

CAR RENTAL SERVICES

Software Requirements Specifications

30th october 2023

Submitted By

Krishnadhar Pandey

Registration No.: 12111429

Program Name : Bachelor of Technology(CSE)

School of Computer Science & Engineering
Lovely Professional University

(Sept - Oct , 2023)

1. INTRODUCTION

1.1 Purpose

The purpose of this document is to outline the requirements for the development of a car rental service software.

1.2 Scope

The software will provide a platform for customers to rent vehicles and for administrators to manage bookings, vehicles, and users.

2. SYSTEM OVERVIEW

2.1 System Description

The car rental service will allows users to:

- Browse available vehicles
- Book the car
- View rental history
- Administrators will be able to manage vehicles, reservations, and user accounts.

3. FUNCTIONAL REQUIREMENTS

3.1 User Registration and Authentication

- Users can create accounts.
- Users can log in and log out.
- Password recovery/reset functionality.

3.2 Vehicle Management

- Administrators can add, edit, and remove vehicles.
- Vehicle information includes make, model, year, price, and availability status.

3.3 Reservation

- Users can search and browse available vehicles.
- Users can select a vehicle, specify rental dates, and make a reservation.
- Users can view, modify, and cancel reservations.
- Users receive a confirmation email after making a reservation.

3.4 Payment Processing

- Integration with a payment gateway for secure online transactions.
- Users can view payment history.

3.5 Administration Dashboard

- Administrators have access to a dashboard for managing vehicles, reservations, and users.
- Real-time updates on reservations and vehicle availability.

4. NON-FUNCTIONAL REQUIREMENTS

4.1 Performance

- The system should support a minimum of 500 concurrent users.
- Response time for user interactions should be under 2 seconds.

4.2 Security

- Data encryption for user information.
- Secure storage of payment details.

4.3 Scalability

• The system should be designed to accommodate future growth.

4.4 Availability

• The system should be available 24/7 with minimal downtime.

5. CONSTRAINTS

- The system should be developed using [specific technologies and frameworks]
- Compliance with local and international data protection regulations.

6. SYSTEM INTERFACE

- Integration with a payment gateway (e.g., PayPal, Stripe).
- Compatibility with various web browsers (e.g., Chrome, Firefox, Safari).

7. DEPENDENCIES

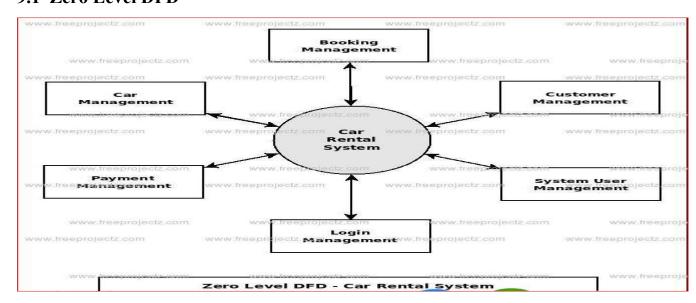
• Integration with an email service for sending confirmation emails.

8. FUTURE ENHANCEMENTS

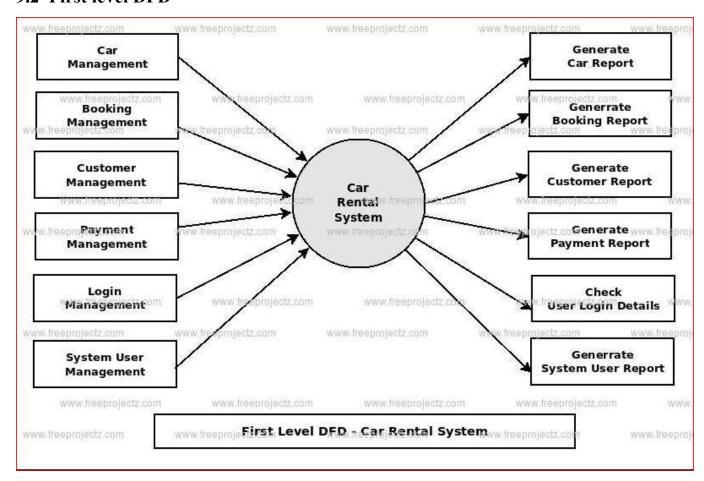
- Possibility of integrating mobile applications.
- Additional payment methods.

