

# Software Requirements Specification

## Document Version 1

---

### Team Members

Shreya Jayas, Jonathan Hernandez

---

### Project Title

Car Service Finder

---

## 1. Project General Description

The goal of the **Car Service Finder** application is to help customers easily locate affordable car services like car washes, oil changes, tire changes, and more, based on their current location and preferences. Using the Google Maps API, the app offers customers a way to find and review nearby service providers, while allowing providers to list and manage their services. SysAdmins will be able to moderate services and reviews to ensure that the platform is running smoothly and free of inappropriate content.

---

## 2. Product Features

The Car Service Finder application is designed to simplify the process of finding car services for users. Below are the key features and functionalities that define the core of the application:

- **Location-Based Service Search:** Customers can search for services such as car washes, oil changes, and tire repairs based on their location, powered by Google Maps API.
- **Profile Creation and Management:** Customers and service providers can create personalized profiles to save preferences and manage services.
- **Subscription to Services:** Customers can subscribe to specific service providers to get updates about discounts, promotions, or future services.
- **Review System:** Customers can leave reviews after using a service to help others make informed decisions. Providers can respond to reviews to engage with customers.
- **Provider Service Management:** Service providers can list new services, modify existing ones, or withdraw them from the platform.
- **Admin Moderation:** SysAdmins can manage users, moderate services, and reviews, and view system usage statistics to ensure the platform runs smoothly.

### 3. Functional Requirements

#### Customer Functional Requirements

- **FR0:** The system will allow customers to create a profile.
- **FR1:** The system will allow customers to modify their profile.
- **FR2:** The system will allow customers to search for services based on their location.
- **FR3:** The system will allow customers to subscribe to available services.
- **FR4:** The system will allow customers to view subscribed services.
- **FR5:** The system will allow customers to write reviews after using a service.

#### Provider Functional Requirements

- **FR6:** The system will allow providers to create and modify their profiles.
- **FR7:** The system will allow providers to list new services.
- **FR8:** The system will allow providers to view customer statistics (e.g., views, subscriptions).
- **FR9:** The system will allow providers to reply to customer reviews.

#### SysAdmin Functional Requirements

- **FR10:** The system will allow SysAdmins to manage customer and provider accounts (ban/unban users).
- **FR11:** The system will allow SysAdmins to moderate services (approve/reject service listings).
- **FR12:** The system will allow SysAdmins to moderate reviews (approve/delete reviews).
- **FR13:** The system will allow SysAdmins to view system usage statistics (number of active users, services, and reviews).

---

## 4. Non-Functional Requirements

### Customer Non-Functional Requirements

- **NFR0:** The search functionality should return results within 2 seconds of the request.
- **NFR1:** The system should allow customers to view their subscribed services in less than 5 seconds.
- **NFR2:** The system should be available to customers 99.9% of the time to ensure continuous access to services.

### Provider Non-Functional Requirements

- **NFR3:** The system should allow providers to update services within 3 seconds.
- **NFR4:** The system should ensure that providers' personal information is encrypted and secure.
- **NFR5:** Providers should be able to view customer statistics in less than 5 seconds.

### SysAdmin Non-Functional Requirements

- **NFR6:** Moderating a service or review should take less than 10 seconds.
- **NFR7:** The system should enforce a two-factor authentication method for SysAdmin accounts for added security.
- **NFR8:** The system should have an uptime of 99.5% to ensure SysAdmin access and smooth operation.

---

## 5. Scenarios

### Customer Use Case - Subscribe to Available Services (Handled by Shreya)

#### Assumption:

The customer is logged in and wants to subscribe to a car service provider.

#### Normal Flow:

1. The customer navigates to the "Available Services" page.
2. They see a list of nearby service providers based on their location.
3. The customer selects a service and clicks "Subscribe."
4. The system confirms the subscription and adds it to the customer's profile.

#### What Can Go Wrong:

- **Network issues:** If the service fails to subscribe due to network problems, the system should prompt the user to retry later.

#### System State on Completion:

The selected service is added to the customer's list of subscribed services.

---

### Provider Use Case - Create Services (Handled by Jonathan)

#### Assumption:

The provider is logged in and wants to create a new service listing.

#### Normal Flow:

1. The provider logs in and clicks "Create Service."
2. The system presents a form for the provider to fill out (e.g., service name, price, description).
3. The provider submits the form, and the system saves the service.
4. The new service is now visible to customers searching for it.

#### What Can Go Wrong:

- **Missing mandatory fields:** If a required field is missing, the system will prompt the provider to fill it out.

**System State on Completion:**

The new service is successfully listed and available for customers to view.

---

**SysAdmin Use Case - Manage User Access *(Handled by Shreya&Jonathan)*****Assumption:**

A customer has posted inappropriate reviews, and the SysAdmin needs to ban the customer.

**Normal Flow:**

1. The SysAdmin logs in and navigates to the "User Management" section.
2. They search for the customer's account by email or name.
3. The SysAdmin clicks "Ban User," and the system marks the customer as banned.
4. The banned customer's access to the platform is removed.

**What Can Go Wrong:**

- **User not found:** If the SysAdmin cannot find the user, the system will prompt them to verify the search parameters.

**System State on Completion:**

The customer is banned from accessing the system.