**Intelligent Vehicle Lifecycle & Eco Score Management**  
**Project Implementation Phase 1 Documentation**  
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**Phase 1: Problem Understanding & Industry Analysis**

**Problem Statement**

A Salesforce-based system to track vehicle maintenance, insurance, and lifecycle while calculating Eco Score (vehicle health + eco-friendliness) and rewarding customers for good maintenance habits. The system also predicts potential part failures and provides service centers a vehicle health index before servicing.Vehicle owners and service centers face challenges in tracking vehicle maintenance, insurance, and overall health. Most systems only send reminders for services or insurance renewals. There is no system that calculates **Eco Score** (vehicle health + eco-friendliness), predicts potential part failures, or rewards customers for timely maintenance.

Current issues:

* Maintenance schedules often missed → increased repair costs.
* No visibility for service centers on vehicle health before servicing.
* Customers are not incentivized for good maintenance practices.

**2. Requirement Gathering**

**Current scenario:**

* Vehicle maintenance and insurance reminders are manual or generic.
* Service centers cannot view real-time vehicle health.
* No customer motivation system for proper maintenance.

**Core Requirements:**

* Centralized tracking of vehicle maintenance, insurance, and service history.
* Automated Eco Score calculation using mileage, parts quality, and driving conditions.
* Predictive alerts for potential part failures.
* Gamified rewards (points & leaderboard) for customers.
* Dashboards for service centers showing vehicle health index.

**3. Stakeholder Analysis**

| **Stakeholder** | **Role** | **Requirements / Expectations** |
| --- | --- | --- |
| Vehicle Owners | End Users | Eco Score insights, predictive alerts, rewards |
| Service Centers | Service Providers | View vehicle health index before servicing, plan resources efficiently |
| Admin (Salesforce) | System Manager | Manage objects, flows, dashboards, users; ensure data accuracy |

**4. Business Process Mapping**

* Vehicle Registration: Customer adds vehicle info into Salesforce.
* Maintenance Tracking: Records service history, mileage, parts used.
* Eco Score Calculation: Automatically calculates vehicle health + eco-friendliness.
* Predictive Alerts: Alerts customers if parts may fail early.
* Reward Points & Leaderboard: Points assigned for proper maintenance → leaderboard motivates users.
* Service Center Dashboard: Shows vehicle health index and alerts for better preparation

**5. Industry-specific Use Case Analysis**

* Vehicle Service Companies: Typically only track service schedules and insurance renewals.
* Fleet Management Systems: Focus on operational logistics, not eco health or gamified rewards.
* Vehicle Maintenance Apps: Generic reminders, no predictive maintenance or Eco Score.

**AppExchange Exploration**

* Existing apps on AppExchange mainly handle service reminders, fleet tracking, and insurance alerts.
* No app currently offers:
  + Eco Score calculation (vehicle health + eco-friendliness).
  + Predictive part failure alerts.
  + Gamified rewards (points & leaderboard).
* This gap creates an opportunity for our Intelligent Vehicle Lifecycle & Eco Score Management System, which brings these unique features together in Salesforce.