Test Plan

Objectives

- Verify that all system functionalities related to user registration, car rental booking, news article commenting, and administrator content management are working as expected.
- Ensure that the system handles errors gracefully and provides users with clear instructions for resolving issues.

Scope

- The test will cover all steps outlined in the Use Cases for User Registration, Car Rental Booking, News Article Commenting, and Administrator Content Management.
- Both success and non-success scenarios will be tested.

Use Cases and Test Cases

UC	TC	Name	Pre-condition	Test Data	Expected result
UC1	TC1.1	Successful User Registration	Follow the steps outlined in the Use Case.	Username: johndoe, Email: johndoe@example.com, Password: Password, Driving License: 123456789	The user receives a confirmation message and can log in.
UC1	TC1.2	Invalid Email Format	Follow the registration steps but enter an invalid email.	Username: johndoe, Email: johndoeexample.com, Password: Password, Driving License: 123456789	The system displays an error message indicating the issue.
UC1	TC1.3	Password Too Short	Enter a password shorter than the system's minimum.	Username: johndoe, Email: johndoeexample.com, Password: Pass, Driving License: 123456789	An error message indicating the password is too short.
UC2	TC2.1	Successful Car Selection	Follow the steps outlined in the Use Case.	Member navigates to the Car Market page, browses cars, selects a car, and proceeds to the Details page.	The system displays the selected car information on the Details page.

UC2	TC2.2	No Cars Match Filters	Set filters that do not match any cars.	Filters: Brand: Nonexistent, Price Range: $0-$10	The system displays a message indicating no cars match the selected filters.
UC3	TC3.1	Successful Car Rental Booking	Follow the steps outlined in the Use Case.	Car: Toyota Rav4, Rental Duration: 5 days, Start Date: 2024-11-10, End Date: 2024-11-15	The booking is completed successfully, and the user is redirected to a congratulation page.
UC3	TC3.2	Invalid Rental Dates	Enter invalid rental dates (e.g., end date before start date).	Car: Toyota Rav4, Rental Duration: 5 days, Start Date: 2024-07-15, End Date: 2024-07-10	The system alerts the user with error messages and prompts to correct the errors.
UC4	TC4.1	Successful Commenting on News Article	Follow the steps outlined in the Use Case.	Article: BMW M8, Comment: "Great article on the new car!"	The comment is posted under the article, and the member sees their comment live.
UC4	TC4.2	Comment with Prohibited Content	Enter a comment with prohibited content.	Article: BMW M8, Comment: "This is a spam comment with offensive language"	The adfmin rejects the comment and it does not display on the article's page.
UC5	TC5.1	Admin - Post New News Article	Follow the steps outlined in the Use Case.	Title: "New Tesla Model S Released", Content: "Tesla has released the new Model S with a range of 400 miles.", Images: tesla_news.jpg	The new article is posted successfully without errors. And the list in CarNews page is updated with the new car.
UC5	TC5.2	Admin - Invalid Article Data	Enter news article data in an incorrect format.	Title: "New Tesla Model S Released", Content: "", Images: tesla_ news.jpg,	The system displays an error message indicating the issue.

UC6	TC6.1	Admin - Add New Car	Follow the steps outlined in the Use Case.	Brand: Tesla, Model: Model S, Price: $80000, Color: Blue, VIN: HJ544634K6 Specifications: Electric, Range: 400 miles, Images: tesla_model_s.jpg	The new car is added successfully without errors. And the list in Car Controls page is updated with the new car.
UC6	TC6.2	Admin - Invalid Car Data	Enter car data in an incorrect format.	Brand: Tesla, Model: Model S, Price: $80000, Color: Blue, VIN: HJ544634K6 Specifications: Electric, Range: 400 miles, Images: invalid_image.txt	The system displays an error message indicating the issue.
UC7	TC6.1	Admin - Update Personal Information	Follow the steps outlined in the Use Case.	Name: John Doe, Contact: JD@example.com, Password: Password	The updated information is saved successfully. And new admin information is loaded in Admin page.
UC7	TC6.2	Admin - Invalid Personal Data	Enter personal information in an incorrect format.	Name: John Doe, Contact: JD@example.com, Password: Pass	The system displays an error message indicating the issue.