Interogari simple:

1. Detaliile unei facturi (inclusiv toate reparatiile efectuate)

SELECT   
 i.InvoiceID,   
 sr.IssueDescription,   
 sl.ServiceDate,   
 sl.Notes,   
 dst.Name AS ServiceTypeName,   
 dst.Price,   
 u.Username AS TechnicianName  
FROM Invoices i  
INNER JOIN ServiceRequests sr ON i.ServiceRequestID = sr.ServiceRequestID  
INNER JOIN ServiceLogs sl ON sr.ServiceRequestID = sl.ServiceRequestID  
INNER JOIN Users u ON sl.TechnicianID = u.Id  
INNER JOIN DictionaryServiceType dst ON sl.ServiceTypeId = dst.ServiceTypeId  
WHERE i.InvoiceID = ?

1. Toate cererile de service

SELECT sr.ServiceRequestId, sr.StatusId, ds.StatusName, sr.IssueDescription, sr.RequestDate,   
 u.Username AS ClientName, d.DeviceId, d.Brand, d.Model, d.DeviceType, d.SerialNumber   
FROM ServiceRequests sr  
INNER JOIN Devices d ON sr.DeviceId = d.DeviceId  
INNER JOIN DictionaryStatus ds ON sr.StatusId = ds.StatusId  
INNER JOIN Users u ON d.ClientId = u.Id

1. Toate facturile

SELECT i.InvoiceId, sr.ServiceRequestId, d.DeviceId, d.Brand, d.Model, d.SerialNumber, sr.IssueDescription, ds.StatusName as Status, i.Amount as Amount, RTRIM(dps.Name) AS PaymentStatus  
FROM Invoices i  
INNER JOIN ServiceRequests sr ON i.ServiceRequestId = sr.ServiceRequestId  
INNER JOIN Devices d ON sr.DeviceId = d.DeviceId  
INNER JOIN DictionaryStatus ds ON sr.StatusId = ds.StatusId  
INNER JOIN DictionaryPaymentStatus dps ON i.PaymentStatusId = dps.PaymentStatusId  
INNER JOIN Users u ON d.ClientId = u.Id  
WHERE u.Username = ?

1. Toate reparatiile efectuate de un tehnician

SELECT  
 sl.ServiceLogId,  
 d.Brand + ' ' + d.Model AS DeviceName,  
 st.Name as ServiceTypeName,  
 sl.ServiceDate,  
 sl.Notes,  
 u.Username as ClientUsername  
FROM ServiceLogs sl  
INNER JOIN ServiceRequests sr ON sl.ServiceRequestId = sr.ServiceRequestId  
INNER JOIN Devices d ON sr.DeviceId = d.DeviceId  
INNER JOIN Users u ON u.Id = sl.TechnicianID  
INNER JOIN DictionaryServiceType st ON sl.ServiceTypeId = st.ServiceTypeId  
WHERE u.Username = ?  
ORDER BY sl.ServiceDate DESC

1. Toate reparatiile efectuate in cadrul unei cereri de service

SELECT  
 sl.ServiceLogId,  
 d.Brand + ' ' + d.Model AS DeviceName,  
 st.Name as ServiceTypeName,  
 sl.ServiceDate,  
 sl.Notes,  
 u.Username as ClientUsername  
FROM ServiceLogs sl  
INNER JOIN ServiceRequests sr ON sl.ServiceRequestId = sr.ServiceRequestId  
INNER JOIN Devices d ON sr.DeviceId = d.DeviceId  
INNER JOIN Users u ON u.Id = d.ClientId  
INNER JOIN DictionaryServiceType st ON sl.ServiceTypeId = st.ServiceTypeId  
WHERE sr.ServiceRequestId = ?  
ORDER BY sl.ServiceDate DESC

1. O anumita cerere de service

SELECT sr.ServiceRequestId, sr.StatusId, ds.StatusName, sr.IssueDescription, sr.RequestDate,   
 u.Username AS ClientName, d.DeviceId, d.Brand, d.Model, d.DeviceType, d.SerialNumber   
FROM ServiceRequests sr  
INNER JOIN Devices d ON sr.DeviceId = d.DeviceId  
INNER JOIN DictionaryStatus ds ON sr.StatusId = ds.StatusId  
INNER JOIN Users u ON d.ClientId = u.Id  
WHERE sr.ServiceRequestId = ?

