

OVERVIEW AND PROJECT REQUIREMENTS:

The intent of the project is to build a Servlets based application that will allow users to buy cars from the automobile inventory system based on various categories of luxurious brands and type of cars that is available online. The following are the high-level requirements for Automobile Inventory system:

- 1. Application has different types of cars and different categories of cars for each type.
- 2. The Store Manager can create new customer account.
- 3. The Store Manager shall be able to Add/Delete/Update automobile products.
- 4. The Store Manager shall be able to Add/Delete/Update customer orders.
- 5. The customer must be able to create an account online.
- 6. The customer must be able to purchase an automobile product online, check the status of the order, or cancel the order.
- 8. The customer shall pay using a credit card online in the checkout page.
- 9. Some of the automobile products shall have retailer special-discounts.
- 10. Some of the automobile products shall have rebates.
- 11. Customer shall be able to shop online to Reserve one or multiple items in the same session from the automobile inventory system online site.
- 12. In the same session, the customer must be able to add or remove items from the shopping cart
- 13. When the customer chooses to check out:
 - a. The customer will enter personal information (Name, Address, Credit Card, etc.) for shipping details.
- 14. The customer will be provided with a confirmation number and a Reserve date (2 weeks after the order date) that the customer can use to cancel an order using the order id.
- 15. MySQL shall be used to store all accounts login information.
- 16. MySQL shall be used to store All Customers transactions/orders.
- 17. All customers shall able to write, submit, view review for any automobile product online.
- 18. Trending link on the left navigation bar that the user can use to see trends for Automobile products that is sold.

Once the user clicks the Trending, the user must be presented with:

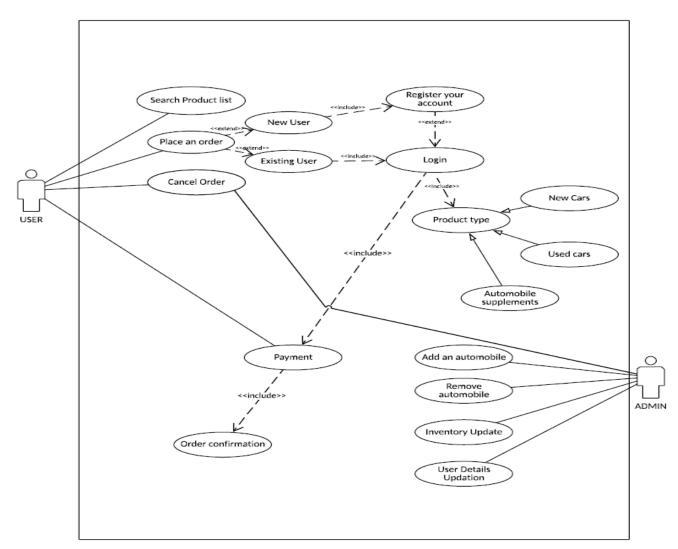
- a. Top five most liked products.
- b. Top five zip-codes where maximum number of products sold.
- c. Top five most sold products regardless of the rating.
- 19. DATA ANALYTICS: with various functionalities for Store manager to visualize the data.
- 20. Under the Inventory link, the store manager shall be able to:
 - 1. Generate a table of all automobile products and how many items of every product currently available in the Site.
 - 2. Generate a Bar Chart that shows the automobile product names and the total number of items available for every category.
 - 3. Generate a table of all automobile product currently on sale.
 - 4. Generate a table of all automobile product currently that have manufacturer rebates.
- 21. Under the Sales Report link, the store manager shall be able to:
 - 1. Generate a table of all automobile products sold and how many items of every automobile products sold number of items sold, and total sales of every product sold.
 - 2. Generate a Bar Chart that shows the automobile product names and the total sales for every automobile products.

- 3. Generate a table of total daily sales transactions; that is, you list the dates and total sales for every day-date.
- 22. Usage of AutoComplete Feature for all the Hotels in the Database.
- 23. Usage of Python Script to connect to twitter API to retrieve data and match with any automobile product names in the DB to display on the Home screen for any Deals.
- 24. Based on the history of the user purchases and after the user makes a purchase, your enterprise web application, shall make three product recommendations for the logged in user.

EXTRA FEATURES:

- 25. All customers shall be notified via e-mail, once order has been placed successfully with the order confirmation number.
 - 26. All customer shall zoom-in all products in the automobile inventory system before adding to cart.

USE CASE DIAGRAM



CLASS DIAGRAM

