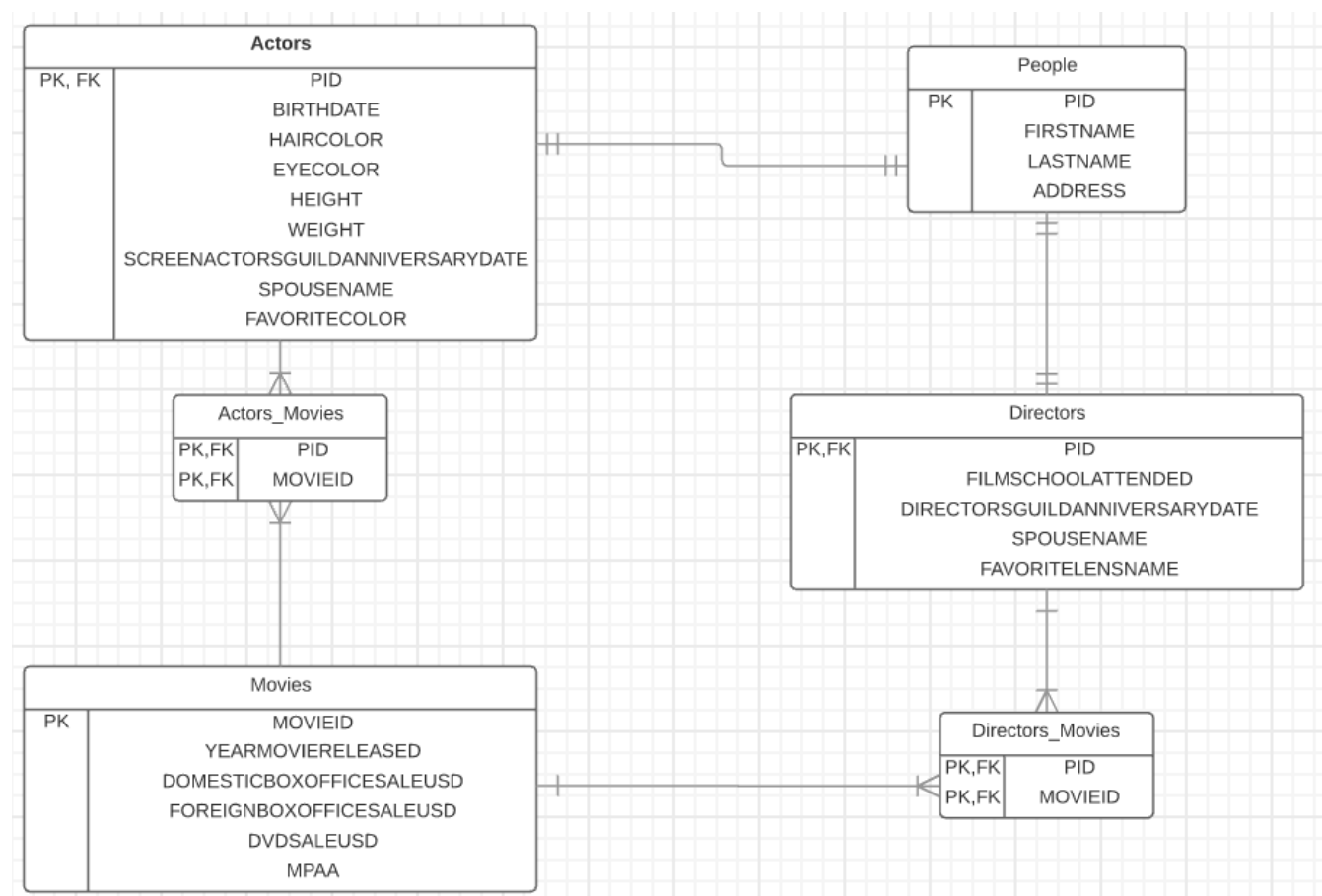


Andrew Rokoszak  
Professor Labouseur  
Database Management  
April 5<sup>th</sup>, 2016

## 1. E/R Diagram



## 2. Create Statements for each table

-- Create People Table --

DROP TABLE IF EXISTS people;

```
CREATE TABLE people (  
    PID INT not null,  
    FIRSTNAME VARCHAR(255) not null,  
    LASTNAME VARCHAR(255) not null,  
    ADDRESS VARCHAR(255) not null,  
    PRIMARY KEY(PID)  
);
```

-- Create Actors Table --

DROP TABLE IF EXISTS actors;

```
CREATE TABLE actors (  
    PID INT not null,  
    BIRTHDATE DATE not null,  
    HAIRCOLOR VARCHAR (255),  
    EYECOLOR VARCHAR (255),  
    HEIGHT FLOAT not null,  
    WEIGHT FLOAT not null,  
    SPOUSENAME VARCHAR (255),  
    FAVORITECOLOR VARCHAR (255),  
    SCREENACTORSGUILDDANNIVERSARYDATE DATE,  
    PRIMARY KEY(PID),  
    FOREIGN KEY (PID) references people(PID)  
);
```