Interogari complexe:

1. Suma totala platita de fiecare user

SELECT \*  
FROM (  
 SELECT  
 U.Username,  
 (  
 SELECT SUM(I.Amount)  
 FROM Invoices I  
 WHERE I.PaymentStatusId = (  
 SELECT PaymentStatusId  
 FROM DictionaryPaymentStatus DPS  
 WHERE DPS.Name = 'Complete'  
 )  
 AND I.ServiceRequestID IN (  
 SELECT SR.ServiceRequestID  
 FROM ServiceRequests SR  
 WHERE SR.DeviceID IN (  
 SELECT D.DeviceID  
 FROM Devices D  
 WHERE D.ClientID = U.Id  
 )  
 )  
 ) AS TotalPaidAmount  
 FROM  
 Users U  
) AS Subquery  
WHERE  
 TotalPaidAmount IS NOT NULL;

1. Ultima data cand un tehnician a efectuat o reparatie

SELECT  
 U.Username as TechnicianUsername,  
 SL.ServiceDate,  
 DST.Name AS ServiceType  
FROM  
 ServiceLogs SL  
INNER JOIN  
 Users U ON SL.TechnicianID = U.Id  
INNER JOIN  
 DictionaryServiceType DST ON SL.ServiceTypeId = DST.ServiceTypeId  
WHERE  
 SL.ServiceLogID = (  
 SELECT TOP 1 SL2.ServiceLogID  
 FROM ServiceLogs SL2  
 WHERE SL2.TechnicianID = SL.TechnicianID  
 ORDER BY SL2.ServiceDate DESC, SL2.ServiceLogID DESC  
 );

1. Clienti care au inregistrat mai multe cereri de service decat media

WITH AvgOrders AS (  
 SELECT CAST(AVG(NumOfOrders) AS DOUBLE PRECISION) AS AverageOrders  
 FROM (  
 SELECT COUNT(\*) AS NumOfOrders  
 FROM ServiceRequests sr  
 INNER JOIN Devices d ON sr.DeviceID = d.DeviceID  
 INNER JOIN Users u ON d.ClientID = u.Id  
 GROUP BY u.Id  
 ) AS T  
)  
SELECT  
 u.Username,  
 COUNT(\*) AS NumberOfOrders,  
 (SELECT AverageOrders FROM AvgOrders) AS AverageOrders  
FROM Users u  
INNER JOIN Devices d ON d.ClientID = u.Id  
INNER JOIN ServiceRequests sr ON sr.DeviceID = d.DeviceID  
GROUP BY u.Username  
HAVING COUNT(\*) >= (SELECT AverageOrders FROM AvgOrders);

1. Tehnicienii care au facut mai multe reparatii decat media

WITH AvgServices AS (  
 SELECT CAST(AVG(NumOfServices) AS DOUBLE PRECISION) AS AverageServices  
 FROM (  
 SELECT COUNT(\*) AS NumOfServices  
 FROM ServiceLogs  
 GROUP BY TechnicianID  
 ) AS T  
)  
SELECT  
 u.Username,   
 COUNT(\*) AS NumberOfServices,  
 (SELECT AverageServices FROM AvgServices) AS AverageServices  
FROM Users u  
INNER JOIN ServiceLogs sl ON u.Id = sl.TechnicianID  
GROUP BY u.Username  
HAVING COUNT(\*) >= (SELECT AverageServices FROM AvgServices);