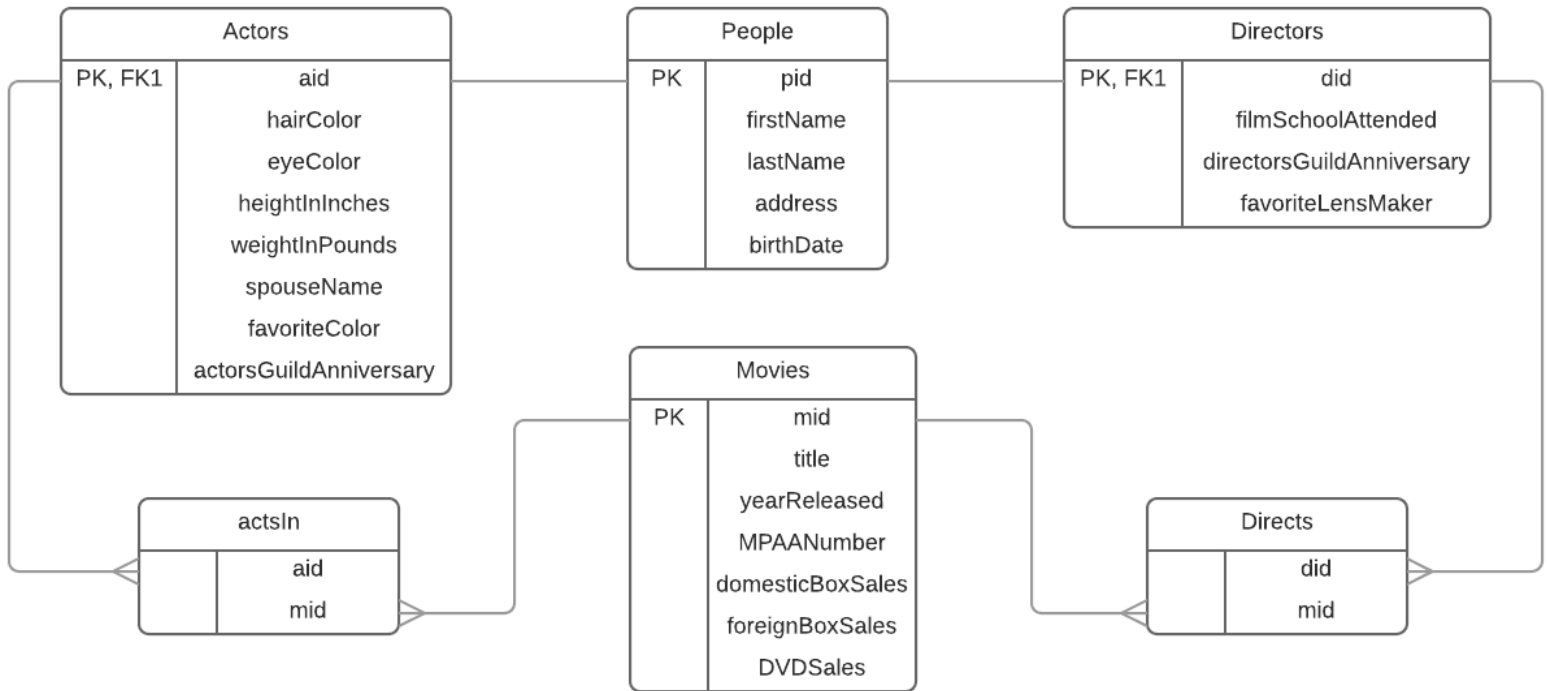


Lab Eight: Normalization Two



DROP TABLE IF EXISTS People, Actors, Directors, Movies, ActsIn, Directs

```
-- People --
CREATE TABLE People (
    pid          bigserial not null,
    firstName    text not null,
    lastName     text not null,
    address      text,
    birthDate    date, -- YYYY-MM-DD
);

-- Actors --
CREATE TABLE Actors (
    aid int references people(pid),
    hairColor      text,
    eyeColor       text,
    heightInInches decimal(2,2),
    weightInPounds decimal(3,2),
    spouseName     text,
    favoriteColor  text,
    actorsGuildAnniversary date,
    primary key(pid)
);
```

-- Directors --

```
CREATE TABLE Directors (  
  did int references people(pid) not null,  
  firstName          text not null,  
  lastName           text not null,  
  filmSchoolAttended text),  
  directorsGuildAnniversary text,  
  favoriteLensMaker  text,  
  primary key(pid)  
);
```

-- Movies --

```
CREATE TABLE Movies (  
  mid          bigserial not null,  
  title        text not null,  
  yearReleased year not null,  
  MPAAANumber  int,  
  domesticBoxSales int,  
  foreignBoxSales int,  
  DVDSales     int,  
  primary key(mid)  
);
```

-- actsIn --

```
CREATE TABLE ActsIn (  
  pid not null references agents(pid),  
  mid not null references movies(mid)  
);
```

-- Directs --

```
CREATE TABLE Directs (  
  pid not null references directors(pid),  
  mid not null references movies(mid)  
);
```

-- Dependencies --

```
pid -> firstName  
pid -> lastName  
pid -> address  
pid -> birthDate
```

```
aid -> hairColor  
aid -> eyeColor  
aid -> heightInInches  
aid -> weightInPounds  
aid -> spouseName  
aid -> favoriteColor  
aid -> actorsGuildAnnivresary
```

```
did -> filmSchoolAttended  
did -> directorsGuildAnniversary  
did -> favoireLensMaker
```

```
mid -> title
```

mid -> yearRelease
mid -> MPAA Number
mid -> domesticBoxSales
mid -> foreignBoxSales
mid -> DVDSales

```
-- Query: Show all the directors with whom actor "Roger Moore" has worked --  
SELECT DISTINCT people.*  
FROM people, movies, directors, directs  
WHERE people.pid = directors.did  
AND directors.did = directs.did  
and directs.mid in (SELECT DISTINCT movies.mid  
                     FROM people, movies, actors, actsIn  
                     WHERE people.firstName = 'Roger'  
                     AND people.lastName = 'Moore'  
                     AND people.pid = actors.aid  
                     AND actors.aid = actsIn.aid  
                     );
```