9. DATA FLOW DIAGRAM

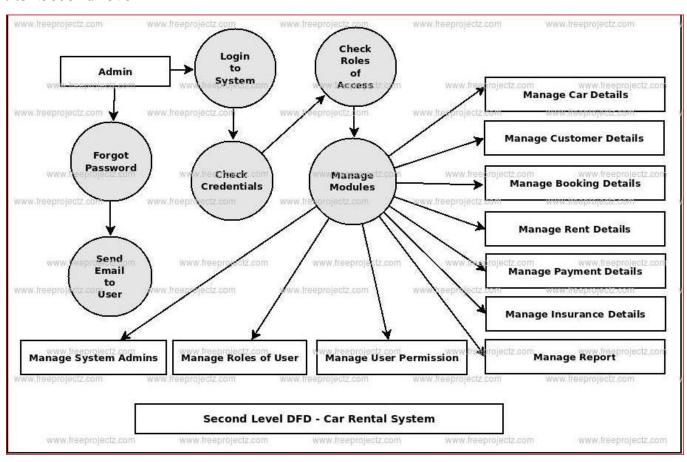
9.1 Zero Level DFD



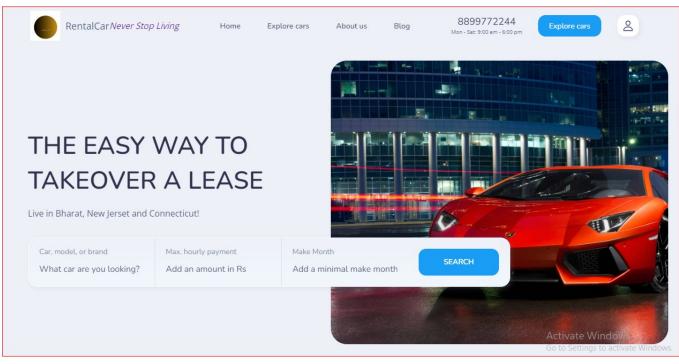
9.2 First level DFD

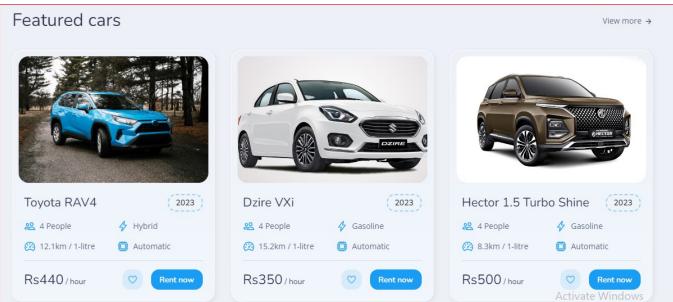


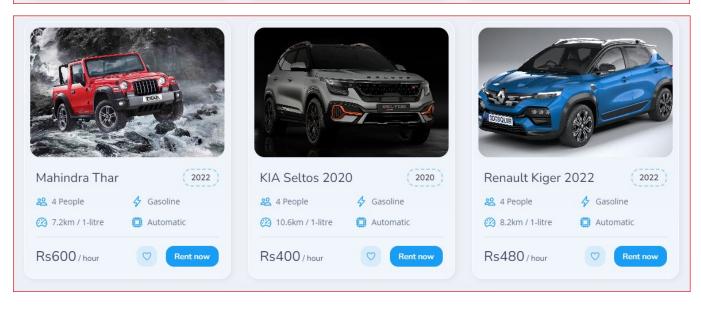
9.3 Second level DFD

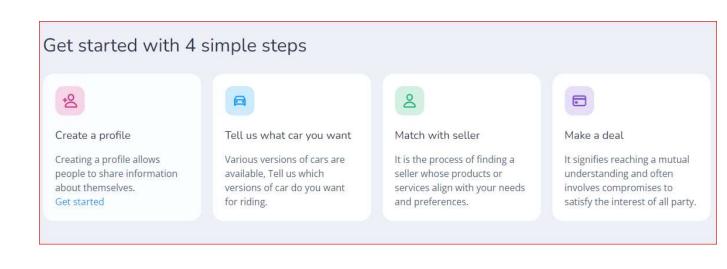


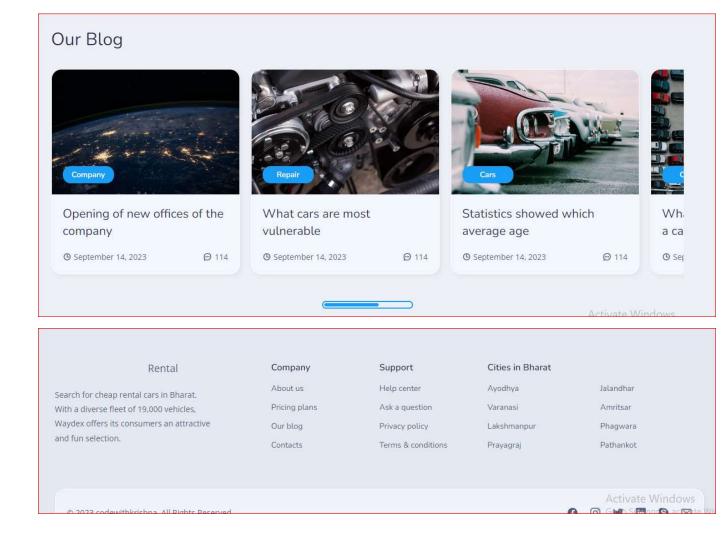
10. SCREENSHOTS OF PROJECT











Link to download the project:

Github link: https://github.com/krishnadhar00/webd-project.git