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# Car Renting System

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**Assigned TA Name:** Shamia Magdy

**Team ID:** 130

**Team Members:**

Name	Seat Number	Level	Department
عبدالرحمن عصام حسن حسن	2023170318	2	No Department
حسن علي حسن عبدالجيد محمد	2023170195	2	No Department
احمد هشام حافظ صديق	20241701100	2	No Department
سراج الدين عاطف شبل	20241700370	2	No Department
احمد صلاح محمد رزق	2023170039	2	No Department
احمد ابوسريع ابراهيم سويلم	20241700014	2	No Department
مهند محمد يحيى محمود	2023170647	2	No Department
يوسف عصمت صالح هواري	20241701168	2	No Department

```

CREATE TABLE Customer (
    CustomerID INT PRIMARY KEY,
    Name VARCHAR2(100),
    Phone VARCHAR2(20),
    Email VARCHAR2(100),
    Address VARCHAR2(200)
);

CREATE TABLE Car (
    CarID INT PRIMARY KEY,
    Model VARCHAR2(100),
    Year INT,
    Status VARCHAR2(20),
    DailyPrice NUMBER(10,2)
);

CREATE TABLE Employee (
    EmployeeID INT PRIMARY KEY,
    Name VARCHAR2(100),
    Phone VARCHAR2(20),
    Position VARCHAR2(50)
);

CREATE TABLE Rental (
    RentalID INT PRIMARY KEY,
    CustomerID INT,
    CarID INT,
    EmployeeID INT,
    StartDate DATE,
    EndDate DATE,
    TotalCost NUMBER(10,2),
    FOREIGN KEY (CustomerID) REFERENCES Customer(CustomerID),
    FOREIGN KEY (CarID) REFERENCES Car(CarID),
    FOREIGN KEY (EmployeeID) REFERENCES Employee(EmployeeID)
);

CREATE TABLE Payment (
    PaymentID INT PRIMARY KEY,
    RentalID INT,
    PaymentDate DATE,
    Amount NUMBER(10,2),
    Method VARCHAR2(50),
    FOREIGN KEY (RentalID) REFERENCES Rental(RentalID)
);

-- INSERT

-- CUSTOMER
INSERT INTO Customer (CustomerID, Name, Phone, Email, Address)
VALUES (1, 'Ahmed Salah', '01012345678', 'ahmed.salah@gmail.com', 'Cairo, Egypt');

INSERT INTO Customer (CustomerID, Name, Phone, Email, Address)
VALUES (2, 'Sara Mohamed', '01087654321', 'sara.mohamed@gmail.com', 'Giza, Egypt');

INSERT INTO Customer (CustomerID, Name, Phone, Email, Address)
VALUES (3, 'John Smith', '01555554321', 'john.smith@yahoo.com', 'Hurghada, Egypt');

-- CAR
INSERT INTO Car (CarID, Model, Year, Status, DailyPrice)
VALUES (1, 'Toyota Corolla', 2024, 'Available', 450.00);

INSERT INTO Car (CarID, Model, Year, Status, DailyPrice)
VALUES (2, 'Hyundai Elantra', 2021, 'Rented', 500.00);

```

```

INSERT INTO Car (CarID, Model, Year, Status, DailyPrice)
VALUES (3, 'BMW X3', 2019, 'Available', 1200.00);

-- EMPLOYEE
INSERT INTO Employee (EmployeeID, Name, Phone, Position)
VALUES (1, 'Omar Adel', '01123456789', 'Manager');

INSERT INTO Employee (EmployeeID, Name, Phone, Position)
VALUES (2, 'Mona Sameh', '01223456789', 'Sales Agent');

INSERT INTO Employee (EmployeeID, Name, Phone, Position)
VALUES (3, 'Karim Tarek', '01010999994', 'Support Agent');

-- RENTAL

INSERT INTO Rental (RentalID, CustomerID, CarID, EmployeeID, StartDate, EndDate, TotalCost)
VALUES (1, 1, 2, 2, '05-DEC-25', '08-DEC-25', 1500.00);

INSERT INTO Rental (RentalID, CustomerID, CarID, EmployeeID, StartDate, EndDate, TotalCost)
VALUES (2, 2, 1, 1, '10-NOV-25', '12-NOV-25', 900.00);

INSERT INTO Rental (RentalID, CustomerID, CarID, EmployeeID, StartDate, EndDate, TotalCost)
VALUES (3, 3, 3, 3, '01-OCT-25', '05-OCT-25', 4800.00);

-- PAYMENT
INSERT INTO Payment (PaymentID, RentalID, PaymentDate, Amount, Method)
VALUES (1, 1, '08-DEC-25', 1500.00, 'Credit Card');

INSERT INTO Payment (PaymentID, RentalID, PaymentDate, Amount, Method)
VALUES (2, 2, '12-NOV-25', 900.00, 'Cash');

INSERT INTO Payment (PaymentID, RentalID, PaymentDate, Amount, Method)
VALUES (3, 3, '05-OCT-25', 4800.00, 'Bank Transfer');

COMMIT;

-- code used for forms

-- 1st button
DECLARE
    v_count NUMBER;
BEGIN
    SELECT COUNT(*)
    INTO v_count
    FROM CUSTOMER
    WHERE CUSTOMERID = :CUSTOMER.CUSTOMERID;

    IF v_count = 0 THEN
        COMMIT_FORM;
    END IF;

    GO_ITEM('RENTAL.CARID');
END;

-- sequences
create sequence rent_seq
start with 4
increment by 1;

-- PL/ SQL of forms

