

Table of Contents

Functional Specification	1
Title here	1
1. Introduction	4
1.1 Executive Summary	4
1.2 Background	4
1.3 Scope	4
2. Functional Requirements.....	4
2.1 Login and Authentication.....	4
2.2 Vehicle Availability Check	4
2.3 Vehicle Reservation Form	5
2.4 Reservation Workflow Submission	5
2.5 Approver Review and Decision	5
2.6 Admin Driver Assignment	5
2.7 Reservation Confirmation by Admin.....	5
2.8 Car Library Management by Admin	6
2.9 Notification System.....	6
2.10 Reporting Functionality	6
3. Non-Functional Requirements.....	6
3.1 Performance	6

1. Introduction

1.1 Executive Summary

This document outlines the business requirements for a Vehicle Reservation Management System to streamline vehicle availability checks, reservation processing, approval workflows, and driver assignment. The system will automate notification and workflow processes, eliminating manual errors and improving efficiency within the organization.

1.2 Background

Currently, the vehicle reservation process is managed manually, leading to inefficiencies, delays in approval, and difficulty in driver assignments. The absence of a real-time system to check vehicle availability and manage the workflow results in a cumbersome process for both users and administrators. This system will integrate with the existing staff database and provide automated workflows for vehicle management.

1.3 Scope

The scope of this project covers the development and implementation of the Vehicle Reservation Management System. The system will allow users to log in, check vehicle availability, submit reservations, receive notifications, and track reservation status. The scope includes user authentication, real-time vehicle availability checks, workflow management for approvals, driver assignment, and notification systems.

2. Functional Requirements

2.1 Login and Authentication

Requirement ID: FR001

- Description: Users must log in using their staff number and password. The system will verify these credentials against the existing staff database.
- Rationale: Ensures only authorized staff can access the system and perform

2.9 Notification System

Requirement ID: FR009

- Description: Automated notifications are sent to users regarding reservation status, including vehicle availability, approval/rejection, and driver assignment.
- Rationale: Keeps users informed about the status of their reservations and ensures transparency.
- Acceptance: Users receive timely notifications based on the status of their reservations.

2.10 Reporting Functionality

Requirement ID: FR010

- Description: Authorized users can generate reports on vehicle usage, including reservation details, vehicle availability, and driver assignments.
- Rationale: Enables tracking of vehicle usage and helps in fleet management analysis.
- Acceptance: Reports can be generated accurately and contain all relevant information on vehicle usage.

3. Non-Functional Requirements

3.1 Performance

Requirement ID: NFR001

- Description: The system must handle up to 100 concurrent users without noticeable performance degradation, especially during peak hours.
- Rationale: Ensures smooth user experience even during periods of high demand.
- Acceptance: The system maintains optimal performance with up to 100 simultaneous users.

3.2 Usability

Requirement ID: NFR002

3.4 Security

Requirement ID: NFR004

- Description: All data transmissions and storage must be encrypted to ensure the confidentiality and integrity of user and vehicle data.
- Rationale: Protects sensitive information from unauthorized access and breaches.
- Acceptance: Data is encrypted, and only authorized personnel can access sensitive information.

4. Assumptions and Dependencies

4.1 Assumptions

- The staff database is fully functional and ready for integration with the vehicle reservation system.
- The organization's email server is reliable and capable of handling the notification workload.
- Admins and users are provided with the necessary permissions to access and use the system.

4.2 Dependencies

- Integration with the staff database for user authentication is essential for login and verification.
- Email server dependency for sending notifications and alerts.
- Continuous network connectivity is required for real-time vehicle availability and notification updates.

