

User Requirement Specifications (URS) Document

Atanas Dimitrov



Contents

[Introduction 2](#_Toc160528250)

[Client Agreement 2](#_Toc160528251)

[General Requirements 2](#_Toc160528252)

[Functional Requirements 3](#_Toc160528253)

[Non-Functional Requirements 4](#_Toc160528254)

[Use Cases 5](#_Toc160528255)

# Introduction

# **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.

# **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:
2. Management of car inventory and operations.
3. Efficiency of automotive community members.
4. Tracking and analyzing statistics related to user interactions and platform administration.
5. 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**
2. They should be able to leave comments under car news.
3. Are able to choose and rent a car.
4. Should be able to log into their accounts.
5. **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. **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:
5. Define performance metrics:
   * 1. Acceptable load time and response time.
     2. Ensure system scalability and reliability.
6. Ensure system performance quality for web application.
7. Ensure system performance quality for both desktop application.
8. 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:**

1. 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:**

1. 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.