

Requirement 1: Car Rental Agencies Portal (WebApp)

1. Dashboard (Main Page)

A central hub providing an overview of operations for rental agencies.

✓ Vehicle Overview (Phase 1)

- Total number of vehicles in the fleet
- Number of vehicles currently rented
- Vehicles in maintenance or unavailable

✓ Reservation Summary (Phase 1)

- Ongoing reservations
- Future reservations (monthly/daily breakdown)
- History of completed reservations

✓ Alerts & Notifications

- Administrative document renewals (registration, insurance, inspections)
- Scheduled technical interventions (oil change, tire replacement, repairs)
- Overdue and upcoming payments

✓ Financial Metrics

- Monthly revenue & expenses
- Gross margin (%)
- Vehicle profitability (revenue per vehicle/month)
- Average occupancy rate (%)

2. Vehicle Management (Phase 1)

Agencies can manage their fleet, update vehicle details, and track availability.

Sub-Tab: View Fleet

✚ Vehicle List with Details

- Registration number
- Brand, model, year
- Status (Available, Rented, Maintenance, Unavailable)
- Last oil change & next scheduled oil change
- Compliance status (Insurance & Technical Inspection)

Sub-Tab: Create Vehicle

✚ Form to add a new vehicle

- Registration number
- Brand & Model
- Year of manufacture
- Fuel type (Gasoline, Diesel, Hybrid, Electric)
- Initial mileage
- Insurance expiry date

- Last technical visit date
- Initial status (Available, Rented, Maintenance, Unavailable)

Sub-Tab: Manage Car Availability

- Agencies can update a vehicle's **status in real-time** (Available, Rented, Maintenance, Unavailable)
- Users can **filter cars by availability**
- Status updates will reflect in both **Web & Mobile App UI**
- Automatic notifications for:
 - Cars due for maintenance
 - Cars returning from rentals

3. Customer Management (Phase 1)

Agencies can manage individual and corporate customers.

Sub-Tab: Create New Client

Client Details

- Client type (Individual or Company)
- Name & First Name (if individual) OR Business Name (if company)
- Gender (for individuals)
- Contact details (Phone, Email)
- Driver's license number & expiry date
- National ID (for locals) or Passport (for foreigners)
- Reliability indicator (Yes/No)

4. Availability Management (Phase 1)

A **booking system** for vehicle reservations.

New Booking Creation

- Select client & vehicle
- Rental duration (Start date, End date)
- Rental agreement & terms
- Estimated cost calculation
- Payment status (Paid, Pending)

Reservation Tracking

- Ongoing reservations
- Upcoming reservations (monthly/daily)
- Completed rental history

Booking Alerts

- Overdue returns
- Pending payments

5. Interventions Management

Centralized **maintenance & compliance tracking** for vehicles.

Sub-Tabs for Interventions:

- ✓ **Insurance** (Contract details, Expiry reminders)
- ✓ **Technical Inspection** (Inspection center, Expiry dates, Costs)
- ✓ **Oil Change** (Last oil change, Next scheduled date, Cost)
- ✓ **Tires** (Replacement history, Next due date, Cost)
- ✓ **Repairs** (Type, Description, Cost)
- ✓ **Violations** (Client violations, Fines, Dates)

6. Expenses Management

Tracking all costs related to vehicle operations.

✓ **Expense Categories:**

- Insurance
- Technical inspections
- Oil changes
- Tire replacements
- Repairs
- Other fees (fuel, maintenance, taxes, etc.)

✓ **Monthly/Annual View** with filters by category.

7. Revenue Management

Reports on rental revenue and business performance.

✓ **Revenue Breakdown:**

- Monthly/Annual rental revenue
- Filters for:
 - Client type (Individual, Corporate)
 - Rental duration (Short-term, Long-term)
 - Specific vehicle

8. Performance & Statistics

Data analytics to monitor agency performance.

✓ **Key Metrics:**

- Monthly/Annual occupancy rate
- Revenue vs Expenses comparison
- Top 5 most rented vehicles
- Most loyal customers

✓ **Data Visualization:**

- Charts (Pie charts, Bar graphs, Line graphs)
- Comparative tables

9. Data Import & Export



Import:

- Bulk upload of client & vehicle data
- Supported formats: CSV, Excel
- Automatic error validation



Export:

- Download reports in **PDF, CSV, Excel**
- Custom column selection for export

10. Cross-Functional Features



Search & Filtering

- Quick search for vehicles, clients, or reservations
- Advanced filters (Date, Status, Type)



Real-Time Notifications

- Alerts for upcoming renewals, maintenance, and overdue payments



Audit Log & History Tracking

- View modifications (Who, When, What)



Security & Access Control

- Role-based authentication:
 - **Administrator** (Full access)
 - **Operator** (Vehicle & Client Management)
 - **Accountant** (Financial reports & transactions)

Requirement 2: UI/UX Enhancements & Functional Updates for Web & Mobile App

1. Entry & Exit Inventory Module (Phase 1)

- ♦ **Purpose:** Ensure accurate vehicle condition tracking by capturing photos before and after rentals.