```

```

-- 2nd button

DECLARE
    price NUMBER;
BEGIN
    SELECT DAILYPRICE
    INTO price
    FROM CAR
    WHERE CARID = :RENTAL.CARID;

    :RENTAL.COST := price * :RENTAL.DAYS;
    :GLOBAL.TCOST := :RENTAL.COST;

    GO_ITEM('PAYMENT.PAYMENT_METHOD');
END;

-- 3rd button
DECLARE
    v_rental_id    NUMBER;
    v_customer_id NUMBER;
    b NUMBER;
BEGIN
    v_customer_id := :CUSTOMER.CUSTOMERID;

    GO_BLOCK('CUSTOMER');

    IF :SYSTEM.RECORD_STATUS = 'INSERT' THEN
        CLEAR_RECORD;
    END IF;

    SELECT rent_seq.NEXTVAL
    INTO v_rental_id
    FROM dual;

    INSERT INTO RENTAL
        (RENTALID, CUSTOMERID, CARID, EMPLOYEEID, STARTDATE, ENDDATE, TOTALCOST)
    VALUES
        (v_rental_id,
         v_customer_id,
         :RENTAL.CARID,
         2,
         SYSDATE,
         SYSDATE + :RENTAL.DAYS,
         :GLOBAL.TCOST);

    INSERT INTO PAYMENT
        (PAYMENTID, RENTALID, PAYMENTDATE, AMOUNT, METHOD)
    VALUES
        (v_rental_id,
         v_rental_id,
         SYSDATE,
         :GLOBAL.TCOST,
         :PAYMENT.PAYMENT_METHOD);

    COMMIT;

    b := show_alert('ALERT106');

    CLEAR_FORM(NO_VALIDATE);
    GO_ITEM('CUSTOMER.CUSTOMERID');
END;

```



Action Edit Query Block Record Field Help Window

ORACLE

WINDOW1

Customer

Customerid	
Name	
Phone	
Email	
Address	

Choose a Car

Enter a query; press Ctrl+F11 to execute, F4 to cancel.

Record: 1/1 | Enter-Qu... | List of Valu...

Action Edit Query Block Record Field Help Window

ORACLE

WINDOW1

Customer

Customerid

Name

Phone

Email

Address

Customer Info

Find %

Customerid	Name	Phone	Email	Address
1	Ahmed Salah	01012345678	ahmed.salah...	Cairo, Egypt
2	Sara Mohamed	01087654321	sara.moham...	Giza, Egypt
3	John Smith	01555554321	john.smith@...	Hurghada, E...

Find OK Cancel

Choose a Car

Choices in list: 3  
Record: 1/1 Enter-Qu... List of Valu...

Action Edit Query Block Record Field Help Window

ORACLE

WINDOW1

Car

Carid

Availability

Days

Rental Days

Pay

FRM-40202: Field must be entered.

Record: 1/1 ... List of Valu...

Action Edit Query Block Record Field Help Window

ORACLE



WINDOW1

Car

Carid

Car Info

Find %

Carid	Model	Year	Status
1	Toyota Corolla	2024	Available
2	Hyundai Elantra	2021	Rented
3	BMW X3	2019	Available

