

# Rihla Car Services Complete ERD to Table Mapping

## Customers

| Attribute    | Data Type | Key    | Description                         |
|--------------|-----------|--------|-------------------------------------|
| customer_id  | INT       | PK     | Unique identifier for each customer |
| name         | VARCHAR   |        | Customer full name                  |
| email        | VARCHAR   | UNIQUE | Customer email address              |
| phone_num    | VARCHAR   |        | Customer phone number               |
| gender       | VARCHAR   |        | Customer gender                     |
| age          | INT       |        | Customer age                        |
| country      | VARCHAR   |        | Customer country                    |
| signup_date  | DATE      |        | Date the customer registered        |
| device       | VARCHAR   |        | Device used to access the platform  |
| loyalty_tier | VARCHAR   |        | Customer loyalty level              |

## Drivers

| Attribute           | Data Type | Key    | Description                       |
|---------------------|-----------|--------|-----------------------------------|
| driver_id           | INT       | PK     | Unique identifier for each driver |
| name                | VARCHAR   |        | Driver full name                  |
| email               | VARCHAR   | UNIQUE | Driver email address              |
| phone_num           | VARCHAR   |        | Driver phone number               |
| gender              | VARCHAR   |        | Driver gender                     |
| age                 | INT       |        | Driver age                        |
| years_of_experience | INT       |        | Total driving experience          |
| join_date           | DATE      |        | Date driver joined Rihla          |
| status              | VARCHAR   |        | Driver availability status        |
| avg_rating          | FLOAT     |        | Average rating received           |

## Vehicles

| Attribute | Data Type | Key | Description |
|-----------|-----------|-----|-------------|
|           |           |     |             |

|                 |         |    |                                    |
|-----------------|---------|----|------------------------------------|
| vehicle_id      | INT     | PK | Unique identifier for each vehicle |
| driver_id       | INT     | FK | Driver who owns the vehicle        |
| model           | VARCHAR |    | Vehicle model                      |
| year            | INT     |    | Manufacturing year                 |
| color           | VARCHAR |    | Vehicle color                      |
| fuel_type       | VARCHAR |    | Fuel type                          |
| capacity        | INT     |    | Passenger or cargo capacity        |
| license_country | VARCHAR |    | Vehicle registration country       |

## Trips

| Attribute     | Data Type | Key | Description                     |
|---------------|-----------|-----|---------------------------------|
| trip_id       | INT       | PK  | Unique identifier for each trip |
| customer_id   | INT       | FK  | Customer who booked the trip    |
| driver_id     | INT       | FK  | Assigned driver                 |
| vehicle_id    | INT       | FK  | Assigned vehicle                |
| pickup_lat    | FLOAT     |     | Pickup latitude                 |
| pickup_long   | FLOAT     |     | Pickup longitude                |
| dropoff_lat   | FLOAT     |     | Drop-off latitude               |
| dropoff_long  | FLOAT     |     | Drop-off longitude              |
| distance      | FLOAT     |     | Distance traveled               |
| duration      | FLOAT     |     | Trip duration                   |
| start_time    | DATETIME  |     | Trip start time                 |
| end_time      | DATETIME  |     | Trip end time                   |
| expected_time | FLOAT     |     | Estimated trip time             |
| base_fare     | FLOAT     |     | Base fare for trip              |

## Payments\_For\_Trips

| Attribute    | Data Type | Key | Description                |
|--------------|-----------|-----|----------------------------|
| payment_id   | INT       | PK  | Unique payment record      |
| trip_id      | INT       | FK  | Related trip               |
| base_fare    | FLOAT     |     | Base trip fare             |
| distance_fee | FLOAT     |     | Distance-based fee         |
| weight_fee   | FLOAT     |     | Weight-based fee (freight) |
| fuel_cost    | FLOAT     |     | Fuel cost                  |

|                |         |  |                  |
|----------------|---------|--|------------------|
| taxes          | FLOAT   |  | Applied taxes    |
| tips           | FLOAT   |  | Customer tips    |
| driver_earning | FLOAT   |  | Driver earnings  |
| org_earning    | FLOAT   |  | Company earnings |
| payment_method | VARCHAR |  | Payment method   |

## Rent\_Vehicle

| Attribute      | Data Type | Key | Description                  |
|----------------|-----------|-----|------------------------------|
| rent_id        | INT       | PK  | Unique rental identifier     |
| customer_id    | INT       | FK  | Customer renting the vehicle |
| vehicle_id     | INT       | FK  | Rented vehicle               |
| start_date     | DATE      |     | Rental start date            |
| end_date       | DATE      |     | Rental end date              |
| days_rented    | INT       |     | Number of rental days        |
| status         | VARCHAR   |     | Rental status                |
| distance_km    | FLOAT     |     | Distance driven              |
| insurance_plan | VARCHAR   |     | Insurance plan selected      |

