iCarShop Assignment 1

# Functional Requirements

* Users need to be able to create an account in order to become a verified buyer or admin
* There would be different types of accounts that defines what the users are capable of
  + Buyers: Can search for cars, provide ratings/reviews, can make offers on cars, and create a profile that contains their preferences
  + Admins: Can post cars for sale, post promotions, manage sales quotas and deadlines, etc.
  + General users without accounts: Basically can search/browse for cars, read reviews, and will generally be able to view the website. But they won’t be able to perform any actions such as providing ratings/reviews
* Admin accounts need a secure sign-on capability in order to keep the inventory management operations secure
* Buyers need a secure sign-on capability so that they can save personal information such as
  + credit card information
  + addresses
  + phone numbers
  + vehicle type preferences/searches/etc.
* When a buyer is logged in, that buyer needs to be able to edit their personal information
* All user accounts need to include an ID that is unique across the entire database
* Admin accounts need to be able to edit inventory
* Users need to be able to search for cars in different ways. If the UI is flexible, they’ll have an easier time finding what they want. Some examples would be:
  + Using a search bar
  + Applying appropriate search filters based on the car’s description
  + Browsing the inventory based on key characteristics (i.e. make, model, price range, year)
* The admins need to easily apply tags to the cars’ descriptions so that the cars are more easily searchable
* Admins must be able to update car sales when promotions begin/expire.
* There should be a customer review “pop up” after using the app:
  + allows customers to rate the application on a scale of 1-5 stars
  + Includes comment section where the customer can provide further details of their experience
  + The customer review must be set to 1 rating per customer.
* There needs to be a special announcements/events tab that allows admins to input current promotions.
* It can have a GPS tag functionality/location input for having customers locate physical store locations or for shipping
* After selecting a car from the inventory, the user should have access to car specifications such as:
  + Make, Model, Year, Price, Engine Stats, Features
  + Pictures of interior and exterior
  + Possibly reviews or comments
* Car inventory info needs to include all the above data, plus other features such as:
  + Time on the market
  + Used/New status
  + Etc.
* Salespeople (as admins) see a deadline for when a set of cars needs to be sold by. They also have a quota that needs to be met and they can see how many cars they need to sell to meet these deadlines and quotas
* There are different types of admins to determine the powers that each person has (like salespeople can only remove cars while the boss can add the new cars to the system (or whoever manages inventory)). That will reduce possible user errors that may happen down the road.
* The end users must have access to a page that allows them to comment and/or review cars that they have previously purchased. These reviews/comments will appear on future listings of that same vehicle.
* When people want to look at a certain vehicle in person, the admins can log the vehicle’s specific location on the lot. That way, buyers can look at it for themselves before being met by a salesperson

# Non-Functional Requirements

* The inventory management system needs to be accessible through the internet via web browsers or mobile apps
* The system shall support both android and iOS platforms
* The user interface should have a responsive layout that adjusts to different screen sizes
* The system should strive to either meet or surpass PCI compliance standards for merchants.
* The system stops multiple admins from removing the same or adding the same product twice (like a security net)
* Hosting server should be able to support hundreds of users simultaneously without slowing or otherwise negatively affecting user experience