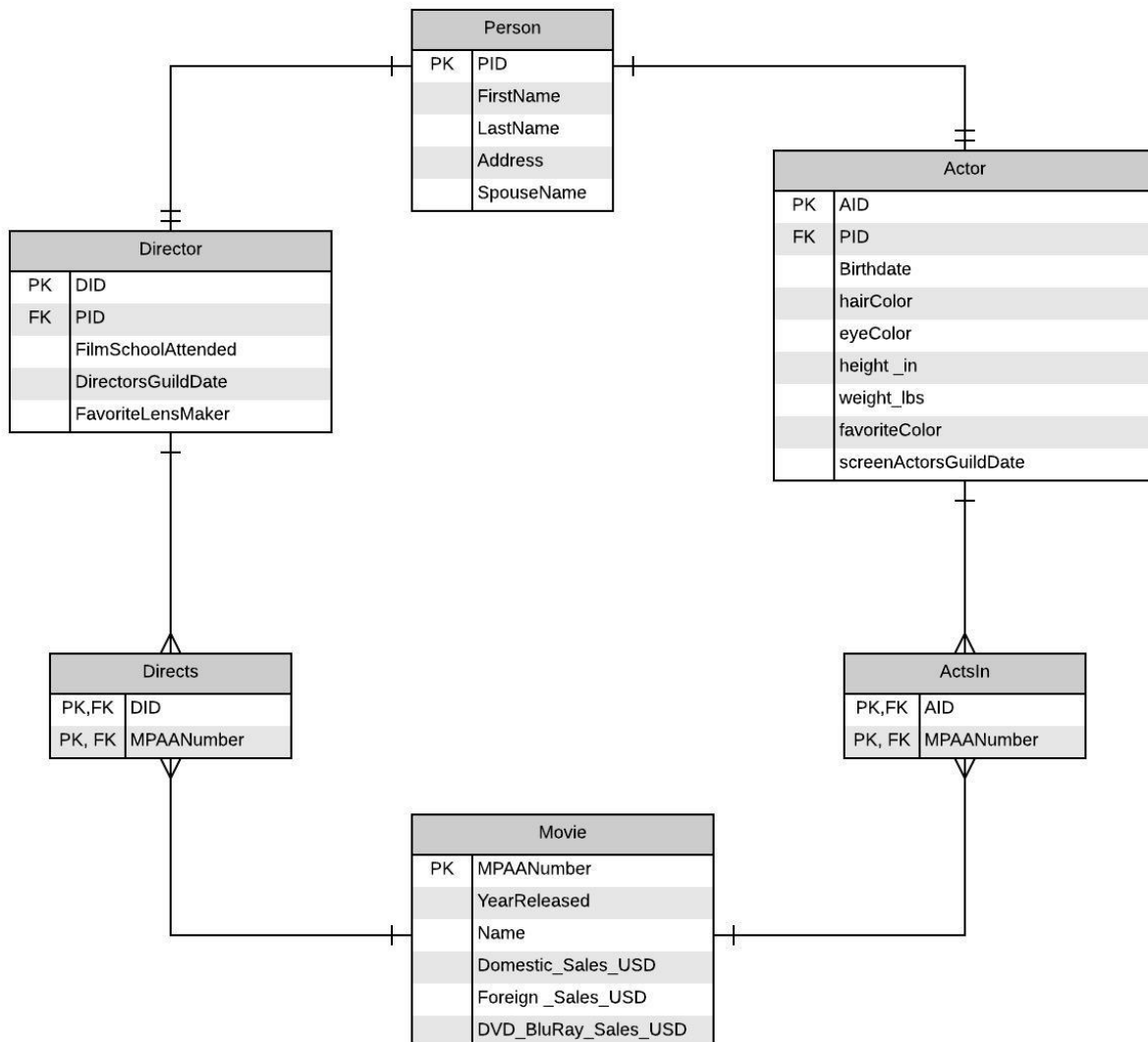


Mackenzie O'Brien  
Lab 8



## 2. Create Statements

```
DROP TABLE IF EXISTS Person;  
DROP TABLE IF EXISTS Actor;  
DROP TABLE IF EXISTS Director;  
DROP TABLE IF EXISTS ActsIn;  
DROP TABLE IF EXISTS Directs;  
DROP TABLE IF EXISTS Movie;
```

```
CREATE TABLE Person (  
    PID char(4) not null,  
    FirstName text not null,  
    LastName text not null,
```

```
    Address text,  
    SpouseName text,  
    primary key(PID)  
);
```

```
CREATE TABLE Actor(  
    AID char(4) not null,  
    PID char(4) not null references Person(PID),  
    Birthdate date not null,  
    hairColor text not null,  
    eyeColor text not null,  
    height_in integer not null,  
    weight_lbs integer not null,  
    favoriteColor text,  
    screenActorsGuildDate date,  
    primary key(AID)  
);
```

```
CREATE TABLE Director(  
    DID char(4) not null,  
    PID char(4) not null references Person(PID),  
    FilmSchoolAttended text,  
    DirectorsGuildDate date,  
    FavoriteLensMaker text,  
    primary key (DID)  
);
```

```
CREATE TABLE Movie(  
    MPAANumber int not null,  
    Name text not null,  
    YearReleased int not null,  
    Domestic_Sales_USD int,  
    Foreign_Sales_USD int,  
    DVD_BluRay_Sales_USD int,  
    primary key (MPAANumber)  
);
```

```
CREATE TABLE ActsIn(  
    AID char(4) not null references Actor(AID),  
    MPAANumber int not null references Movie(MPAANumber),  
    primary key (AID, MPAANumber)  
);
```

```
CREATE TABLE Directs (  
    DID char(4) not null references Director(DID),
```

MPAANumber int not null references Movie(MPAANumber),  
primary key (DID, MPAANumber)  
);

### 3. Functional Dependencies

- Person
  - $PID \rightarrow \text{FirstName, LastName, Address, SpouseName}$
- Actor
  - $PID \rightarrow AID$
  - $AID \rightarrow \text{Birthdate, hairColor, eyeColor, height\_in, weight\_lbs, favoriteColor, ScreenActorsGuildDate}$
- Director
  - $PID \rightarrow DID$
  - $DID \rightarrow \text{FilmSchoolAttended, DirectorsGuildDate, FavoriteLensMaker}$
- ActsIn
  - $MPAANumber \rightarrow AID$
- Directs
  - $MPAANumber \rightarrow DID$
- Movie
  - $MPAANumber \rightarrow \text{Name, YearReleased, Domestic\_Sales\_USD, Foreign\_Sales\_USD, DVD\_BluRay\_Sales\_USD}$

### 4. Query for Sean Connery

```
select * from Person
where PID in (select PID
              from Director
              where DID in (select DID
                            from Directs
                            where MPAANumber in (select MPAANumber
                                                  from ActsIn
                                                  where AID in (select AID
                                                                from Actor
                                                                where PID in (select PID
                                                                              from Person
                                                                              where FirstName='Sean' and LastName='Connery'
                                                                              )
                                                                )
                                                  )
                            )
              )
);
```