Robert Lynch

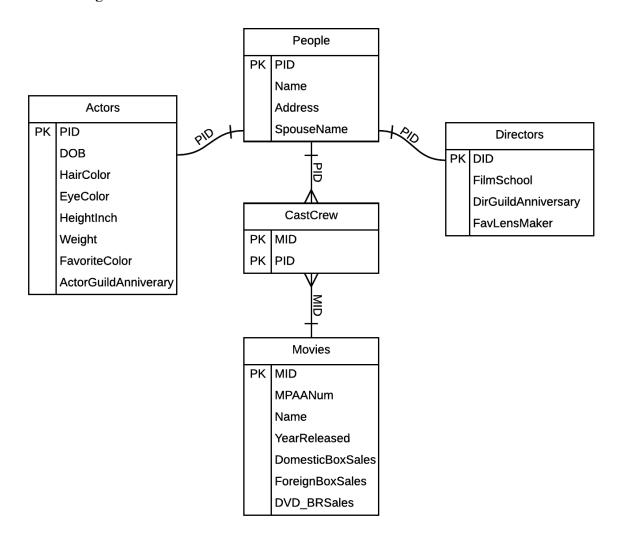
Professor Labouseur

Database Systems – CMPT 308 114

3 November 2016

Lab 8

1. ER Diagram



2. SOL Code

```
    DROP TABLE IF EXISTS People;

2. DROP TABLE IF EXISTS Actors;

    DROP TABLE IF EXISTS Directors;

4. DROP TABLE IF EXISTS CastCrew;
DROP TABLE IF EXISTS Movies;
6.
7. --People-
8. CREATE TABLE People(
9.
      PID char(25) not null,
10.
      Name text not null,
11.
      Address varchar(100),
12.
      SpouseName text,
13.
      PRIMARY KEY(PID)
14.);
15.
16. --Actors-
17. CREATE TABLE Actors(
18.
      PID char(25) not null references People(PID),
19.
      DOB datetime not null,
20.
      HairColor text not null,
21. EyeColor text not null,
22.
      HeightInch not null,
23. Weight not null,
24. FavoriteColor text,
25.
      ActorGuildAnniversary text,
26.
      PRIMARY KEY(PID)
27.);
28.
29. --Directors-
30. CREATE TABLE Directors(
31.
      PID char(25) not null references People(PID),
32.
      FilmSchool text,
33.
      DirGuildAnniversary text,
34.
      FavLensMaker text,
35.
      PRIMARY KEY(PID)
36.);
37.
38. --CastCrew-
39. CREATE TABLE CastCrew(
      PID char(25) not null references People(PID),
40.
41.
       MID char(25) not null references Movies(MID),
42.
      PRIMARY KEY(PID, MID)
43.);
44.
45. --Movies-
46. CREATE TABLE Movies(
47.
      MID char(25) not null,
48.
      MPAANum integer not null,
49.
      Name text not null,
50.
      YearReleased date,
51.
      DomesticBoxSales numeric(10, 2),
52.
      ForeignBoxSales numeric(10, 2),
       DVD_BRSales numeric(10, 2),
53.
54.
      PRIMARY KEY(MID)
55.);
```

3. Functional Dependencies

People: PID → Name, Address, SpouseName

Actors: PID → DOB, HairColor, EyeColor, HeightInch, FavoriteColor,

ActorGuildAnniversary

Directors: PID → FilmSchool, DirGuildAnniversary, FavLensMaker

CastCrew: PID, MID →

Movies: MID → MPAANum, YearReleased, DomesticBoxSales, ForeignBoxSales,

DVD_BRSales

4. Query

```
1. select Name
2. from People
3. where PID in (select PID
4. from Directors
5. where MID in (select MID
6. from CastCrew
7. where PID in (select PID
8. from People
9. where Name = "Sean Connery"
```