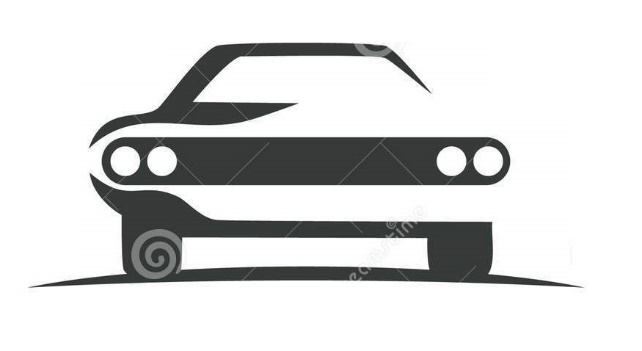
autosExchange by OVVR

OVVR



PROG37721 | Web Services Using .NET & C# | Final Project

Oleh Vytvitskyy & Vincent Romani

# Project Overview

autosExchange is an all-in-one classifieds advertising platform for automobiles. Much like any other classified’s platform, users can identify themselves as a dealership or an independent party and place their automobile for sale. Competitors include AutoTrader and Kijiji Autos, however the competitive advantage is that autosExchange will not prompt the poster to upgrade the status of ads, spam them with unnecessary notifications, or provide false market analysis information.

The development environment for the project is going to be Microsoft’s Visual Studio 2019 Community Edition, Version 16.1. ASP.NET will be used as the server-side web application framework to produce dynamic web pages and web services. The server-side application will be written mostly in C# using the .NET and Collections frameworks. ASP.NET Web Forms will be used to create the graphical user interface for users to interact with.

As for the database portion of the application, Microsoft SQL Server 14.0 will be used. User information as well as listing information will be stored indefinitely, contingent on current legislature and GDPR standards.

Edmunds public API will be used to prepopulate enumeration classes for car information such as Make, Model and trim as this is updated on a frequent bases and used across the industry.

The developers for the project consist of an elite team head-hunted from fortune 500 companies:

* Vincent Romani, 26 – Rome, Italy
* Oleh Vytvitskyy, 25 – Lviv, Ukraine

Due to the vast experience and punctiliousness of the mentioned developers, they will also be the lead Project Managers, Quality Assurance, Database Administrators and Vendor Integration Services Management.

# Functional Requirements

## Initial Search and Filtering

* A search and filtering implementation will be present on most pages of the website and will remain present on search result pages in order to filter what is currently displayed. Searching and filtering will be possible on parameters that will be determined after a focus group meeting has been conducted determining the most sought-after parameters of cars i.e. Make, Model, Mileage and Drivetrain.

## Listing a Car for Sale

* Listing a car for sale is the most fundamental requirement. All users can list a car for sale, enter predefined parameters (some being mandatory [i.e. Price]) of different types, some being a text field, some a combo box of predefined values to choose from. A user will then identify themselves as a dealer or a private party. Should they identify themselves as a dealer, additional information will appear for the user to populate requesting dealership information. A user will be generated a random token that will be used to enter for authentication for editing the ad in order to circumvent having to use unique login accounts.

## Editing a Listing

* Using the uniquely generated token that is given once a car is listed, users will be able to use this token to verify they have access to edit the listing. Once the token is entered, a user is presented with editable fields for the listing that corresponds to the uniquely generated token.

## Deleting a Listing

* Much like editing, a user can delete a listing. In order to delete a listing a user must enter the unique token provided to them on listing creation. Once a user marks a listing as deleted, it is still stored in then database, however marked deleted [historic] for data collection

# Class Design

# Database Design

# Work Assignment

Vincent and Oleh have both mutually agreed to split work corresponding to the task at hand and depending on where roadblocks occur. However, at an abstract level the work assignment will be followed as so:

|  |  |
| --- | --- |
| Creating Project Proposal | Oleh & Vincent |
| Creating Classes | **Vincent** |
| Creating Enumeration Classes | **Oleh** |
| Creating Class Methods | **Vincent** |
| Creating Class Fields | **Vincent** |
| Creating Enumerable Classes | **Oleh** |
| Creating Search Functionality Logic | **Vincent** |
| Creating Search Functionality UI | **Oleh** |
| Creating Listing Page Logic | **Vincent** |
| Creating UI for Listings Page | **Oleh** |
| Creating Edit Page Logic | **Vincent** |
| Creating UI for Edit Page | **Oleh** |
| Creating Delete Page Logic | **Vincent** |
| Creating UI for Delete Page | **Oleh** |
| Design Database | **Oleh & Vincent** |
| Create Database | **Oleh & Vincent** |
| QA Testing | **Oleh & Vincent** |
| QA Documentation | **Oleh & Vincent** |
| Integration Research (CARFAX & CarProof) | **Oleh** |
| Integration Research (Kelly Blue Book) | **Vincent** |
| Local Legislature Research for Security Standards conforming | **Oleh** |
| UCDA Standards Research | **Vincent** |
| EULA (End User License Agreement) Creation for Application Usage | **Oleh** |
| Liaise with Advertisers | **Vincent** |
| Liaise with Local Communities | **Oleh** |
| Advertise Application | **Vincent** |

# Project Milestones and Deliverables

As stated in the Project Proposal Guidelines:

“*Project milestones and corresponding deliverables, to be submitted*

*in class plan, shall be documented”*

Due to the initial instructor only teaching the first seven weeks, and subsequently only proving the class plan for the first half of the semester, there are no milestones and deliverables imposed on a non-existent (at the moment) class plan for week 8-14. Ergo, the following milestones and deliverables are tentative and are subject to change.

|  |  |
| --- | --- |
| Project Proposal | Week 7B - Saturday, June 22nd 2019 |
| Create Initial Classes, Enumeration Classes, Fields and Methods & Database | **Week 9B – Wednesday, July 3rd 2019** |
| Implement Logic of Classes Interrelationship and Error handling | **Week 10B - Wednesday July 10th 2019** |
| Create UI Components | **Week 11B – Wednesday July 17th 2019** |
| Link UI to Business Classes | **Week 12B – Wednesday July 24th 2019** |
| Finishing Touches & Final Presentation & Present QA Documentation | **Week 13B – Wednesday July 31th 2019** |