-- Create Directors Table --

DROP TABLE IF EXISTS directors;

```
CREATE TABLE directors (  
    PID INT not null,  
    SPOUSENAME VARCHAR (255),  
    FILMSCHOOLATTENDED VARCHAR (255),  
    DIRECTORSGUILDDANNIVERSARYDATE DATE,  
    FAVORITELENSMAKER VARCHAR (255),  
    PRIMARY KEY(PID),  
    FOREIGN KEY (PID) references people(PID)  
);
```

--Create Movies Table --

DROP TABLE IF EXISTS movies;

```
CREATE TABLE movies (  
    MOVIEID                INT not null,  
    MOVIEName              VARCHAR(255) not null,  
    YEARMOVIERELEASED      INT not null ,  
    MPAA                   INT not null,  
    DOMESTICBOXOFFICESALESUSD  FLOAT ,  
    FOREIGNBOXOFFICESALESUSD  FLOAT ,  
    DVD_BLUERAYSALESUSD      FLOAT ,  
    PRIMARY KEY (MOVIEID)  
);
```

--Create actors\_movies Table--

```
CREATE TABLE actors_movies (  
    PID                    INT not null references actors(PID) ,  
    MovieID                INT not null references movies(MOVIEID)  
,  
    Primary Key (PID,MOVIEID)  
);
```

--Create directors\_movies Table--

DROP TABLE IF EXISTS directors\_movies;

```
CREATE TABLE directors_movies (  
    PID                    INT not null references directors(PID) ,  
    MovieID                INT not null references movies(MOVIEID)  
,  
    Primary Key (PID,MOVIEID)  
);
```

-- People

```
INSERT INTO people (PID , FIRSTNAME , LASTNAME, ADDRESS)
VALUES ('1' , 'Andrew' , 'Rokoszak' , '13 West Cedar Street Poughkeepsie New York');
```

```
INSERT INTO people (PID , FIRSTNAME , LASTNAME, ADDRESS)
VALUES ('2' , 'Carolyn' , 'Rokoszak' , '136 Youngs Road Mahwah New Jersey');
```

```
INSERT INTO people (PID , FIRSTNAME , LASTNAME, ADDRESS)
VALUES ('3' , 'Sean' , 'Connery' , '738 Crest Oak Road Summit New Jersey');
```

```
INSERT INTO people (PID , FIRSTNAME , LASTNAME, ADDRESS)
VALUES ('4' , 'Mike' , 'Simmons' , '1313 River Street Corning New York');
```

```
INSERT INTO people (PID , FIRSTNAME , LASTNAME, ADDRESS)
VALUES ('5' , 'Michael' , 'Crudo' , '1313 Fairy Road Crow Nest Montana');
```

```
INSERT INTO people (PID , FIRSTNAME , LASTNAME, ADDRESS)
VALUES ('6' , 'Bobby' , 'Dasilva' , '112 Victory Lane Bridewater New Jersey');
```

```
INSERT INTO people (PID , FIRSTNAME , LASTNAME, ADDRESS)
VALUES ('7' , 'Mitch' , 'Connelly' , '1324 Kirkland Road Buffalo New York');
```

```
INSERT INTO people (PID , FIRSTNAME , LASTNAME, ADDRESS)
VALUES ('8' , 'Dave' , 'Smith' , 'First Road Ashville California');
```

```
INSERT INTO people (PID , FIRSTNAME , LASTNAME, ADDRESS)
VALUES ('9' , 'Jim' , 'Kelly' , '876 Crest Oak Street Somerset New Texas');
```

-- ACTORS

```
INSERT INTO actors (PID , BIRTHDATE , HAIRCOLOR, EYECOLOR , HEIGHT , WEIGHT ,
SPOUSENAME , FAVORITECOLOR, SCREENACTORSGUILDANNIVERSARYDATE)
VALUES ('1' , '19931015' , 'Black' , 'Black' , '5.5' , '120' , 'KENDALL BURKE' , 'ORANGE' , '20001213'
);
```

```
INSERT INTO actors (PID , BIRTHDATE , HAIRCOLOR, EYECOLOR , HEIGHT , WEIGHT ,
SPOUSENAME , FAVORITECOLOR, SCREENACTORSGUILDANNIVERSARYDATE)
VALUES ('2' , '19600512' , 'Brown' , 'Black' , '5.6' , '250' , 'JOHN SMITH' , 'MAGENTA' , '20011213' );
```

```
INSERT INTO actors (PID , BIRTHDATE , HAIRCOLOR, EYECOLOR , HEIGHT , WEIGHT ,
SPOUSENAME , FAVORITECOLOR, SCREENACTORSGUILDANNIVERSARYDATE)
VALUES ('3' , '19300825' , 'Grey' , 'Black' , '60' , '200' , 'MARY CARTER' , 'BLUE' , '19750217' );
```