Find OK Cancel

Days

Pay

ORACLE

Action Edit Query Block Record Field Help Window



WINDOW1

Car

Carid 2

Availability

Days

Rental Days

3  
4  
5  
6  
7  
8  
9  
10

Pay

Record: 1/1

ORACLE

Action Edit Query Block Record Field Help Window



WINDOW1

Cost

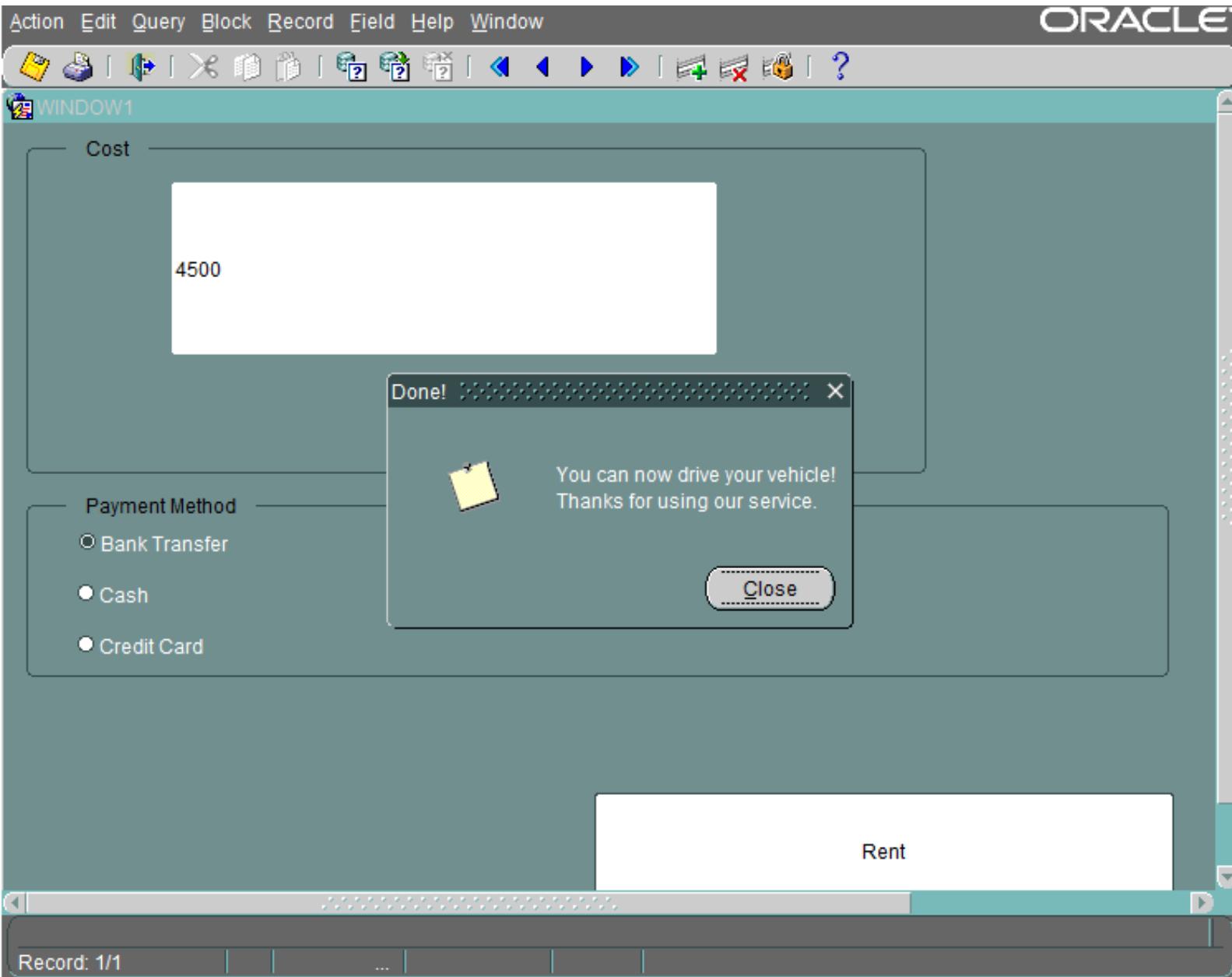
4500

Payment Method

- Bank Transfer
- Cash
- Credit Card

Rent

Record: 1/1



ORCLconnHR | CUSTOMER  
0.0038254 seconds

```
select * from rental;
```

Results | Script Output | Explain | Autotrace | DBMS Output | OWA Output

results:

	RENTALID	CUSTOMERID	CARID	EMPLOYEEID	STARTDATE	ENDDATE	TOTALCOST
1	7	2	2	2	14-DEC-25	20-DEC-25	3000
2	8	3	2	2	14-DEC-25	23-DEC-25	4500
3	9	3	2	2	14-DEC-25	23-DEC-25	4500
4	1	1	2	2	05-DEC-25	08-DEC-25	1500
5	2	2	1	1	10-NOV-25	12-NOV-25	900
6	3	3	2	3	01-OCT-25	05-OCT-25	4800

ORCLconnHR CUSTOMER  
0.0024626 seconds

```
select * from payment;
```

Results Script Output Explain Autotrace DBMS Output OWA Output

Results:

	PAYMENTID	RENTALID	PAYMENTDATE	AMOUNT	METHOD
1	7	7	14-DEC-25	3000	Bank Transfer
2	8	8	14-DEC-25	4500	Credit Card
3	9	9	14-DEC-25	4500	Cash
4	1	1	08-DEC-25	1500	Credit Card
5	2	2	12-NOV-25	900	Cash
6	3	3	05-OCT-25	4800	Bank Transfer

RESSED

MODULE1: CANVA\_CUSTOMER

Canvas: CANVA\_CUSTOMER Block: <Null>

Segoe UI

Customer

Customerid CUSTOMERID  
Name NAME  
Phone PHONE  
Email EMAIL  
Address ADDRESS

Choose a Car

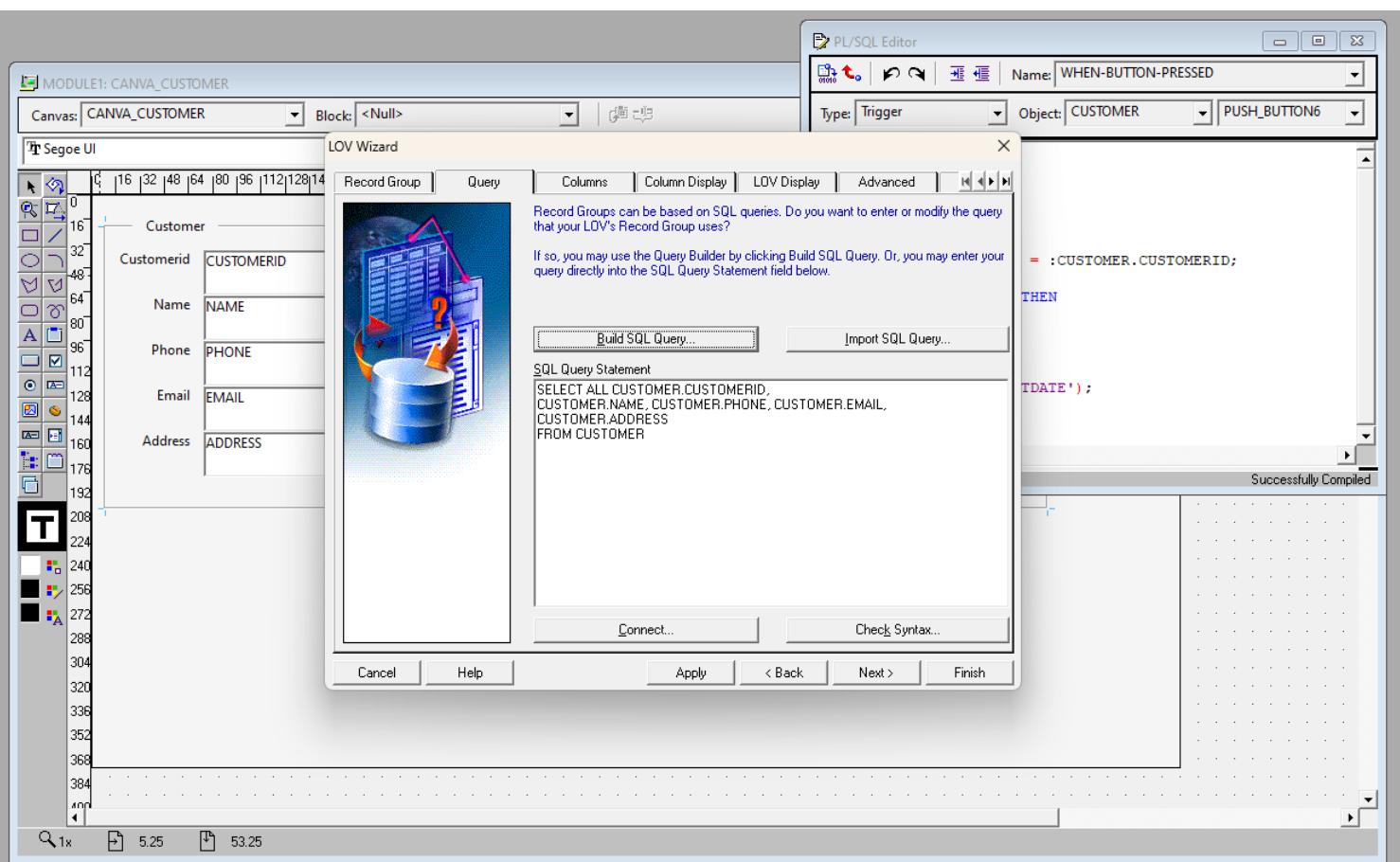
PL/SQL Editor

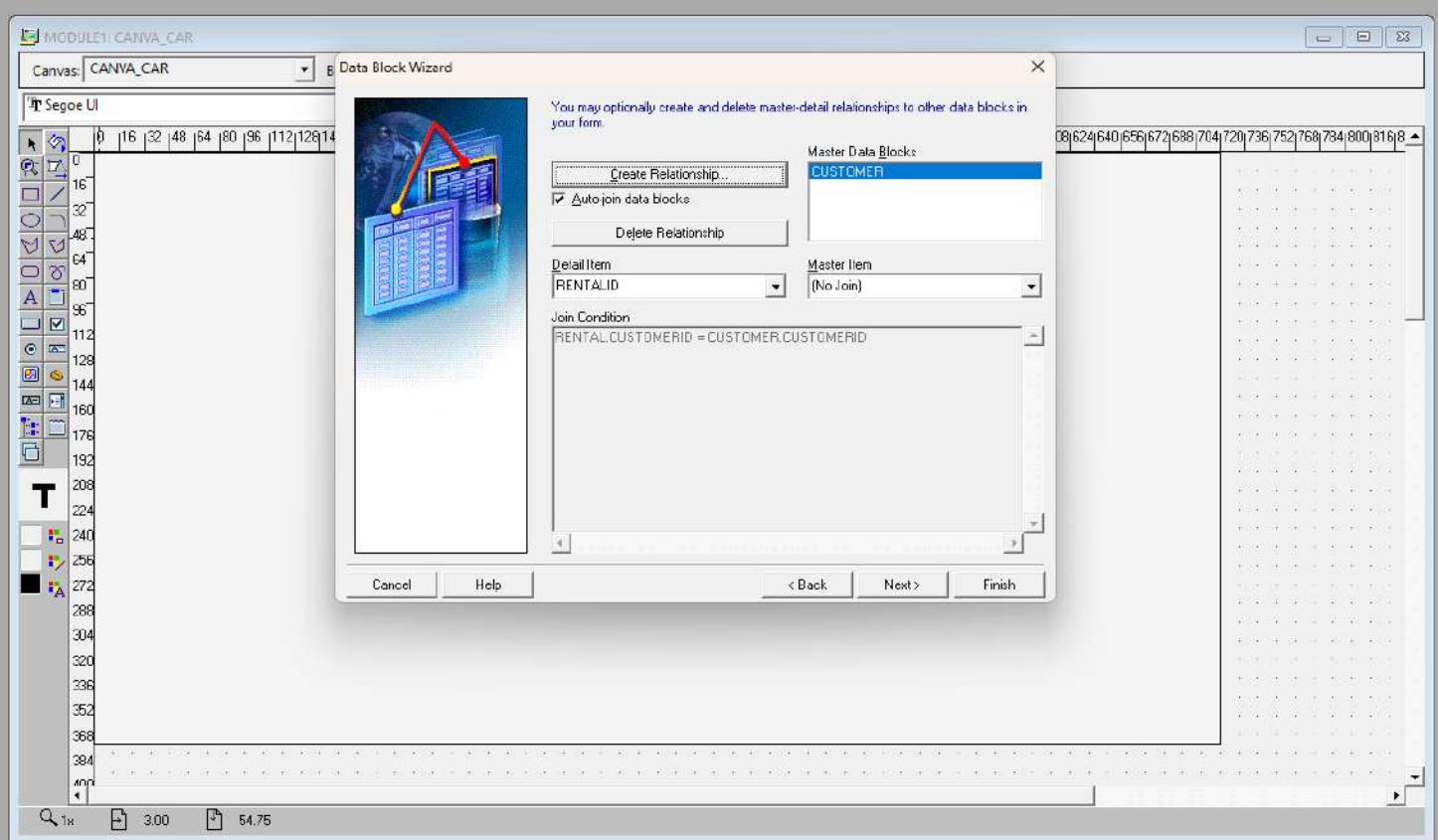
Name: WHEN-BUTTON-PRESSED

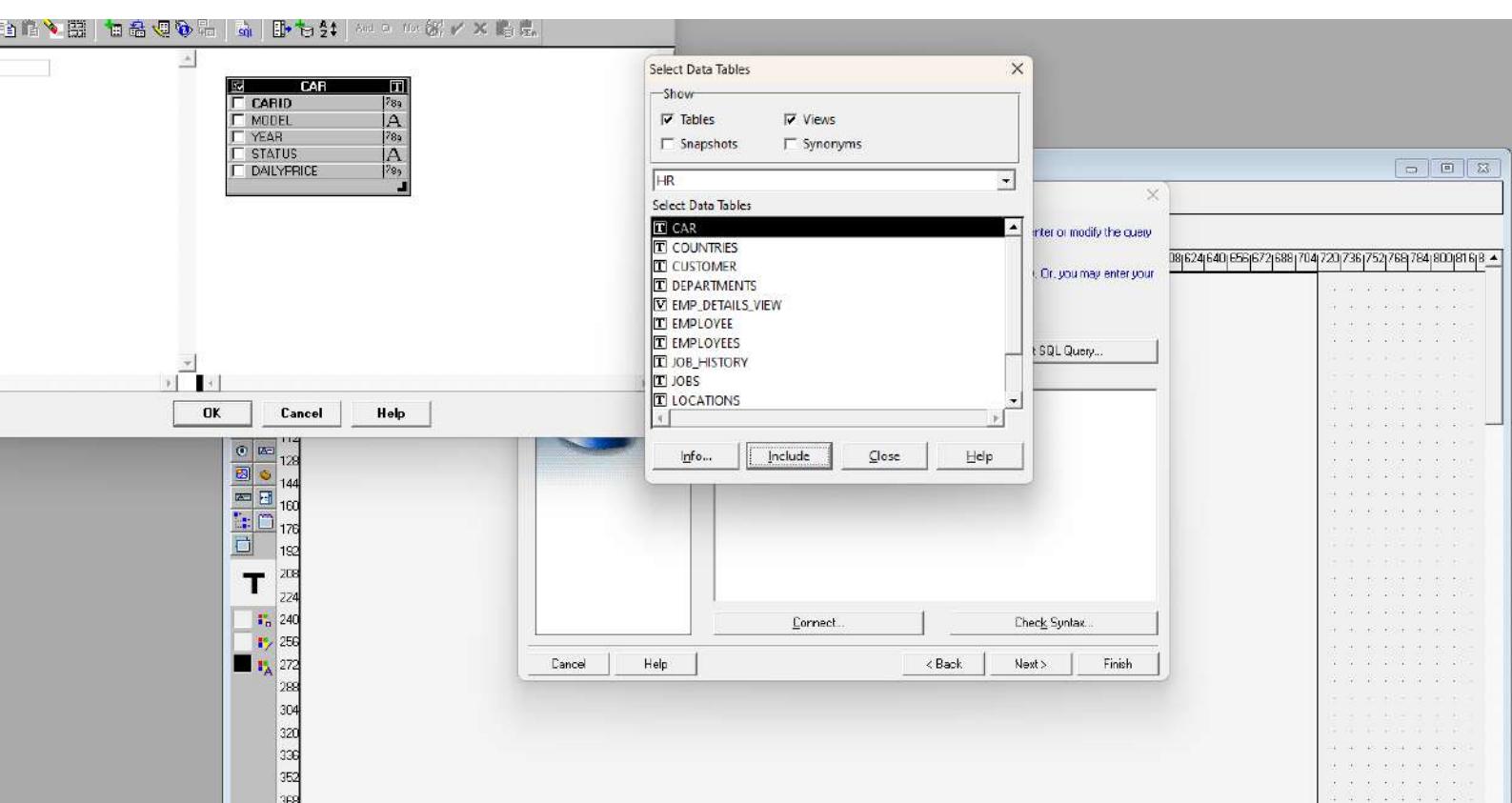
Type: Trigger Object: CUSTOMER Push\_Button6

