**Car Inventory Application**

**Overview**

This project is a Car Inventory Management System developed using WPF (Windows Presentation Foundation) in C#. The application allows users to manage a list of cars, providing the ability to add new cars, update existing cars, and view car details such as Make, Model, Colour, Year, Price, and whether the car is new or used.

The application implements object-oriented programming principles, such as encapsulation, data validation, and the use of collections (List) to manage objects.

**Features**

- Add Car: Users can input car details (Make, Model, Colour, Year, Price, and New/Used status) and add the car to the inventory.

- Update Car: Users can select an existing car from the list, modify its details, and the changes will be saved and reflected in the car list.

- Validation: The application ensures that all required fields (Make, Model, Colour, Year, Price) are filled out correctly before the car is added or updated.

- Dynamic Car List Display: All added cars are displayed in a DataGrid, showing key details like Make, Model, and Price.

- Status Message: Displays a message when a car is successfully added or updated. This message automatically clears after a few seconds.

- Reset Form: Users can reset all input fields using the 'Reset' button.

- Exit: The application includes an 'Exit' button to close the program.

**User Interface**

The application features a simple and intuitive interface, designed using WPF. The input fields allow users to enter car information, and the list of cars is displayed in a DataGrid with a checkbox to indicate if the car is new or used.

**Usage**

Adding a Car

1. Select the car's Make from the dropdown menu.

2. Enter the car's Model in the text field.

3. Specify the Colour of the car.

4. Select the Year of manufacture from the dropdown (it includes the last 50 years).

5. Enter the Price of the car.

6. Check the New checkbox if the car is new.

7. Click the Enter button to add the car to the inventory.

**Updating a Car**

1. Select an existing car from the list displayed in the DataGrid.

2. Modify any of the car details (Make, Model, Colour, Year, Price, or New/Used status).

3. Click Enter to update the car details.

4. A message will display indicating which fields were updated.

**Resetting the Form**

- Click the Reset button to clear all input fields and reset the form to its default state.

**Exiting the Application**

- Click the Exit button to close the application.

**Output**

