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/*-- Calculate landing, maintenance, fuelling, and parking fees for the
selected customer*/
SELECT
    CASE
        WHEN Customer.Customer_Type = 'corporation' THEN 'Corporation'
        ELSE 'Not a Corporation'
    END AS Customer_Type,
    Aircraft.Aircraft_Registration_Number,
    SUM(Flight_Record.Landing_Fee) AS total_landing_fees,
    SUM(Maintenance_Record.Maintenance_Cost) AS total_maintenance_fees,
    SUM(Fuelling_Record.Fuelling_Cost) AS total_fuelling_fees,
    SUM(Parking_Record.Parking_Cost) AS total_parking_fees
FROM
    Flight_Record
JOIN
    Aircraft ON Flight_Record.Aircraft_Registration_Number =
Aircraft.Aircraft_Registration_Number
JOIN
    Customer ON Aircraft.Customer_ID = Customer.Customer_ID
LEFT JOIN
    Maintenance_Record ON Aircraft.Aircraft_Registration_Number =
Maintenance_Record.Aircraft_Registration_Number
LEFT JOIN
    Fuelling_Record ON Aircraft.Aircraft_Registration_Number =
Fuelling_Record.Aircraft_Registration_Number
LEFT JOIN
    Parking_Record ON Aircraft.Aircraft_Registration_Number =
Parking_Record.Aircraft_Registration_Number
WHERE
    Customer.Customer_ID = 2
    AND Flight_Record.Flight_Date_And_Time BETWEEN '2024-02-01' AND '2024-
02-29'
GROUP BY
    Customer.Customer_Type,
    Aircraft.Aircraft_Registration_Number;

/*-- List pilots who are also customers and made the most take-offs and
landings*/
SELECT
    Pilot.Customer_ID,
    Pilot.Pilot_ID,
    COUNT(Flight_Record.Flight_ID) AS total_flights,
    Aircraft.Aircraft_Type,
    Aircraft.Aircraft_Registration_Number
FROM
    Pilot
JOIN
    Flight_Record ON Pilot.Pilot_ID = Flight_Record.Pilot_ID
JOIN
    Aircraft ON Flight_Record.Aircraft_Registration_Number =
Aircraft.Aircraft_Registration_Number
WHERE
    Flight_Record.Flight_Date_And_Time BETWEEN '2024-02-01' AND '2024-02-
29'

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GROUP BY
    Pilot.Customer_ID, Pilot.Pilot_ID, Aircraft.Aircraft_Type,
    Aircraft.Aircraft_Registration_Number
ORDER BY
    total_flights DESC;
-- Select the customer_ID associated with the specified corporation
SELECT @Customer_ID = Customer_ID FROM Corporation WHERE Corporation_ID =
101;
SELECT
    Aircraft.Aircraft_Registration_Number,
    Maintenance_Record.Maintenance_Date,
    Airport_Employee.Employee_ID,
    Airport_Employee.Employee_name,
    Airport_Employee.Maintenance_Skillsets
FROM
    Aircraft
JOIN
    Maintenance_Record ON Aircraft.Aircraft_Registration_Number =
Maintenance_Record.Aircraft_Registration_Number
JOIN
    Airport_Employee ON Maintenance_Record.Employee_ID =
Airport_Employee.Employee_ID
WHERE
    Aircraft.Customer_ID = 2
    AND Maintenance_Record.Maintenance_Date BETWEEN '2024-02-01' AND
'2024-02-29';

SELECT @Customer_ID = Customer_ID FROM Corporation WHERE Corporation_ID =
101;

-- List all parts used in a service per aircraft type, part number, and
part name
SELECT
    Aircraft.Aircraft_Type,
    Maintenance_Record.Aircraft_Registration_Number AS
aircraft_registration_number,
    Maintenance_Record.Maintenance_Date,
    Aircraft_Accessories.Aircraft_Accessories_ID,
    Aircraft_Accessories.Accessory_Name
FROM
    Maintenance_Record
JOIN
    Aircraft ON Maintenance_Record.Aircraft_Registration_Number =
Aircraft.Aircraft_Registration_Number
JOIN
    Aircraft_Accessories ON Maintenance_Record.Aircraft_Accessories_ID =
Aircraft_Accessories.Aircraft_Accessories_ID
WHERE
    Aircraft.Customer_ID = 2
    AND Maintenance_Record.Maintenance_Date BETWEEN '2024-02-01' AND
'2024-02-29';

