

SENG205 Project Outline, T3 2025

Project Overview

GreenMove Car Rentals, a sustainable transport company operating across Victoria, aims to modernize its fleet and customer operations by developing a **Smart Vehicle Rental Management System (VRMS)**. The system will act as a centralized platform to manage customers, vehicles, rental bookings, and fleet health monitoring. The project involves designing, developing, and implementing a scalable, secure, and user-friendly VRMS that meets industry standards. Any programming language of your choice (e.g., Java, Python, C#) may be used for implementation.

Project Objectives

1. Customer Enrolment:

- Enable online customer registration and profile creation.
- Maintain a centralized database of customer details, driving license records, and rental history.

2. Booking & Reservation Management:

- Allow customers to search for available vehicles, reserve online, and manage rental extensions or cancellations.
- Automate waitlist management for popular vehicle categories (e.g., electric cars).

3. Vehicle Tracking & Monitoring:

- Integrate GPS and IoT sensors to track vehicle location, battery/fuel levels, and maintenance status.
- Generate automatic alerts for overdue returns or low battery/fuel levels.

4. Customer Support & Helpdesk System:

- Implement an AI-powered chatbot to handle customer queries (e.g., pricing, availability, late return policies).
- Enable customer complaint ticketing and roadside assistance requests.