Features:

- Allow users/agencies to upload vehicle photos at **rental start & end**.
- Mandatory image upload for specific areas (e.g., Front, Rear, Sides, Interior, Odometer).
- Store images in the system for future reference.
- Compare start vs. end images for damage assessment.



UI Impact:

- New **"Vehicle Check-in & Check-out"** section in the booking process.
- Image upload interface on both **Web & Mobile App**.

2. Integration of Google Translate API (Phase 1)

- ♦ **Purpose:** Improve accessibility for multilingual users.



Features:

- Enable **automatic translation** of platform text & messages based on user preference.
- Users can select their **preferred language** in settings.
- Real-time **translation toggle** for content and UI elements.

🌸 UI Impact:

- Language selection dropdown in **header/footer**.
- Automatic translation applied to key areas (menus, forms, instructions).

3. User Experience (UX) Improvements (Phase 1)

- ♦ **Purpose:** Enhance navigation, speed, and overall usability of the platform.

✅ Key Enhancements:

- **Simplified booking flow** to reduce steps for vehicle rental.
- Improved **loading speed** for web pages & mobile screens.
- **Refined design** for better clarity & ease of use.
- Optimize **search & filters** for vehicles.

🌸 UI Impact:

- **Updated home screen layout** with clear CTA buttons.
- **Better mobile responsiveness** for a seamless app experience.

4. Display Rental Agency Name & Rating (Phase 1)

- ♦ **Purpose:** Provide users with insights into agency reputation.

✅ Features:

- Display **agency name & rating** on vehicle listings & booking pages.
- Ratings based on **customer feedback & history**.
- Ability to **sort vehicles by highest-rated agencies**.

🌸 UI Impact:

- **Visible agency details** on car listing & booking screens.
- **Filter & sort option** by rating in search results.

5. "Become an Owner" → "Become a Partner" (with Contact Form) 📧 (Phase 1)

- ♦ **Purpose:** Update branding & improve user onboarding.

✅ Changes:

- Rename **"Become an Owner"** to **"Become a Partner"**.
- Clicking it redirects to a **Contact Form** instead of sign-up.

🌸 UI Impact:

- Update **menu & homepage button**.
- Design a **contact form page** with:
 - Name, Email, Phone
 - Business Type (Car Rental, Individual Owner, Investor, etc.)
 - Message box
 - Submit button (sends email to admin)

6. Hide Messaging Feature (Phase 1)

♦ **Purpose:** Remove unused functionality to streamline the platform.

✓ **Changes:**

- **Disable messaging system** on both Web & Mobile App.
- Hide chat buttons & related UI components.

🌸 **UI Impact:**

- Remove "**Messages**" section from the menu.
- Hide chat icons in rental bookings & agency pages.

7. Real-Time Vehicle Availability Sync 🔄 (Phase 1)

♦ **Purpose:** Ensure accurate car availability across platforms.

✓ **Features:**

- **Live synchronization** between **reservation app & management system**.
- Automatic updates when:
 - A car is rented (Marked as unavailable).
 - A rental ends (Car becomes available).
 - A vehicle goes for maintenance (Marked as unavailable).

🌸 **UI Impact:**

- Real-time availability indicators on car listings.
- Automatic status update in **rental app & admin panel**.

Milestones:

Milestone	Scope of Work
1	<p>Core System & Initial UI Fixes</p> <ul style="list-style-type: none">● Requirement 1 – WebApp:<ul style="list-style-type: none">○ Real-Time Availability Sync between management system & reservation app○ Vehicle Management (Add/edit vehicles, track details)○ Availability Management● Requirement 2 – Web & Mobile Enhancements:<ul style="list-style-type: none">● Change "Become an Owner" to "Become a Partner" (Redirect to contact form)● Improve user experience (UI optimizations) <p>Delivery Goal: Basic car rental management is operational, and initial UI fixes for better user experience.</p>
2	<p>Live Availability Sync & UI Improvements</p> <ul style="list-style-type: none">● Requirement 1 – WebApp:<ul style="list-style-type: none">○ Basic Dashboard (View current rentals, availability summary)● Requirement 2 – Web & Mobile Enhancements:<ul style="list-style-type: none">○ Display rental agency name & rating○ Hide messaging feature○ Entry-Exit Inventory: Enable capturing vehicle condition photos before & after rental <p>Delivery Goal: Live vehicle availability updates & UI fixes are implemented.</p>
3	<p>Entry/Exit Inventory & Major Enhancements</p> <ul style="list-style-type: none">● Requirement 1 – WebApp:<ul style="list-style-type: none">○ Customer Management (Store client details, license, ID)○ Intervention Management● Requirement 2 – Web & Mobile Enhancements:<ul style="list-style-type: none">○ Google Translate API integration - 4 languages <p>Delivery Goal: Enhanced vehicle tracking & multi-language support.</p>
4	<p>Final Features & Full System Deployment</p> <ul style="list-style-type: none">● Requirement 1 – WebApp:<ul style="list-style-type: none">○ Final testing & optimizations○ Bug fixes & deployment● Requirement 2 – Web & Mobile Enhancements:<ul style="list-style-type: none">○ Final UI fixes & usability improvements