SELECT
    Aircraft.Aircraft_Type,

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    Aircraft_Model.Model_Number,
    Aircraft.Aircraft_Registration_Number,
    SUM(Flight_Record.Landing_Fee + COALESCE(Parking_Record.Parking_Cost,
0) +
        COALESCE(Fuelling_Record.Fuelling_Cost, 0) +
COALESCE(Cleaning_Record.Cleaning_Cost, 0) +
        COALESCE(Maintenance_Record.Maintenance_Cost, 0) +
COALESCE(Storage_Record.Storage_Cost, 0)) AS total_revenue_per_aircraft
FROM
    Flight_Record
JOIN
    Aircraft ON Aircraft.Aircraft_Registration_Number =
Flight_Record.Aircraft_Registration_Number
LEFT JOIN
    Parking_Record ON Aircraft.Aircraft_Registration_Number =
Parking_Record.Aircraft_Registration_Number
LEFT JOIN
    Fuelling_Record ON Aircraft.Aircraft_Registration_Number =
Fuelling_Record.Aircraft_Registration_Number
LEFT JOIN
    Cleaning_Record ON Aircraft.Aircraft_Registration_Number =
Cleaning_Record.Aircraft_Registration_Number
LEFT JOIN
    Maintenance_Record ON Aircraft.Aircraft_Registration_Number =
Maintenance_Record.Aircraft_Registration_Number
LEFT JOIN
    Storage_Record ON Aircraft.Aircraft_Registration_Number =
Storage_Record.Aircraft_Registration_Number
LEFT JOIN
    Aircraft_Model ON Aircraft.Model_Number = Aircraft_Model.Model_Number
WHERE
    Flight_Record.Flight_Date_And_Time BETWEEN '2024-02-01' AND '2024-02-
29'
    AND Aircraft.Aircraft_Registration_Number IS NOT NULL
    AND Aircraft_Model.Model_Number IS NOT NULL
    AND Aircraft.Aircraft_Registration_Number <> '' -- Exclude rows with
empty registration numbers
    AND Aircraft_Model.Model_Number <> '' -- Exclude rows with empty
model numbers
GROUP BY
    Aircraft.Aircraft_Type,
    Aircraft_Model.Model_Number,
    Aircraft.Aircraft_Registration_Number;

SELECT SUM(total_revenue_per_aircraft) AS total_revenue
FROM (
    SELECT
        Aircraft.Aircraft_Type,
        Aircraft_Model.Model_Number,
        Aircraft.Aircraft_Registration_Number,
        SUM(Flight_Record.Landing_Fee +
COALESCE(Parking_Record.Parking_Cost, 0) +
            COALESCE(Fuelling_Record.Fuelling_Cost, 0) +
COALESCE(Cleaning_Record.Cleaning_Cost, 0) +

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        COALESCE(Maintenance_Record.Maintenance_Cost, 0) +
COALESCE(Storage_Record.Storage_Cost, 0)) AS total_revenue_per_aircraft
FROM
    Flight_Record
JOIN
    Aircraft ON Aircraft.Aircraft_Registration_Number =
Flight_Record.Aircraft_Registration_Number
LEFT JOIN
    Parking_Record ON Aircraft.Aircraft_Registration_Number =
Parking_Record.Aircraft_Registration_Number
LEFT JOIN
    Fuelling_Record ON Aircraft.Aircraft_Registration_Number =
Fuelling_Record.Aircraft_Registration_Number
LEFT JOIN
    Cleaning_Record ON Aircraft.Aircraft_Registration_Number =
Cleaning_Record.Aircraft_Registration_Number
LEFT JOIN
    Maintenance_Record ON Aircraft.Aircraft_Registration_Number =
Maintenance_Record.Aircraft_Registration_Number
LEFT JOIN
    Storage_Record ON Aircraft.Aircraft_Registration_Number =
Storage_Record.Aircraft_Registration_Number
LEFT JOIN
    Aircraft_Model ON Aircraft.Model_Number =
Aircraft_Model.Model_Number
WHERE
    Flight_Record.Flight_Date_And_Time BETWEEN '2024-02-01' AND '2024-
02-29'
    AND Aircraft.Aircraft_Registration_Number IS NOT NULL
    AND Aircraft_Model.Model_Number IS NOT NULL
    AND Aircraft.Aircraft_Registration_Number <> '' -- Exclude rows
with empty registration numbers
    AND Aircraft_Model.Model_Number <> '' -- Exclude rows with empty
model numbers
GROUP BY
    Aircraft.Aircraft_Type,
    Aircraft_Model.Model_Number,
    Aircraft.Aircraft_Registration_Number
) AS revenue_per_aircraft;

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