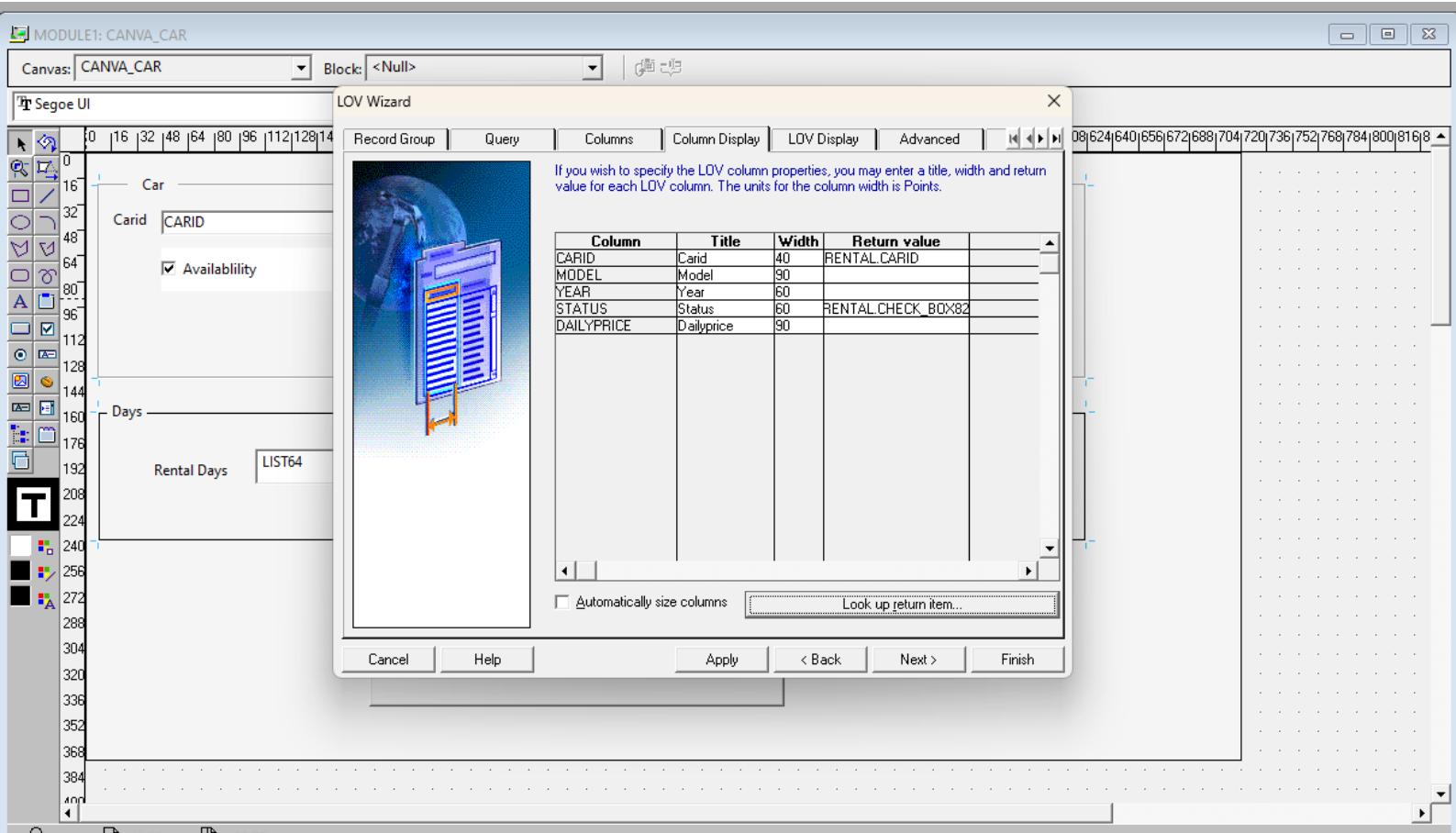
```
1 DECLARE
2     v_count NUMBER;
3 BEGIN
4     SELECT COUNT(*)
5         INTO v_count
6     FROM Customer
7     WHERE CustomerID = :CUSTOMER.CUSTOMERID;
8
9     IF v_count != 0 THEN
10        COMMIT_FORM;
11    END IF;
12 END;
13
14 GO_ITEM('RENTAL.STARTDATE');
```

