



EasyCar Rent – Refined Data Model

Conventions

- Tables and columns use **snake_case**, in **singular**.
 - Primary keys are **UUID** generated with `gen_random_uuid()` (`CREATE EXTENSION pgcrypto;`).
 -  **Audit fields (7):**
 - `status`
 - `created_at` / `created_by`
 - `updated_at` / `updated_by`
 - `deleted_at` / `deleted_by`
 - Foreign Keys use **ON UPDATE CASCADE** and **ON DELETE** rules appropriate to the domain.
 -  **Unique constraints** on codes and names (scoped where applicable).
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Module: Customer Management

customer {id, first_name, last_name, document_number, phone, email, address}

driving_license {id, license_number, category, expiry_date, customer_id}

customer_history {id, notes, customer_id}

Module: Fleet Management

vehicle {id, brand, model, plate, vehicle_category_id, vehicle_status_id}

vehicle_category {id, code, name, description}

vehicle_status {id, code, name, description}

Module: Reservation Management

reservation {id, start_date, end_date, customer_id, vehicle_id, reservation_status_id, branch_id, reservation_type_id}

reservation_status {id, code, name, description}

branch {id, code, name, location}

reservation_type {id, code, name, description}

Relationships

- `driving_license.customer_id` → **customer.id**
- `customer_history.customer_id` → **customer.id**
- `vehicle.vehicle_category_id` → **vehicle_category.id**
- `vehicle.vehicle_status_id` → **vehicle_status.id**
- `reservation.customer_id` → **customer.id**
- `reservation.vehicle_id` → **vehicle.id**
- `reservation.reservation_status_id` → **reservation_status.id**

- `reservation.branch_id` → **`branch.id`**
 - `reservation.reservation_type_id` → **`reservation_type.id`**
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Referential Actions

- **ON UPDATE CASCADE** in all foreign keys.
- **ON DELETE RESTRICT** for critical entities (customer, vehicle, branch).
- **ON DELETE SET NULL** for optional relationships when applicable.