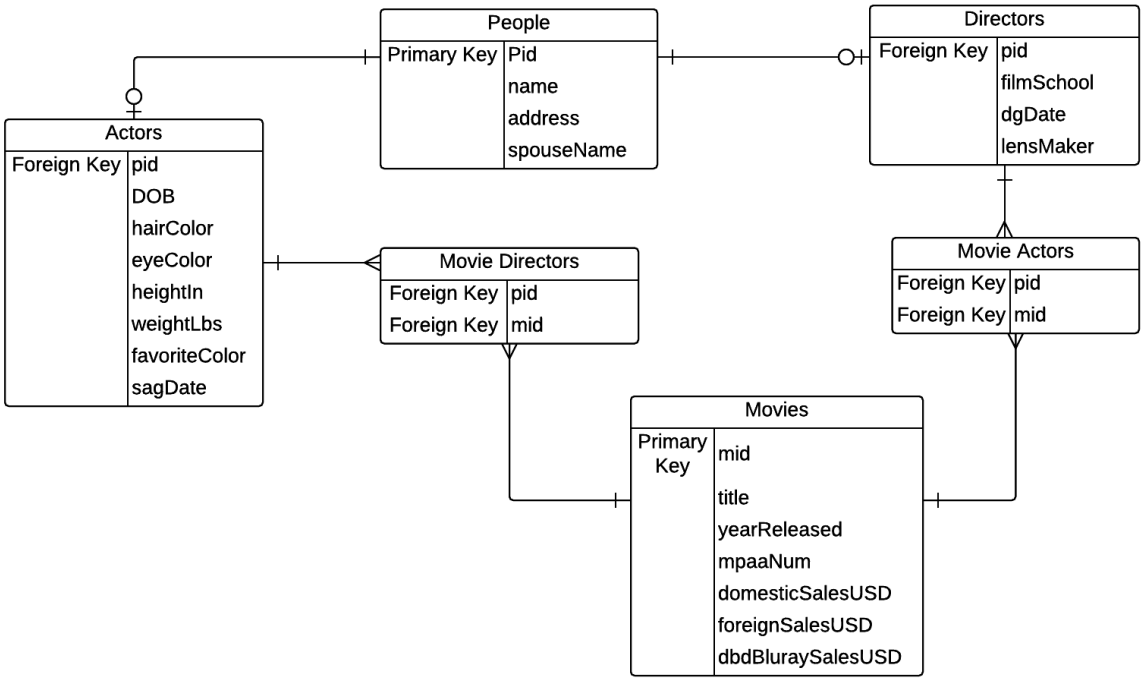
Jenna Ficula
Lab 8

1. ER Diagram



2. SQL create statements:

```
create table people(
pid             TEXT NOT NULL PRIMARY KEY
name            TEXT
address         TEXT
spouseNAME      TEXT
);

create table actors(
        pid             TEXT NOT NULL  REFERENCES people(pid)
        DOB             DATE
        hairColor       TEXT
        eyeColor        TEXT
        heightIn        INT
        weightLbs       INT
        favoriteColor   TEXT
        sagDate         DATE
);
```

```
create table movies(
        mid                 TEXT NOT NULL  PRIMARY KEY
        title               TEXT NOT NULL
        yearReleased        INT
        mpaaNum             INT
        domesticSalesUSD    FLOAT
        foreignSalesUSD     FLOAT
        dvdBluraySalesUSD   FLOAT
);

create table directors(
        pid             TEXT NOT NULL  REFERENCES people(pid)
        filmSchool      TEXT
        dgDate          DATE
        lensMaker       TEXT
);

create table movieDirectors(
        mid                 TEXT NOT NULL REFERENCES movies(mid)
        pid                 TEXT NOT NULL REFERENCES people (pid)
        primary key (mid, pid)
);

create table movieActors(
        mid                 TEXT NOT NULL REFERENCES movies(mid)
        pid                 TEXT NOT NULL REFERENCES people (pid)
        primary key (mid, pid)
);
```

3. Functional Dependencies:

(People) pid → (name, address, spouseName)

(Actors) pid → (DOB, hairColor, eyeColor, heightIn, weightLbs, favoriteColor, sagDate)

(Directors) pid → (filmSchool, dgDate, lensMaker)

mid → (name, yearReleased, mpaaNum, domesticSalesUSD, foreignSalesUSD, dvdBluraySalesUSD)

4. Query:

```
SELECT directors.name
FROM Directors d INNER JOIN movieDirectors ON d.pid = movieDirectors.pid
WHERE mid in (SELECT mid
                FROM movieDirectors c INNER JOIN People p ON p.pid = movieActors.pid
                WHERE name = "Sean Connery");
```