

# 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 AutoStream Enterprises that integrates vehicle rental services and automotive news. This platform aims to enhance user engagement by 30% and operational efficiency by 25% within the first year of launch.
- 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) Users
  - 1) They should be able to leave comments under car news.
  - 2) Are able to choose and rent a car.
  - 3) 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.

## 3) Data Management

- 1. Specify data handling, storage, and backup procedures.
- 2. Establish guidelines for data accuracy and consistency.

# 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 both desktop application.
- 5) Security Requirements:
  - 1. Detail authentication.
  - 2. Authorization measures.
  - 3. Outline data encryption
  - 4. Protection strategies.
  - 5. Administrators being the only ones with capabilities to access desktop app.

# **Use Cases**

Use Case 1: User Registration

Actor: New User

#### **Preconditions:**

• The user is on the registration page of the AutoStream platform.

## Main Flow:

- 1. The user selects the "Sign Up" option on the registration page.
- 2. The user enters their details such as name, email, and password 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.

## **Non-Success Scenario:**

- If the information is invalid (e.g., email already in use, weak password), the system displays relevant error messages.
- 2. The user is prompted to correct the issues in the form.
- 3. Steps 3-5 are repeated until all information is valid.

## Use Case 2: Car Rental Booking

## Actor: Logged-in User

#### **Preconditions:**

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

#### Main Flow:

- 1. The user browses the available car rental options.
- 2. The user selects a car and proceeds to the booking form.
- 3. The user inputs rental details (e.g., rental duration, pickup location).
- 4. The user submits the booking form.
- 5. The system validates the provided rental details.
- 6. Upon successful validation, the booking is confirmed, and the user receives a booking confirmation via email.

#### **Non-Success Scenario:**

- If the booking details are invalid (e.g., dates overlap with an existing booking, required fields are missing), the system alerts the user with error messages.
- 2. The user is asked to correct the errors in the booking form.
- 3. Steps 4-6 are repeated until the booking details are valid.

#### Use Case 3: News Article Commenting

## Actor: Logged-in User

#### Preconditions:

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

#### Main Flow:

- 1. The user navigates to the comments section at the bottom of the article.
- 2. The user types their comment in the comment input field.
- 3. The user submits their comment by clicking the "Post Comment" button.
- 4. The system validates the comment for any prohibited content or spam indicators.
- 5. Upon successful validation, the comment is posted under the article, and the user sees their comment live.

#### Non-Success Scenario:

- 1. If the comment includes prohibited content (e.g., offensive language, spam), the system rejects the comment and informs the user of the violation.
- 2. The user is prompted to edit their comment to comply with community guidelines.
- 3. Steps 3-5 are repeated until the comment meets the guidelines.

## Use Case 4: Administrator Content Management

**Actor:** Platform Administrator

#### **Preconditions:**

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

#### Main Flow:

- 1. The administrator accesses the content management section.
- 2. The administrator reviews, edits, or deletes existing articles, or posts new articles.
- 3. The administrator submits changes or new content to the system.
- 4. The system validates the changes or new content for compliance with publishing standards.
- 5. Upon successful validation, the changes are made live on the platform.

#### Non-Success Scenario:

- 1. If the new or edited content fails compliance checks (e.g., contains unverified claims), the system notifies the administrator of the specific issues.
- 2. The administrator is required to correct the issues before resubmitting.
- 3. Steps 3-5 are repeated until the content meets all standards.