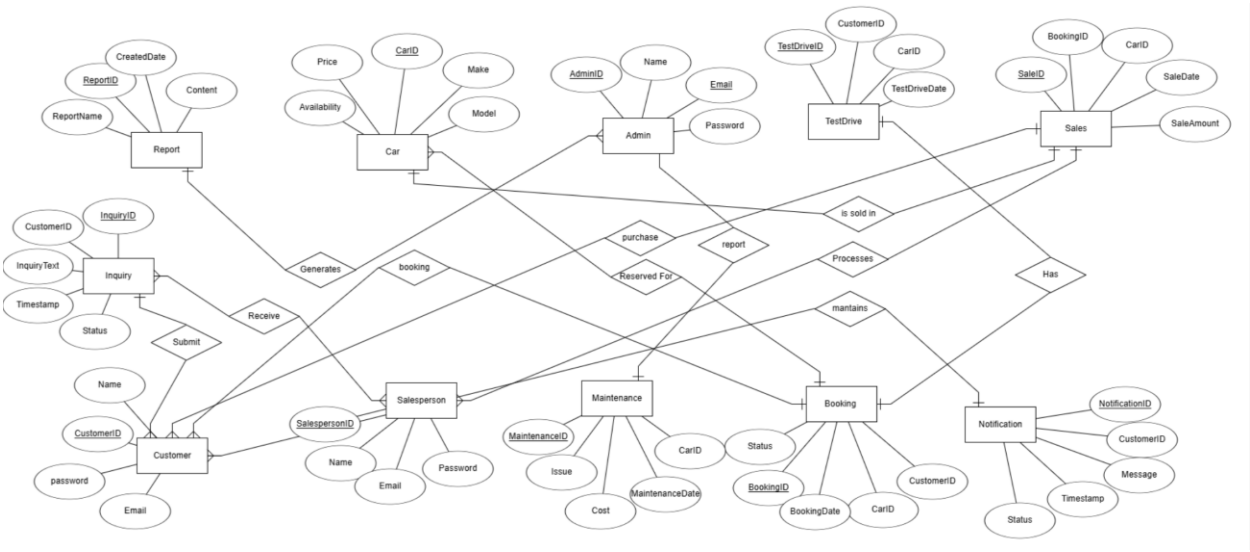
Milestone 2

ERD



Relational Database Schema

Salesperson

SalesPersonID	Name	Email	Password

Customer

CustomerID	Name	Email	Password

Admin

AdminID	Name	Email	Password

Car

CarID	Model	Make	Price	Availability

Sales

SaleID	CarID	BookingID	SaleDate	SaleAmount

Booking

BookingID	BookingDate	Status	CustomerID	CarID

Maintenance

MaintenanceID	CarID	Issue	MaintenanceDate	Cost

TestDrive

TestDriveID	CustomerID	CarID	TestDriveDate

Report

ReportID	ReportName	CreatedDate	Content

Inquiry

InquiryID	CustomerID	InquiryText	Timestamp	Status

Notification

NotificationID	CustomerID	Message	Timestamp	Status

SQL Queries and Requirement-Query Matrix

SQL Queries

Insert Data

QUR_001: Insert a New Customer

```
INSERT INTO Customer (Name, Email, Password)
VALUES ('John Doe', 'johndoe@example.com', 'password123');
```

QUR_002: Insert a New Car

```
INSERT INTO Car (Model, Make, Price, Availability)
VALUES ('Camry', 'Toyota', 25000, 1);
```

QUR_003: Insert a New Booking

```
INSERT INTO Booking (CustomerID, CarID, BookingDate, Status)
VALUES (1, 1, NOW(), 'Pending');
```

Update Data

QUR_004: Update Car Price

```
UPDATE Car
SET Price = 26000
WHERE CarID = 1;
```

QUR_005: Update Booking Status

```
UPDATE Booking
SET Status = 'Approved'
WHERE BookingID = 1;
```

Delete Data

QUR_006: Delete a Customer Record

```
DELETE FROM Customer
WHERE CustomerID = 1;
```

QUR_007: Delete a Car from Inventory

```
DELETE FROM Car
WHERE CarID = 1;
```

Select Queries

QUR_008: Retrieve All Available Cars

```
SELECT *
FROM Car
WHERE Availability = 1;
```

QUR_009: Retrieve Bookings and Related Customer Details

```
SELECT b.BookingID, c.Name AS CustomerName, car.Model AS CarModel, b.Status
FROM Booking b
JOIN Customer c ON b.CustomerID = c.CustomerID
JOIN Car car ON b.CarID = car.CarID;
```

QUR_010: Retrieve Total Sales by Model

```
SELECT car.Model, COUNT(s.SaleID) AS TotalSales, SUM(s.SaleAmount) AS TotalRevenue
FROM Sales s
JOIN Car car ON s.CarID = car.CarID
GROUP BY car.Model;
```

QUR_011: Retrieve All Test Drives for a Specific Customer

```
SELECT td.TestDriveID, car.Model, td.TestDriveDate, td.Status
FROM TestDrive td
JOIN Car car ON td.CarID = car.CarID
WHERE td.CustomerID = 1;
```

QUR_012: Retrieve Cars Within a Specific Price Range

```
SELECT *
FROM Car
WHERE Price BETWEEN 15000 AND 30000;
```

QUR_013: Retrieve Unresolved Customer Inquiries

```
SELECT i.InquiryID, c.Name AS CustomerName, i.InquiryText, i.Timestamp
FROM Inquiry i
JOIN Customer c ON i.CustomerID = c.CustomerID
WHERE i.Status = 'New';
```