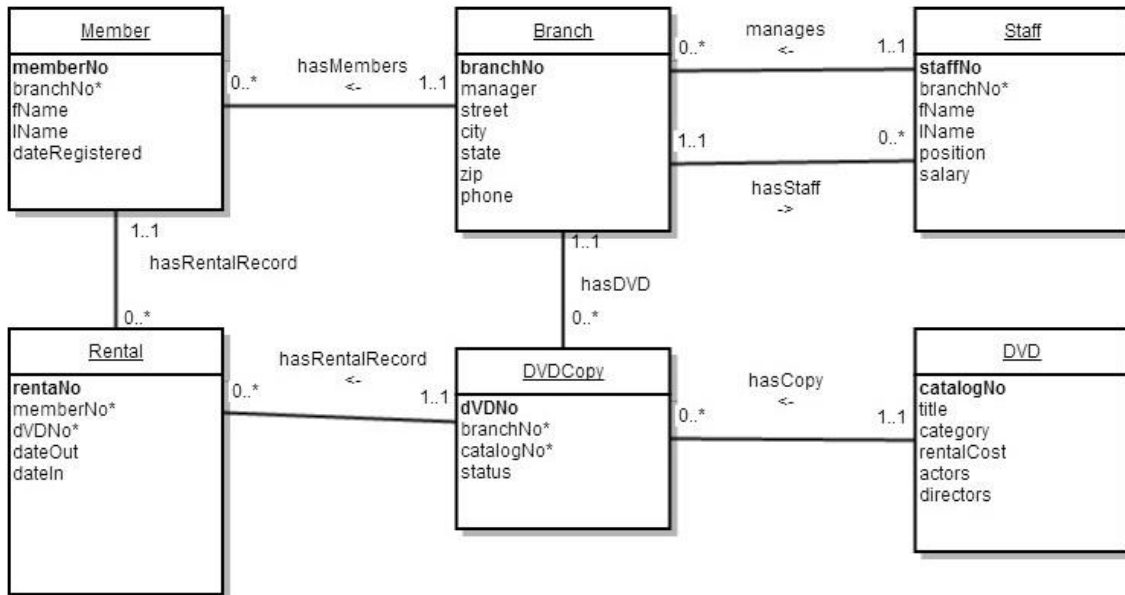**Database Design, CSCI 340, Spring 2016**
Views, Feb. 26

Recall the DVD Rental DB created in the previous lab. Here is a schema for it:

Using SQL Server:

1. Create s StaffDirectory view

> StaffDirectory
> staffNo
> fName
> lName
> position

> CREATE VIEW StaffDirectory
> AS
> (SELECT staffNo, fName, lName, position
> FROM Staff)

2. Add a single field to the StaffDirectory view which contains the first and last name of the staff member's manager.

> DROP VIEW Staff Directory
>
> CREATE VIEW StaffDirectory
> AS
>   (SELECT S1.staffNo, S1.fName, S1.lName, S1.position,
>   (RTRIM(S2.fName) + ' ' + RTRIM(S2.lName))
>   AS 'manager'
>   FROM Staff S1 JOIN Branch ON S1.branchNo=Branch.branchNo
>   JOIN Staff S2 ON S2.staffNo=Branch.manager)

3. Create a view for a front desk employee of the Butte branch at 17 West Park Street (B2999) to check in movies.

> ParkStreetRentals
>   rentalNo
>   memberfName
>   memberlName
>   dvdTitle
>   dateOut
>   dateIn
>
> CREATE VIEW PartStreetRentals
> AS
> (SELECT rentalNo, fName AS 'memberfName',
>   lName AS 'memberlName',
>   dvdTitle, dateOut, dateIn
> FROM Rental JOIN DVDCopy ON Rental.dVDNo=DVDCopy.dVDNo
>   JOIN DVD ON DVDCopy.catalogNo=DVD.catalogNo
>   JOIN Member ON Rental.memberNo=Member.memberNo
> WHERE DVDCopy.branchNo='B2999')

4. List the fields that are updatable from this view. (Discover this by attempting to do UPDATE statements on the view.)

> Only dateOut and dateIn are updateable. These are updateable because the rentalNo is known and rentalNo is the key for the table which contains dateOut and dateIn.

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5. What views would you expect a branch manage to find useful for daily operations? Assume that the branch manager needs to work with staff, branch members and inventory, but not with rentals.

Views giving information on the:
- staff which works at that branch
- members who are registered at that branch
- inventory (dvd copies) belonging to that branch.

6. Define one or more of these views.

```
CREATE VIEW PartStreetStaffs
AS
        (SELECT staffNo, fName, lName, position, salary
         FROM Staff
         WHERE DVDCopy.branchNo='B2999')
```