

Problem Statement : Mechanics often face challenges in efficiently managing repair services, customer interactions, and payment processing in their automotive repair shops. To streamline these operations, there is a need for a comprehensive Automotive Repair Management System that facilitates seamless communication between mechanics and customers while effectively tracking repair details and payments.

Title: Automotive Repair Management System

-- Create Customer table

```
CREATE TABLE customer (  
customer_id INT PRIMARY KEY,  
name VARCHAR(50),  
address VARCHAR(100),  
phone_no VARCHAR(20)  
);
```

-- Create Vehicle table

```
CREATE TABLE vehicle (  
plate_no VARCHAR(10) PRIMARY KEY,  
model VARCHAR(50),  
customer_id INT,  
FOREIGN KEY (customer_id) REFERENCES customer(customer_id)  
);
```

-- Create Problems table

```
CREATE TABLE problems (  

```

```
problem_no INT PRIMARY KEY,  
problem_status VARCHAR(20),  
price DECIMAL(10,2),  
time VARCHAR(10),  
job_id INT,  
FOREIGN KEY (job_id) REFERENCES job_card(job_id)  
);
```

-- Create Payment table

```
CREATE TABLE payment (  
payment_id VARCHAR(10) PRIMARY KEY,  
status VARCHAR(20),  
mode VARCHAR(20),  
job_id INT,  
FOREIGN KEY (job_id) REFERENCES job_card(job_id)  
);
```

-- Create Job Card table

```
CREATE TABLE job_card (  
job_id INT PRIMARY KEY,  
price DECIMAL(10,2),  
delivery_time VARCHAR(20),  
plate_no VARCHAR(10),
```

```
mechanic_id VARCHAR(10),  
customer_id INT,  
FOREIGN KEY (plate_no) REFERENCES vehicle(plate_no),  
FOREIGN KEY (mechanic_id) REFERENCES mechanic(mechanic_id),  
FOREIGN KEY (customer_id) REFERENCES customer(customer_id)  
);
```

-- Create Mechanic table

```
CREATE TABLE mechanic (  
mechanic_id VARCHAR(10) PRIMARY KEY,  
name VARCHAR(50)  
);
```

-- Insert sample data into Customer table

```
INSERT INTO customer (customer_id, name, address, phone_no)  
  
VALUES  
(1, 'Ayush', 'punes1', '123456789'),  
(2, 'Vedant', 'punes2', '9876543210'),  
(3, 'Sher', 'punes3', '5551234567');
```

-- Insert sample data into Vehicle table

```
INSERT INTO vehicle (plate_no, model, customer_id)  
  
VALUES  
( 'AfC257', 'Toyota', 1),
```

```
('XYZ456', 'Honda', 2),  
( 'DEF789', 'Ford', 3);
```

-- Insert sample data into Mechanic table

```
INSERT INTO mechanic (mechanic_id, name)  
  
VALUES  
  
( 'M001', 'AARYAN'),  
( 'M002', 'CHINMAY'),  
( 'M003', 'AARYA');
```

-- Insert sample data into Job Card table

```
INSERT INTO job_card (job_id, price, delivery_time, plate_no, mechanic_id, customer_id)  
  
VALUES  
  
(1, 200.00, '3 days', 'AfC2573', 'M001', 1),  
(2, 300.00, '2 days', 'XYZ456', 'M002', 2),  
(3, 250.00, '4 days', 'DEF789', 'M003', 3);
```

-- Insert sample data into Problems table

```
INSERT INTO problems (problem_no, problem_status, price, time, job_id)  
  
VALUES  
  
(1, 'Pending', 100.00, '2 hours', 1),  
(2, 'Completed', 200.00, '3 hours', 2),  
(3, 'In Progress', 150.00, '4 hours', 3);
```

-- Insert sample data into Payment table

INSERT INTO payment (payment_id, status, mode, job_id)

VALUES

('PAY001', 'Paid', 'Cash', 1),

('PAY002', 'Unpaid', 'Credit', 2),

('PAY003', 'Paid', 'Debit', 3);