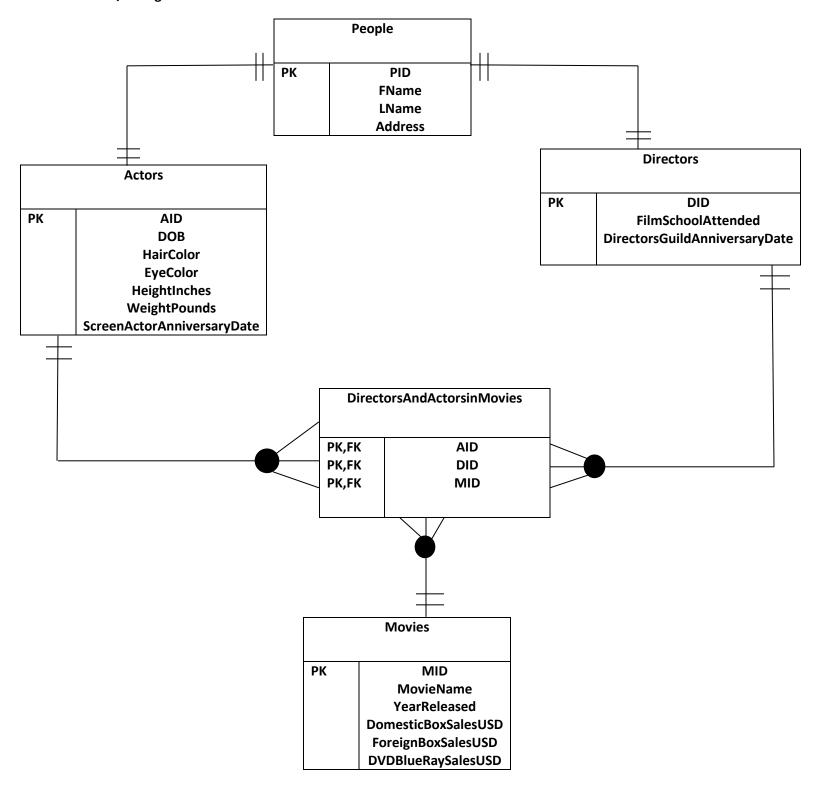
# **Megan Crane**

## **Normalization Assignment 2**

## 1. E/R Diagram



#### 2. Create Statements

```
Table1: People
drop table if exists People;
create table People (
pid int not null,
FName char(30) not null,
LName char(30) not null,
Address char(150) not null,
primary key(pid)
);
Table2: Actors
drop table if exists Actors;
create table Actors (
aid int not null references people(pid),
DOB date not null,
HairColor char(30) not null,
EyeColor char(30) not null,
HeightInches int not null,
WeightPounds int not null,
ScreenActorsAnniversaryDate date not null,
primary key(aid)
```

```
);
Table3: Directors
drop table if exists Directors;
create table Directors (
did int not null references people(pid),
FilmSchoolAttended char(50) not null,
DirectorsGuildAnniversaryDate date not null,
primary key(did)
);
Table4: Movies
drop table if exists Movies;
create table Movies(
mid int not null,
MovieName char(150) not null,
YearReleased char(4) not null,
DomesticBoxSalesUSD int not null,
ForeignBoxSalesUSD int not null,
DVDBlueRaySalesUSD int not null,
```

primary key(mid)

);

#### Table5 DirectorsAndActorsinMovies

```
drop table if exists DirectorsAndActorsinMovies;
```

```
create table DirectorsAndActorsinMovies (
aid int not null references actors(aid),
did int not null references directors(did),
mid int not null references movies(mid),
primary key(aid, did, mid)
);
```

### 3. Insert Statements

### Table1: People

```
insert into people(pid, FName, LName, Address)

values('001','Sean','Connery','838 Charlton Road, Charlton, NY');

insert into people(pid,FName,LName,Address)

values('002','Jennifer','Lawrence','78 North Street, Duxbury, MA');

insert into people(pid,FName,LName,Address)

values('003','Adam','Sandler','6220 Deerwood Circle North, Plymouth, MN');

insert into people(pid,FName,LName,Address)

values('004','Mie','Hamma','413 Mullberry Street, China Town, NY');
```

### **Table2: Actors**

insert into actors(aid, DOB, HairColor, EyeColor, HeightInches, WeightPounds, ScreenActorsAnniversaryDate)

```
values('001','August/25/1930','brown','green','72','170','04/21/2003');
insert into actors(aid, DOB, HairColor, EyeColor, HeightInches, WeightPounds,
ScreenActorsAnniversaryDate)
values('002','August/15/1990','blonde','blue','64','130','10/13/2009');
insert into actors(aid, DOB, HairColor, EyeColor, HeightInches, WeightPounds,
ScreenActorsAnniversaryDate)
values('004','October/16/1946','black','brown','64','120','06/17/2000');
Table3: Directors
insert into directors(did,FilmSchoolAttended,DirectorsGuildAnniversaryDate)
values('001','LA Film School','04/08/2005');
insert into directors(did,FilmSchoolAttended,DirectorsGuildAnniversaryDate)
values('003','American Film Institute','12/17/2008');
Table4: Movies
insert into
movies(mid,MovieName,YearReleased,DomesticBoxSalesUSD,ForeignBoxSalesUSD,DVDBlueRaySalesUS
D)
values('001','You Only Live Twice','1967','43000000','68000000','100000000');
insert into
movies(mid,MovieName,YearReleased,DomesticBoxSalesUSD,ForeignBoxSalesUSD,DVDBlueRaySalesUS
D)
values('002','The Hunger Games','2012','210800000','59250000','320000000');
Table5: DirectorsAndActorsinMovies
insert into DirectorsAndActorsinMovies(aid,did,mid)
values('001','001','001');
insert into DirectorsAndActorsinMovies(aid,did,mid)
values('004','001','001');
```

4. Functional Dependencies

People: pid depends on FName, LName, Address

Actors: aid depends on DOB, HairColor, EyeColor, HeightInches, WeightPounds, ScreenActorAnniversaryDate

Directors: did depends on FilmSchoolAttended, DirectorsGuildAnniversaryDate

Movies: mid depends on MovieName, YearReleased, DomesticBoxSalesUSD, ForeignBoxSalesUSD, DVDBlueRaySalesUSD

## 5. SQL Query to return all directors Sean Connery has worked with

```
select distinct p2.FName, p2.LName

from directors d,
    people p1,
    people p2,
    actors a,
    DirectorsAndActorsinMovies daaim

where p1.pid = a.aid
    and a.aid = daaim.aid
    and d.did = daaim.did
    and p2.pid = d.did
    and p1.FName = 'Sean'
    and p1.LName = 'Connery';
```