# Secondhand Car Sales System

## Case Study

A second-hand car sales system will be developed for web and mobile platforms. The primary purpose of this secondhand car sales system to be developed is to store and manage detailed information about the customer, car models, sales advertisements, and car owners. Car owners logging into the system with their name, surname, e-mail address, and password will be able to enter a new car advertisement on the system, view, edit, delete, and remove their existing advertisements. The owner of the car will enter and save the details of the announcement of the sales, such as the type of car, year of manufacture, brand, model, fuel type, engine, transmission, mileage, sales price, and car pictures. In addition, the car owner can add equipment such as fog lights, foldable mirrors, parking sensors, central locking, and a glass roof to their car. When the car owner adds a new listing or makes any changes to the listing, system administrators' approval will be required for the listing to be published. After the system administrators approve the announcement, the announcement will be published. Published ads will be displayed as shop window ads by customers who want to buy a car. Customers can examine the details of the cars they want to buy on the window advertisements. In addition, customers will be able to search for ads in detail by using information such as the type of car they want to buy, the year of manufacture, brand, model, fuel type, engine, transmission, mileage, and sales price. Through the system to be developed, customers can compare the car advertisements they are interested in. In addition, customers will be able to access the contact information of the car owners regarding the cars they are interested in, make comments, and express their opinions through the system. Apart from the transactions that car owners and customers can perform on the system, system administrators can enter and update information such as new car type, brand, model, and car hardware through the system management panel. The system, which will work on all web and mobile browsers, will support 5 million users simultaneously. Data belonging to customers and car owners will be secured using the MD5 encryption algorithm through the system with a strong database infrastructure. In the secondhand car sales system to be developed, advanced search algorithms will be used to ensure that the response time for any query will be less than 2 seconds. In addition, the system to be developed will be 100% secure against unauthorized user logins. The time that the car sales system to be developed will be closed due to routine maintenance will be at most 30 minutes in a one-month operating period.

## Functional Requirements

## Nun-Functional Requirements

## Use case Diagram for Secondhand Car Sales System.

## Class Diagram for Secondhand Car Sales System.

## Sequence Diagram for Secondhand Car Sales System.

## Definitions of Use cases

Table 1 \_\_\_\_

|  |  |
| --- | --- |
| Use-case Name: |  |
| Brief description: |  |
| Actor: |  |
| The flow of realization: |  |
| Step-step Description: |  |

## Possible Scenarios

**Possible Scenario for \_\_\_ Use-case**