-- DIRECTORS

```
INSERT INTO directors (PID, SPOUSENAME, FILMSCHOOLATTENDED,  
DIRECTORSGUILDANNIVERSARYDATE, FAVORITELENSMAKER )  
VALUES ('4' , 'ANDREA LUTHER' , 'Luxburg' , '20011213' , 'FIJIFILM');
```

```
INSERT INTO directors (PID, SPOUSENAME, FILMSCHOOLATTENDED,  
DIRECTORSGUILDANNIVERSARYDATE, FAVORITELENSMAKER )  
VALUES ('5' , 'ILEEN FRANCOIS' , 'NEW YORK UNIVERSITY' , '19951209' , 'KODAK');
```

```
INSERT INTO directors (PID, SPOUSENAME, FILMSCHOOLATTENDED,  
DIRECTORSGUILDANNIVERSARYDATE, FAVORITELENSMAKER )  
VALUES ('6' , 'BRANDON JENNINGS' , 'School Of Lights' , '20031215' , 'CANON');
```

-- MOVIES

```
INSERT INTO movies (MOVIEID , MOVIEName , MPAA , YEARMOVIERELEASED ,  
DOMESTICBOXOFFICESALESUSD , FOREIGNBOXOFFICESALESUSD , DVD_BLUERAYSALESUSD)  
VALUES ('1' , 'MOVIE 1' , '0001' , '1991' , '12.11' , '123.11' , '23.23');
```

```
INSERT INTO movies (MOVIEID , MOVIEName , MPAA , YEARMOVIERELEASED ,  
DOMESTICBOXOFFICESALESUSD , FOREIGNBOXOFFICESALESUSD , DVD_BLUERAYSALESUSD)  
VALUES ('2' , 'MOVIE 2' , '0002' , '1992' , '12.11' , '123.11' , '23.23');
```

```
INSERT INTO movies (MOVIEID , MOVIEName , MPAA , YEARMOVIERELEASED ,  
DOMESTICBOXOFFICESALESUSD , FOREIGNBOXOFFICESALESUSD , DVD_BLUERAYSALESUSD)  
VALUES ('3' , 'MOVIE 3' , '0003' , '1993' , '12.11' , '123.11' , '23.23');
```

-- directors\_movies

```
INSERT INTO directors_movies(MOVIEID ,PID)  
VALUES ( '1' , '4' );
```

```
INSERT INTO directors_movies(MOVIEID ,PID)  
VALUES ( '2' , '5' );
```

```
INSERT INTO directors_movies(MOVIEID ,PID)  
VALUES ( '3' , '6' );
```

--actors\_movies

```
INSERT INTO actors_movies(MOVIEID ,PID)
VALUES ( '1' , '1' );
```

```
INSERT INTO actors_movies(MOVIEID ,PID)
VALUES ( '2' , '2' );
```

```
INSERT INTO actors_movies(MOVIEID ,PID)
VALUES ( '3' , '3' );
```

### **3. Functional Dependencies for each table**

-- Functional Dependencies --

-- TABLE People

--(PID) ,→ FIRSTNAME , LASTNAME , ADDRESS

-- TABLE Actors

--(PID) ,→ BIRTHDATE , HAIRCOLOR, EYECOLOR , HEIGHT , WEIGHT  
,SCREENACTORSGUILDANNIVERSARYDATE

-- TABLE Directors

--(PID) ,→ FILMSCHOOLATTENDED,  
--DIRECTORSGUILDANNIVERSARYDATE

-- TABLE Movies

--(MOVIEID) , → MOVIEName , YEARMOVIERELEASED , DOMESTICBOXOFFICESALESUSD ,  
FOREIGNBOXOFFICESALESUSD , --DVD\_BLUERAYSalesUSD

-- Actors\_Movies

--(PID , MOVIEID) ,→

-- Directors\_Movies

--(PID , MOVIEID ) ,→

4. Write a query to show all the directors with whom actor "Sean Connery" has worked.

```
Select distinct LASTNAME , FIRSTNAME
from people
where pid In (
    select pid
    from directors_movies
    where movieid IN (
        select movieid
        from actors_movies
        where pid IN (
            Select pid
            from people
            where lastname = 'Connery' and pid IN (
                Select pid
                from people
                where firstname = 'Sean')
            )
        )
    )
)
```