

Lab:- 9 & 10

Car Dealer management system

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Course : MC212 DBMS

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DDL Statements

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CREATE TABLE Car {
    car_id      numeric(6,0) PRIMARY KEY
    NOT NULL AUTO_INCREMENT,
    price       numeric(7,0) NOT NULL,
    colour      varchar(10),
    model       varchar(20) NOT NULL,
    fuel_type   varchar(10),
    add_date    date DEFAULT CURRENT_DATE NOT NULL,
    car_type    varchar(5) CHECK(car_type in
    ('rent', 'old', 'new')),
    FOREIGN KEY (model)
    REFERENCES Car_company(Model)
};

CREATE TABLE Car_company {
    Model       varchar(20) PRIMARY KEY,
    company_name varchar(20)
```

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};

CREATE TABLE Rental_car{
    rental_car_id    numeric(6,0) PRIMARY KEY,
    availability      varchar(1)
    CHECK(availability in ('Y','N')),
    FOREIGN KEY (rental_car_id)
    REFERENCES Car(car_id)
};

CREATE TABLE Old_car{
    car_id    numeric(6,0) PRIMARY KEY,
    safety_ratings    numeric(1,0)
    CHECK(safety_ratings<=5 &&
    safety_ratings>=0),
    transmission_type  varchar(10),
    warranty_year      numeric(4,0),
    FOREIGN KEY (car_id)
    REFERENCES Car(car_id)
};

CREATE TABLE New_car{
    car_id    numeric(6,0) PRIMARY KEY,
    year      numeric(4,0),
    km        numeric(6,0),
    seller_id  numeric(10,0),
    Description  varchar(50),
    FOREIGN KEY (car_id)
    REFERENCES Car(car_id),
    FOREIGN KEY (seller_id)
    REFERENCES Customers(customer_id)
};

CREATE TABLE Customers{
    customer_id  varchar(50) PRIMARY KEY,
    first_name   varchar(15) NOT NULL,
    middle_name  varchar(15) NOT NULL,

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        last_name      varchar(15) NOT NULL,
        street_number  numeric(3,0),
        area_name      varchar(15),
        apt_number     numeric(3,0),
        password       varchar(10) NOT NULL,
        pin_code       numeric(6,0) NOT NULL,
        FOREIGN KEY (pin_code)
        REFERENCES Address(pin_code)
    };

CREATE TABLE Address{
    pin_code  numeric(6,0) PRIMARY KEY,
    city     varchar(15),
    state    varchar(15)
};

CREATE TABLE Phone_no{
    customer_id  varchar(50) PRIMARY KEY,
    mobile_no    numeric(10,0),
    PRIMARY KEY(customer_id,mobile_no),
    FOREIGN KEY (customer_id)
    REFERENCES Customers(customer_id)
};

CREATE TABLE Transaction{
    Transaction_id  numeric(10,0) PRIMARY KEY,
    Amount         numeric(10,0),
    Buyer_ID       varchar(50) NOT NULL,
    Seller_ID      varchar(50) NOT NULL,
    Date           date DEFAULT CURRENT_DATE NOT NULL,
    Type           varchar(4) CHECK(Type in
('CtoA', 'MtoA', 'CtoC')),
    car_id        numeric(6,0),
    FOREIGN KEY (Buyer_ID)
    REFERENCES Customers(customer_id),

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        FOREIGN KEY (Seller_ID)
        REFERENCES Customers(customer_id),
        FOREIGN KEY (customer_id)
        REFERENCES Customers(customer_id)
    };

CREATE TABLE Admin{
    admin_id varchar(50) PRIMARY KEY
    FOREIGN KEY (admin_id)
    REFERENCES Customers(customer_id)
};

CREATE TABLE Mechanic {
    mechanic_id varchar(50) PRIMARY KEY,
    starting_date date DEFAULT CURRENT_DATE NOT
    NULL,
    rating numeric(1,0) CHECK(rating<=5 &&
    rating>=0),
    FOREIGN KEY (mechanic_id)
    REFERENCES Customers(customer_id)
};

CREATE TABLE Feedback{
    customer_id varchar(50),
    time timestamp DEFAULT CURRENT_TIMESTAMP,
    description varchar(50) NOT NULL,
    PRIMARY KEY(customer_id, time),
    FOREIGN KEY (customer_id)
    REFERENCES Customers(customer_id)
};

CREATE TABLE Service_Request{
    customer_id varchar(50),
    request_time timestamp DEFAULT
    CURRENT_TIMESTAMP,
    description_about_service varchar(50)
    Mechanic_id varchar(50),

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        PRIMARY KEY(customer_id,request_time),
        FOREIGN KEY (customer_id)
        REFERENCES Customers(customer_id)
        FOREIGN KEY (Mechanic_id)
        REFERENCES Mechanic(mechanic_id)
};

CREATE TABLE Bargain_Request{
    customer_id  varchar(50),
    car_id       numeric(6,0),
    price        numeric(10,0),
    PRIMARY KEY(customer_id,car_id, price),
    request_time timestamp DEFAULT
CURRENT_TIMESTAMP,
    accept_time  timestamp
    FOREIGN KEY (customer_id)
    REFERENCES Customers(customer_id)
    FOREIGN KEY (car_id)
    REFERENCES Old_car(car_id)
};

CREATE TABLE Rent{
    car_id       numeric(6,0),
    customer_id  varchar(50),
    rented_date  date DEFAULT CURRENT_DATE NOT
NULL,
    due_date     date NOT NULL,
    PRIMARY KEY(customer_id,car_id,rented_date),
    FOREIGN KEY (customer_id)
    REFERENCES Customers(customer_id)
    FOREIGN KEY (car_id)
    REFERENCES Rental_car(car_id)
};

CREATE TABLE Buy_newcar{

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        car_id    numeric(6,0) PRIMARY KEY,
        customer_id varchar(50),
        date      date DEFAULT CURRENT_DATE NOT NULL,
        FOREIGN KEY (car_id)
        REFERENCES New_car(car_id)
};

CREATE TABLE Service_accept{
    customer_id    varchar(50),
    request_time   timestamp DEFAULT
CURRENT_TIMESTAMP,
    mechanic_id    varchar(50),
    accept_time     timestamp,
    rating_per_service numeric(1,0)
    CHECK(rating_per_service<=5 &&
rating_per_service >=0),
    PRIMARY KEY(customer_id,request_time),
    FOREIGN KEY (customer_id,request_time)
    REFERENCES Service_Request
    (customer_id,request_time)
};

```