<u>CO550-WebApps-2022 – CW1 Project Design - Audi Car</u> <u>Selling Website – Team 2: Arbaaz, Mohammed, Brian</u>

Project Plan

For car purchase web app

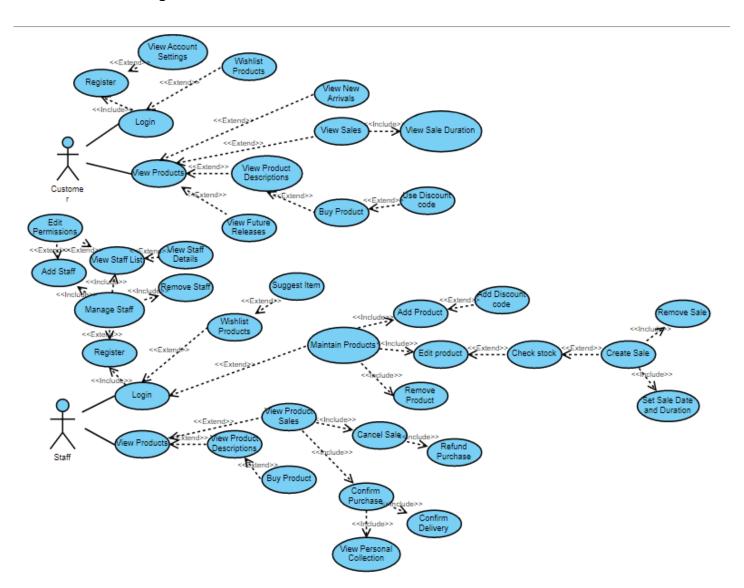
For this CO550 Web Applications module, Team 2 (Arbaaz, Mohammed, Brian) will be making a fictitious car selling website for Audi. This web app has multiple features like a database for storing car information, a login and registration system for users to wishlist and add cars to the checkout section. When an admin logs in they will be able to perform CRUD operations like adding new information or removing it (the admin view will also be different from a customer view of the web pages). There will be at least 6 cars available on the site, each will be displayed as a card on the store page. Once one option is selected, the user will be taken to a subpage where descriptive information about the car will be shown, including multimedia like images, videos. Our web system will either use MVC or MVVM architecture to for interaction with the database, and may use Razor Pages for structure. CSS styling will likely be done with Bootstrap, which will create responsive elements conveniently and with stability. At least 6 cars will be shown on the website, and we aim to have around 11 pages which consist of: store page, wishlist, checkout, login, sign-up, (6) car pages. As we practise using the C# database-related languages and frameworks, we will be building this software with waterfall methodology in mind. The cars featured will RS3, RS4, RS5, RS6, RS7, R8 and these can be searched through alphabetically, or filtered through by price or date added on the store page.

Feature List

- *For car purchase web app*
- 1. Web app: Offer at least 6 cars for sale on the store page
- 2. Web app: Show description, Images, Videos on a product page
- 3. Web app: Have a responsive layout for both desktop and mobile screens
- 4. Web app: Have a navigation bar to travel between main/ top level pages
- 5. Web app: Have a search bar on the store page to sort through cars by name
- 6. Web app: Feature to filter through products by price (low-high) or date (new-old) added on the store page
- 7. Web app: Have a basket to mimic a checkout (no payment handlers used)

- 9. Customer + Staff: Ability to register for an account
- 10. Customer + Staff: Ability to log in/ log out on the login page
- 11. Customer + Staff: Ability to wishlist items from the store page and product page
- 12. Customer + Staff: Ability to view product sales, their durations, and new arrivals
- 13. Customer + Staff: Ability to use discount codes when buying a product
- 14. Staff: Ability to create, read, update, delete product page information from web app (any page)
- 15. Staff: Ability to create, read, update, delete members of staff details, and permissions from web app (from Login page)
- 16. Staff: Ability to create and remove sales, and set sale durations.
- 17. Staff: Ability to confirm delivery dates and remove purchases after viewing transactions.

Use Case Diagram



Use Case Documentation

For use case diagram

Login: When the customer or staff wants to log in to the site, they select the login option in the navbar to be taken to the login/ register page. They input their username and password in the corresponding text fields. The user presses the login button to be authenticated, and is then logged in.

Register: When the customer or staff wants to register, they select the login option in the navbar to be taken to the login/ register page. They will select the register option and create an account that includes a username and password. The password needs to contain at least 8 characters, one special character, and one number. Their account will be created with this information.

