**E-Commerce Project Proposal**

Department of Computer Science and Technology

420-411-VA

Peter Fishman, Yassine El Yamani, Vlad Dumitrescu

Ronald Raphael

August 31, 2023

**Project Overview**

We plan to create an online PHP based e-commerce website, which will be an online car marketplace, with a similar model to the already well known car company called Tesla, the name of our site will be EZCARBUYER, and will allow members to browse, and purchase vehicles.

**Goals**

The goals of the EZCARBUYER project are:

* Clean user interface to allow for an optimal user experience.
* Diverse catalog for users to browse and look through. Allows for in depth searches using different tags.
* User authentication and authorization to allow for a safe search and checkout experience.
* Effortless transaction page with the ability for multiple payment options.

**Specifications**

* Effortless transaction page with the ability for multiple payment options.
* Login Page [Email/username,Password].
* Signup Page [Email/username, Password, Confirm password, First Name, Last Name, Phone Number].
* Database [Users, Admin, sellers, Cars, payment, orders, Comments].
* Shipping Price Calculation.
* Optional Search.
* In Depth filtering to select certain cars, models and more.

**Product listing:**

The user must be able to see all the products that we currently have which in this case cars are our products. The user must be able to select a product and put it in his cart which is referred in the database as orders table or remove it from the cart whenever he wants to. Regarding the admin, he must be able to see the listing of seller with their products and users with their orders.

**Product description:**

Our products are cars wich we’re selling to customers that need or want a car. The cars we’re selling could be a brand new cars and used ones. The cars in our company their prices will depend on some features such as the distance traveled by the car if it is a used car, heated seat, sunroof, rear camera, bluetooth, etc. Our company sells every brands and models that the clients want.

**Product search:**

The ability for all users, whether members or not to view all new and used car listings in the catalog. This search bar will allow users to enter any car model in our database which will then directly take them to anything under that name. This will work if the user were to enter the make, model or anything identifiable to the vehicle they are searching for.

**Product comments:**

We want members to be able to comment under all car models to leave details about what they are looking to buy. Similar to how Tesla has certain models, we want users to leave comments under our own models for future buyers to be able to judge the cars and let others know how they are.

**Product checkout:**

Product checkout will be our main checkout car that will allow users to go to their cart with the car they decide to purchase, and then once confirmed take them to the payment section where they enter their information. The checkout will give the final price and display shipping costs and more. The user information and location will be taken directly from the users accounts when they have registered.

**User registration:**

User registration will be the main signup page that will allow all registering users to enter all details on the form to save their information into the database. This page will also make the user register 2FA for further security reasons.

**User group management:**

Our web application’s user group management will be divided into three groups, which are: Admin, seller and user.

**Admin:** He’s responsible for everything in the app. Users are created and managed by administrators. They control who has access to the program, what they can do, and, if necessary, they have the power to suspend accounts. They are the ones to assist you if you ever forget your password or have difficulties logging in.

**Seller:** They monitor their inventory. Sellers must make sure they have enough inventory to satisfy client demand. Unhappy consumers can result from running out of merchandise. Sellers are responsible for processing customer orders. This includes confirming orders, packing products securely, and shipping them on time. The seller may modify a product and his profile.

**User:** The user must log in to perform certain actions in the web application such as to order and to comment. The user once he’s logged in, he may modify his profile. For example, he could search for a car without the need to authenticate himself. Without an account a user wouldn’t be able to perform most of the actions that there are. The user or customer must have an account or create one if he doesn’t have it.

**Error pages:**

Throw errors when something goes wrong for users and admins to further understand the problems they are facing. Will present error messages that will throw out the console errors.

**ERD for our project:**

