

Lana Bracken  
Project: Database Design and Implementation

### Task 3

USE FinalProject;

-- Reeder View

Create view vwReader as

select MeterNumber, Address, meterreading.meterreadingid,

CurrReeder.Name as CurrReederName, CurrReeder.UserName as CurrReederUserName, CurrReeder.Job  
as CurrReederJob,

PrevReeder.Name as PrevReederName, PrevReeder.UserName as PrevReederUserName,  
PrevReeder.Job as PrevReederJob,

MeterReading.CurrReadingDate, MeterReading.CurrMeterReading,

MeterReading.PrevMeterReadingDate, MeterReading.PrevMeterReading, notes

from meter

join Contract on Contract.MeterID = Meter.MeterID

join CustomerContractAddrAssoc ccaa on ccaa.ContractID = Contract.ContractID

join Address on ccaa.AddressID = Address.AddressID

left join MeterReading on MeterReading.CustomerContractAddrAssocID =  
ccaa.CustomerContractAddrAssocID

left join Employee CurrReeder on CurrReeder.EmployeeID = MeterReading.CurrReederID

left join Employee PrevReeder on PrevReeder.EmployeeID = MeterReading.PrevReederID

where

-- CurrReeder.UserName = user() and CurrReeder.Job = 'Reeder'

-- or PrevReeder.UserName = user() or PrevReeder.Job = 'Reeder'

CurrReeder.UserName = 'GCreighton' or PrevReeder.UserName = 'GCreighton' ;

-- drop view vwReader;

-- drop view vwCustomerService;

-- Customer Service

Create view vwCustomerService as

select name, activationdt, deactivationdt, address, addresstype, ContractNumber, meternumber,

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meterreading.meterreadingid, currmeterreading, CurrReadingDate, PrevMeterReading, PrevMeterReadingDate, notes, billnumber, billdate, consumption, cost, balance, paymentdate, amount, method from meterreading

left join bill on bill.MeterReadingID = meterreading.meterreadingid

left join payments on payments.billid = bill.billid

join CustomerContractAddrAssoc ccaa on meterreading.customercontractaddrassocid = ccaa.customercontractaddrassocid

join address on address.addressid = ccaa.addressid

join customer on customer.customerid = ccaa.customerid

join contract on contract.contractid = ccaa.contractid

join meter on meter.meterid = contract.meterid;

-- Customer Service are not allowed to see who read the meter, they can see the CurrReaderID and PrevReaderID, but those values will mean nothing to them

-- left join Employee currReader on currReader.EmployeeID = meterreading.CurrReederID

-- left join Employee prevReader on prevReader.EmployeeID = meterreading.PrevReederID

-- Manager (view and edit everything)

Create view vwManager as

select Customer.name, activationdt, deactivationdt, address, addresstype, ContractNumber, meternumber,

currmeterreading, CurrReadingDate, currReader.name as CurrReaderName, PrevMeterReading, PrevMeterReadingDate, prevReader.name as PrevReaderName, notes,

billnumber, billdate, consumption, cost, balance, paymentdate, amount, method from meterreading

left join bill on bill.MeterReadingID = meterreading.meterreadingid

left join payments on payments.billid = bill.billid

join CustomerContractAddrAssoc ccaa on meterreading.customercontractaddrassocid = ccaa.customercontractaddrassocid

join address on address.addressid = ccaa.addressid

join customer on customer.customerid = ccaa.customerid

join contract on contract.contractid = ccaa.contractid

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```
join meter on meter.meterid = contract.meterid
```

```
left join Employee currReader on currReader.EmployeeID = meterreading.CurrReederID
```

```
left join Employee prevReader on prevReader.EmployeeID = meterreading.PrevReederID;
```

```
-- Also for Manager to get to Employees and Meters
```

```
Create view vwManager_Employee as
```

```
    Select * from Employee;
```

```
Create view vwmanager_Meter as
```

```
    Select * from Meter;
```

```
-- Create Roles
```

```
CREATE ROLE IF NOT EXISTS manager;
```

```
CREATE ROLE IF NOT EXISTS reader;
```

```
CREATE ROLE IF NOT EXISTS customer_service;
```

```
grant select on vwReader to 'reader';
```

```
grant update(CurrMeterReading, CurrReadingDate, notes) on finalproject.MeterReading to 'reader';
```

```
grant select on finalproject.vwCustomerService to 'customer_service';
```

```
grant select, update, insert on finalproject.customer to 'customer_service';
```

```
grant select, update, insert on finalproject.address to 'customer_service';
```

```
grant select, update, insert on finalproject.contract to 'customer_service';
```

```
grant select, update, insert on finalproject.bill to 'customer_service';
```

```
grant select, update, insert on finalproject.payments to 'customer_service';
```

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```
grant all on customer to 'manager';  
grant all on address to 'manager';  
grant all on contract to 'manager';  
grant all on customercontractaddrassoc to 'manager';  
grant select on vwmeter to 'manager';  
grant select on vwemployee to 'manager';  
grant all on meterreading to 'manager';  
grant all on bill to 'manager';  
grant all on payments to 'manager';  
grant select on vwManager to 'manager';  
grant all on meter to 'manager';  
grant all on employee to 'manager';
```

```
-- drop user 'GCreighton';  
CREATE USER 'GCreighton'@'localhost' IDENTIFIED BY 'GCreighton';
```

```
grant reader to 'GCreighton'@'localhost';
```

```
CREATE USER 'LTschiersch'@'localhost' IDENTIFIED BY 'LTschiersch'  
PASSWORD EXPIRE;  
grant reader to 'LTschiersch'@'localhost';
```

```
CREATE USER 'GMcCaskill'@'localhost' IDENTIFIED BY 'GMcCaskill'  
PASSWORD EXPIRE;
```

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```
grant reader to 'GMcCaskill'@'localhost';
```

```
CREATE USER 'RSkip'@'localhost' IDENTIFIED BY 'RSkip'  
PASSWORD EXPIRE;  
grant reader to 'RSkip'@'localhost';
```

```
CREATE USER 'BMunson'@'localhost' IDENTIFIED BY 'BMunson'  
PASSWORD EXPIRE;  
grant reader to 'BMunson'@'localhost';
```

```
CREATE USER 'CBuey'@'localhost' IDENTIFIED BY 'CBuey'  
PASSWORD EXPIRE;  
grant reader to 'CBuey'@'localhost';
```

```
CREATE USER 'EMadelin'@'localhost' IDENTIFIED BY 'EMadelin'  
PASSWORD EXPIRE;  
grant reader to 'EMadelin'@'localhost';
```

```
CREATE USER 'RAstill'@'localhost' IDENTIFIED BY 'RAstill'  
PASSWORD EXPIRE;  
grant manager to 'RAstill'@'localhost';
```

```
CREATE USER 'LFessby'@'localhost' IDENTIFIED BY 'LFessby'  
PASSWORD EXPIRE;  
grant customer_service to 'LFessby'@'localhost';
```

```
CREATE USER 'WCritcher'@'localhost' IDENTIFIED BY 'WCritcher'  
PASSWORD EXPIRE;
```

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```
grant customer_service to 'WCritcher'@'localhost';
```