



USER REQUIREMENT SPECIFICATIONS (URS) DOCUMENT

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Introduction

1. **Objective:** The primary goal of this project is to develop a unified platform for 'Word of Cars' Enterprises that integrates vehicle rental services and automotive news.
2. **Scope:** This project will deliver a web and desktop application with supporting backend services, focusing on user-friendly interfaces and robust data management.

Client Agreement

1. The project focuses on delivering systems to enhance various aspects:
 1. Management of car inventory and operations.
 2. Efficiency of automotive community members.
 3. Tracking and analyzing statistics related to user interactions and platform administration.
2. The objective is to deliver a complete software solution within the designated timeline outlined in the project plan.

General Requirements

- 1) The system should allow users to easily find information related to cars.
- 2) The system should allow users to browse and rent a car easily.

Functional Requirements

- 1) **Members**
 - 1) They should be able to leave comments under car news.
 - 2) Should be able to choose and rent a car.
 - 3) Should be able to create their accounts.
 - 4) Should be able to log into their accounts.
- 2) **Administrators**
 1. Must oversee all users' details.
 2. Should be able to manage the car news.
 3. Should be able to manage the replies on the news.

4. Should be able to manage the available cars for rent.
5. Should be able to manage the contact information on the website.
6. Should be able to add new car to the web site

Non-Functional Requirements

- 1) The system must be user-friendly and accessible.
- 2) Compliance with relevant legal and ethical standards.
- 3) The system should ensure data security and privacy.
- 4) System Performance Requirements:
 1. Define performance metrics:
 - 1) Acceptable load time and response time.
 - 2) Ensure system scalability and reliability.
 2. Ensure system performance quality for web application.
 3. Ensure system performance quality for desktop application.
- 5) Security Requirements:
 1. Detail authentication.
 2. Authorization measures.
 3. Outline data encryption
 4. Protection strategies.
 5. Administrators are the only ones with capabilities to access desktop app.

Use Cases

Use Case 1: User Registration (1.3, 1.4)

Actor: New User

Preconditions:

- The user is on the registration page of the web site.

Main Flow:

1. The user navigates to the "Sign Up" section on the registration page.
2. The user enters their details such as username, email, password, and driving license number into the form.
3. The user submits the registration form.
4. The system validates the provided information for correctness and completeness.

5. Upon successful validation, the system creates a new user account, logs the user in, and redirects them to their user dashboard.
6. The user receives a confirmation email with account details.

Extensions:

4a. If the information is invalid (e.g. already used email, weak password), the system displays corresponding error messages. The system returns the user to the registration page and the user is prompted to correct the problems in the form. The whole process is then repeated again.

Use Case 2: Car Rental Booking (1.4, 1.2)

Actor: Member

Preconditions:

- The member must be logged into their account.
- The member has navigated to the car rental section.

Main Flow:

1. The member browses the available car rental options.
2. The member selects a car and proceeds to the Details page.
3. The system displays the selected car information into the Details page.
4. The member can read more about the selected car on the Page.
5. The member navigates to the booking form.
6. The member inputs rental details (e.g., rental duration).
7. The member submits the booking form.
8. The system validates the provided rental details.
9. Upon successful validation, the booking is confirmed, and the user receives a booking confirmation via email.

Extensions:

8a. If the reservation data is invalid (e.g. dates overlap with an existing reservation, required fields are missing, the end date is before the start date, or the start date is before today's date), the system alerts the user with error messages. The user is requested to correct the errors in the booking form. And then the whole process is repeated again.

Use Case 3: News Article Commenting (1.4, 1.1, 2.3)

Actor: Member

Preconditions:

- The member must be logged into their account.
- The member is viewing a news article.

Main Flow:

1. The member navigates to the Car News page.
2. The system displays all available articles.
3. The member select the article and the system brings him to the Article page.
4. The system displays the information of the article at the Article page.
5. The member navigates to the comments section at the bottom of the article.
6. The member types their comment in the comment input field.
7. The member submits their comment.
8. The system validates the comment for any prohibited content or spam indicators.
9. Upon successful validation, the comment is posted under the article, and the user sees their comment live.

Extensions:

8a. If the comment includes prohibited content (e.g., offensive language, spam), the system rejects the comment and informs the user of the violation. The system passes the comment to the Administrator page for checking the comment correctness. If the comment is against the policy the administrator deletes the member's comment.

Use Case 4: Administrator Content Management (2.2, 2.3)

Actor: Administrator

Preconditions:

- The administrator is logged into their account on the administrative dashboard.

Main Flow:

1. The administrator navigates the content management section.
2. The administrator reviews, edits, or deletes existing articles, or posts new articles.
3. The system load a form for reviewing, editing, or deleting the article.
4. The administrator submits changes or new content to the system.
5. The system validates the changes or new content for compliance with publishing standards.
6. Upon successful validation, the changes are made live on the platform.

Extensions:

5a. If the new or edited content fails compliance checks (e.g., contains unverified claims), the system notifies the administrator of the specific issues. The administrator is required to correct the issues before resubmitting. The process is then repeated.

Use Case 5: Administrator Adds New Car (2.4, 2.6)

Actor: Administrator

Preconditions:

- The administrator is logged into their account on the administrative dashboard.

Main Flow:

1. The administrator navigates to the car management section within the dashboard.
2. The administrator enters details for a new car, including brand, model, price, specifications, and images.
3. The system load a form for adding or modifying the car.
4. The administrator submits the new car data to the system.
5. The system validates the car data for completeness and compliance with data standards.
6. Upon successful validation, the car is added to the inventory and made available on the platform.

Extensions:

5a. If the car data fails validation checks (e.g., incomplete details or specifications that do not meet standards), the system notifies the administrator of the specific issues. The administrator must resolve these issues before resubmitting. The process is then repeated.

Use Case 6: Administrator Posts New News Article (2.2)

Actor: Administrator

Preconditions:

- The administrator is logged into their account on the administrative dashboard.

Main Flow:

1. The administrator navigates to the news management section.
2. The administrator creates a new news article, entering information such as the title, content, images, and associated tags.
3. The administrator submits the news article to the system.
4. The system checks the article for compliance with content guidelines.
5. Upon successful validation, the article is published on the platform and becomes accessible to users.

Extensions:

4a. If the news article fails compliance checks (e.g., contains inappropriate content), the system alerts the administrator to the issues. The administrator needs to correct these problems before the article can be resubmitted.

Use Case 7: Administrator Updates Personal Information (2.5)

Actor: Administrator

Preconditions:

- The administrator is logged into their account on the administrative dashboard.

Main Flow:

1. The administrator goes to the profile settings section of the dashboard.
2. The administrator updates personal information such as name, contact details, and password.
3. The administrator submits the changes to the system.
4. The system validates the updated information for compliance with security standards.
5. Upon successful validation, the updated information is saved and becomes effective immediately.

Extensions:

4a. If the updated information fails security checks (e.g., password too weak), the system notifies the administrator of the specific issues. The administrator must address these issues before the updates can be successfully made.