
- Color
- Miles
- Image(s)

Incentive:

- Id
- Title
- Description
- Disclaimer
- Start Date
- End Date
- Discount value
- Discount type (cash or %)
- VehicleFilters

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:

<https://github.com/NEU-INFO5100-Jan2020/INFO5100-Jan2020-Project>