Phase III Project Proposal

CS 380 – Introduction to Software Engineering Department of Computer Science

PROPOSAL FORM

Spring Quarter 2023

Title: Motor Master



Member
Long Le

Thang D. Le

Description and Statement

The car shop application that will provide a digital platform for car dealerships to showcase their inventory, manage user inquiries, and streamline the sales and buys process. The application will be designed to cater to both customers and dealerships, providing a user-friendly interface for browsing car models, searching for specific features, and tracking on prices. Additionally, dealerships will have access to a comprehensive back-end system for managing their inventory, tracking sales. The application will be developed using modern application development technologies, including tools and languages such as Java, JavaFX, MySQL and Scene Builder to ensure scalability and robustness. The project's key objectives are to improve the car-trading experience for customers, streamline the sales process for dealerships, and increase efficiency in the car sales industry.

Features

- Login and sign-up form (integrated with database)
- Buy and sell cars
- Add cars to cart
- Search button
- Car Upgrating
- View detail vehicle info including speed, price, type
- Keep track on the car's market
- Store and view car items in garage

Details

Login form

The login form is a secure gateway that allows users to access a system or application by verifying their identity by checking with data in Database from mySQL. It consists of three fields: username, password, and registration.

- Username: The username field is where users enter their unique identification credentials. It serves as a personal identifier, allowing the system to recognize and associate the user with their account.
- 2. Password: The password field is where users input their secret passphrase associated with their username. Passwords are typically concealed to ensure privacy and security. It acts as a verification mechanism to ensure that only authorized individuals can gain access to the system or application.
- 3. Registration: The registration link or button on the login form provides users with the option to create a new account. By clicking on this link, users can navigate to the registration page where they can provide the necessary information to create their account, such as username, email, and password. This enables new users to establish their presence in the system and gain access to the features and functionalities offered.

The login form serves as a pivotal entry point for users, enabling secure authentication and granting them access to the system or application. The registration option further expands the user base, allowing new individuals to join and benefit from the platform's offerings.

Dashboard

The dashboard is a centralized interface that provides users with a comprehensive view of important information and features. It incorporates four key components: bank balance, a frame of a car from the garage, the user's name, and a portfolio chart.

- 1. Bank Balance: The bank balance section presents users with an overview of their current financial status. It displays real-time information about their available funds, account balances, and transaction history. This enables users to monitor their finances, track expenses, and make informed decisions regarding their financial goals.
- 2. Frame of Car from Garage: The frame of the car from the garage provides users with a visual representation of their vehicle. It can showcase an image or an icon representing

- the make, model, or color of the car. This element serves as a quick reference point for users to access and manage vehicle-related information, such as maintenance schedules, fuel tracking, or insurance details.
- 3. User: The section displays the name or username of the user currently logged into the dashboard. It adds a personalized touch, making users feel recognized and connected to their account. Additionally, it acts as a reminder of the active user, especially buying or selling car in their garages.
- 4. Portfolio Chart: The portfolio chart presents a graphical representation of the user's investment portfolio. It showcases the performance of their investments, including stocks, bonds, mutual funds, or other assets, over a specified period. The chart provides insights into the growth or fluctuations in the portfolio value, helping users track their investment progress and make informed financial decisions.

The dashboard combines essential elements that offer users a comprehensive view of their financial and vehicle-related information, along with a personalized touch. The inclusion of a portfolio chart enhances the dashboard's functionality by providing insights into the user's investment performance. Overall, the dashboard serves as a valuable tool for users to manage their finances, track vehicle-related information, and monitor the growth of their investment portfolio.

EDR diagram for moto shop