Wishlist Products: When the customer or staff wants to wishlist a product, they must log in first. Once they have logged in, they navigate to the store page and browse the items displayed. They then wishlist a product with the button on the corresponding card. Alternatively, they can click on the title of the card to go to the product page, and wishlist a product from there. The wishlist can be viewed by clicking a button on the navbar, taking the user to a page displaying saved items as cards linking to the respective product pages.

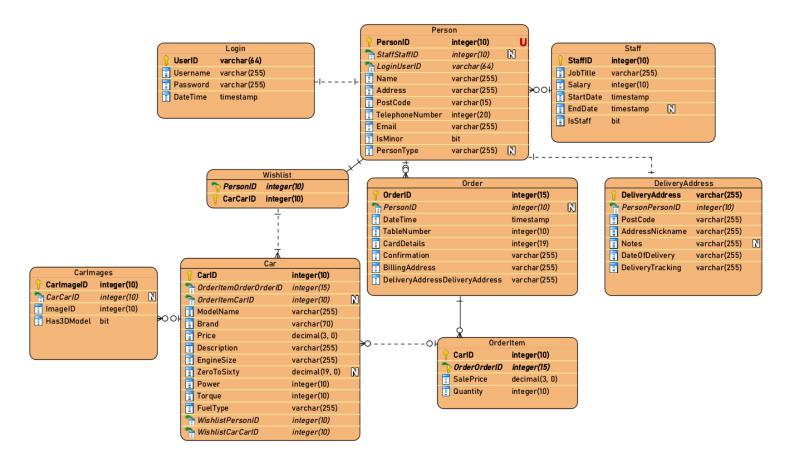
View Products: When the customer or staff wants to view a product, they access the web app via a url linking to one of the web pages. They then click on the 'products' page link on the navbar to go to the store page.

Buy Products: When the customer or staff wants to buy a product, they navigate to the store page via the navbar, and click on a product item. This takes them to a specific product page, where they click on a 'buy' button to purchase the car.

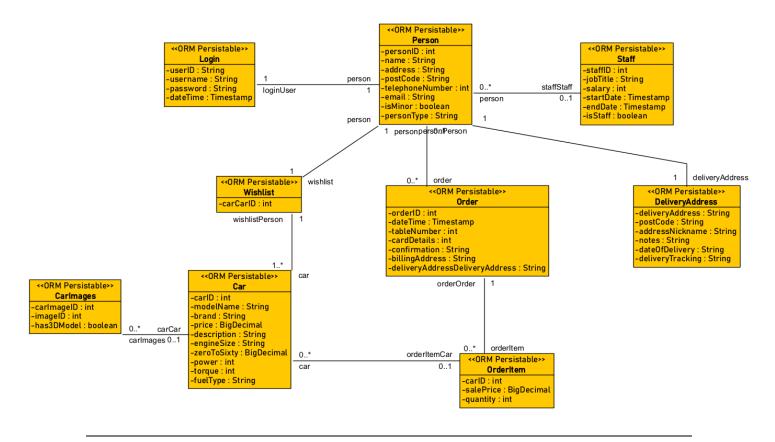
Maintain Products: When the staff wants to maintain products, they log in to the web app, and go to the store page. They press on the edit button to add or remove cars to the store page. They press 'done' when changes are made to save them. To fill out details, they click on a product item to go to its product page. They press on an 'edit' button which allows them to change product details, descriptions, prices, and create and configure sales.

Manage Staff: When the staff wants to manage staff members, they log in to the web app via the login page. Once authenticated, they click on a button that is now available called 'staff list'. This shows preview panels of all staff registered with the web app. They can be added or removed once the edit button is toggled, and the changes can be saved by clicking 'done'. To edit permissions, they click on a staff listing to go to a details page and press on an 'edit permissions' button to alter access for each staff member.

ERD Diagram



Class Diagram



User Stories

Customer Name: Steve

Job: Pharmacist

It would be helpful to get more variety of colours

Customer Name: Siva

Job: Security

Im always late for work but I have a wife and 3 kids can you please recommend me a fast car please.

Customer Name: Ak

Job: Software Engineer

I want a certain car but cannot afford it at the moment am I able to add it to my wishlist.

Staff Name: Arbaaz

Job: Audi REP

Arbaaz wants to upload variety of colours such as <u>audi</u> specific colours you can look in the section of colours and then look for the section that says "<u>audi</u> specific".

Staff Name: Ben

Job: Audi REP

The staff wants to add a filter that will allow the customers to see the 0-60 speeds and decide which car is quick enough to them to buy as well as pictures of the size of the car and make sure it meets there standards.

Staff Name: Stefan

Job: Audi Rep

Stefan wants to make a feature to add any car to a wishlist so the customers can keep the cars there until they can afford it.

Extra Designs