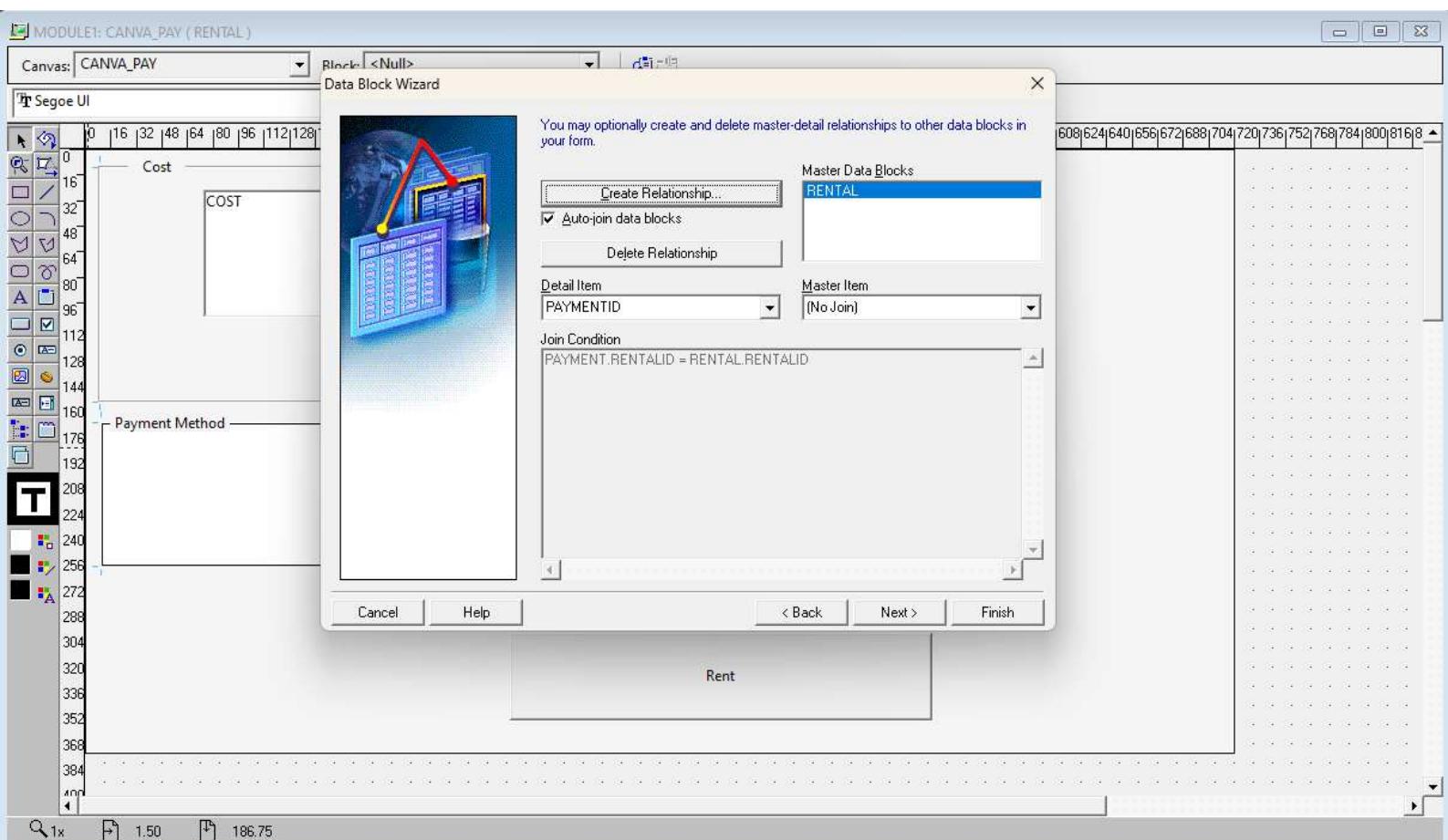
Not Modified Successfully Compiled











The screenshot shows the Oracle Forms Designer interface. On the left is the 'Canvas' window titled 'MODULE1: CANVA\_PAY (RENTAL)'. It displays a graphical user interface with several components: a large rectangular area labeled 'COST' at position [138, 138, 438, 438], a group of radio buttons for 'Payment Method' with options 'Bank Transfer', 'Cash', and 'Credit Card' at [108, 488, 178, 588], and a smaller rectangular area labeled 'Rent' at [348, 588, 648, 648]. The canvas has a grid with numerical values from 0 to 448 along the top and left axes. On the right is the 'PL/SQL Editor' window titled 'PL/SQL Editor' with the name 'WHEN-BUTTON-PRESSED'. It shows a trigger for the 'CUSTOMER' object on the 'RENT\_BUTTON'. The code is:

```
1 Declare
2 b number;
3 begin
4   b := show_alert('ALERT106');
5 end;
```

The status bar at the bottom of the PL/SQL Editor indicates 'Not Modified' and 'Successfully Compiled'.

Property Palette

Find:

Alert: ALERT106

General	
■ Name	ALERT106
◦ Subclass Information	
◦ Comments	
Functional	
■ Title	Done!
■ Message	You can now drive your vehicle! That's
■ Alert Style	Note
■ Button 1 Label	Close
■ Button 2 Label	
◦ Button 3 Label	
◦ Default Alert Button	Button 1
Visual Attributes	
◦ Visual Attribute Group	DEFAULT
Color	
◦ Foreground Color	<Unspecified>
◦ Background Color	<Unspecified>
◦ Fill Pattern	<Unspecified>
Font	
◦ Font Name	<Unspecified>
◦ Font Size	<Unspecified>

MODULE1: CANVA\_CAR (RENTAL)

Canvas: CANVA\_CAR Block: <Null>

Segoe UI

Carid :CARID  
Availability

Rental Days DAYS

Pay

PL/SQL Editor

Name: WHEN-BUTTON-PRESSED

Type: Trigger Object: RENTAL PUSH\_BUTTON78

```
1 DECLARE
2     price NUMBER;
3 BEGIN
4     SELECT DAILYPRICE
5         INTO price
6     FROM CAR
7     WHERE CARID = :RENTAL.CARID;
8
9     :RENTAL.TOTALCOST := price * :RENTAL.DAYS;
10 END;
11
12 GO_ITEM('PAYMENT.PAYMENT_METHOD');
```

Modified Not Compiled

1x 585.00 213.00