## Payment\_For\_Rent

| Attribute        | Data Type | Key | Description                  |
|------------------|-----------|-----|------------------------------|
| payment_id       | INT       | PK  | Unique rental payment record |
| rent_id          | INT       | FK  | Associated rental            |
| base_price       | FLOAT     |     | Base rental price            |
| fuel_cost        | FLOAT     |     | Fuel cost                    |
| maintenance_cost | FLOAT     |     | Maintenance cost             |
| taxes            | FLOAT     |     | Taxes applied                |
| tips             | FLOAT     |     | Optional tips                |
| driver_cut       | FLOAT     |     | Driver share                 |
| org_cut          | FLOAT     |     | Company share                |
| total_profit     | FLOAT     |     | Final profit                 |
| payment_method   | VARCHAR   |     | Payment method               |

## Freight

| Attribute        | Data Type | Key | Description               |
|------------------|-----------|-----|---------------------------|
| freight_id       | INT       | PK  | Unique freight identifier |
| driver_id        | INT       | FK  | Assigned driver           |
| vehicle_id       | INT       | FK  | Assigned vehicle          |
| volume           | FLOAT     |     | Cargo volume              |
| weight           | FLOAT     |     | Cargo weight              |
| fragile          | BOOLEAN   |     | Fragile indicator         |
| distance         | FLOAT     |     | Delivery distance         |
| pickup_location  | VARCHAR   |     | Pickup location           |
| dropoff_location | VARCHAR   |     | Drop-off location         |
| status           | VARCHAR   |     | Freight status            |
| created_at       | DATETIME  |     | Order creation time       |
| delivered_at     | DATETIME  |     | Delivery completion time  |

## Insurance

| Attribute     | Data Type | Key    | Description                 |
|---------------|-----------|--------|-----------------------------|
| insurance_id  | INT       | PK     | Unique insurance identifier |
| vehicle_id    | INT       | FK     | Covered vehicle             |
| freight_id    | INT       | FK     | Covered freight             |
| provider_name | VARCHAR   |        | Insurance provider          |
| policy_num    | VARCHAR   | UNIQUE | Policy number               |
| coverage_type | VARCHAR   |        | Coverage type               |
| expiry_date   | DATE      |        | Policy expiry date          |

## Maintenance

| Attribute        | Data Type | Key | Description                   |
|------------------|-----------|-----|-------------------------------|
| maintenance_id   | INT       | PK  | Maintenance record identifier |
| vehicle_id       | INT       | FK  | Vehicle serviced              |
| workshop_name    | VARCHAR   |     | Service workshop              |
| description      | VARCHAR   |     | Maintenance description       |
| maintenance_type | VARCHAR   |     | Type of maintenance           |
| cost             | FLOAT     |     | Service cost                  |
| service_date     | DATE      |     | Service date                  |

|                  |     |  |                  |
|------------------|-----|--|------------------|
| days_out_of_work | INT |  | Vehicle downtime |
|------------------|-----|--|------------------|

## Ratings

| Attribute   | Data Type | Key | Description            |
|-------------|-----------|-----|------------------------|
| rating_id   | INT       | PK  | Rating identifier      |
| trip_id     | INT       | FK  | Related trip           |
| customer_id | INT       | FK  | Customer giving rating |
| driver_id   | INT       | FK  | Driver being rated     |
| score       | INT       |     | Rating score           |
| comments    | VARCHAR   |     | Customer comments      |
| date        | DATE      |     | Rating date            |

## Complaints

| Attribute       | Data Type | Key | Description                   |
|-----------------|-----------|-----|-------------------------------|
| complaint_id    | INT       | PK  | Complaint identifier          |
| trip_id         | INT       | FK  | Related trip                  |
| customer_id     | INT       | FK  | Customer submitting complaint |
| complaint_text  | VARCHAR   |     | Complaint details             |
| status          | VARCHAR   |     | Complaint status              |
| resolution_date | DATE      |     | Date of resolution            |

## Documents

| Attribute       | Data Type | Key    | Description              |
|-----------------|-----------|--------|--------------------------|
| document_id     | INT       | PK     | Document identifier      |
| driver_id       | INT       | FK     | Related driver           |
| document_type   | VARCHAR   |        | Type of document         |
| document_number | VARCHAR   | UNIQUE | Official document number |
| file_url        | VARCHAR   |        | Stored file location     |
| status          | VARCHAR   |        | Verification status      |
| created_at      | DATE      |        | Upload date              |
| reviewed_at     | DATE      |        | Review date              |
| expires_at      | DATE      |        | Expiration date          |

