

Use Cases Description

1. Add Vehicle

Description: The user can add a new vehicle to the system by providing necessary details such as plate number, maker, model, and engine displacement (for motorcycles).

Preconditions: The user must be authenticated.

Postconditions: The vehicle is added to the database and can be referenced in future transactions.

2. Edit Vehicle

Description: The user can modify the details of an existing vehicle, such as updating the model or changing the plate number.

Preconditions: The vehicle must exist in the system.

Postconditions: The changes are saved in the database.

3. Delete Vehicle

Description: The user can remove a vehicle from the system if it is no longer needed or if it has been sold.

Preconditions: The vehicle must exist in the system.

Postconditions: The vehicle is removed from the database, and it will not be referenced in future tax calculations.

4. Add Person

Description: The user can add a new person to the system by entering details such as license number, name, surname, and address.

Preconditions: The user must be authenticated.

Postconditions: The person's details are stored in the database.

5. Edit Person

Description: The user can modify the details of an existing person, such as changing their address or updating their name.

Preconditions: The person must exist in the system.

Postconditions: The changes are saved in the database.

6. Delete Person

Description: The user can remove a person from the system if they are no longer relevant (e.g., the person no longer owns any vehicles).

Preconditions: The person must exist in the system.

Postconditions: The person's details are removed from the database.

7. Calculate Annual Taxes

Description: The user can calculate the annual tax for a vehicle based on its type (motorcycle, petrol car, diesel car, or hybrid) and specific parameters (engine displacement or CO2 emissions).

Preconditions: The vehicle must exist in the system, and the user must input the necessary parameters.

Postconditions: The tax amount is computed and displayed to the user.

8. Generate Tax List

Description: The user can generate a comprehensive list of all vehicle owners, along with their vehicles, the taxes for each vehicle, and the total tax owed by each owner.

Preconditions: The user must be authenticated.

Postconditions: A report is generated and can be viewed or exported.

9. Search Vehicles

Description: The user can search for vehicles in the system using criteria such as plate number, maker, or model.

Preconditions: The system must have existing vehicles.

Postconditions: The user receives a list of vehicles matching the search criteria.

10. Search Users

Description: The user can search for persons in the system using criteria such as license number, name, or address.

Preconditions: The system must have existing persons.

Postconditions: The user receives a list of persons matching the search criteria.