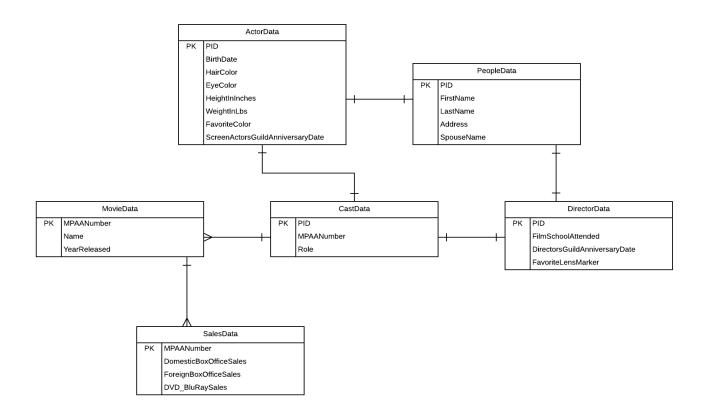
Dietrich Mosel Professor Labouseur November 13th, 2017 Database Management

Lab 8: Normalization Two

#1 - E/R DIAGRAM



#2 – SQL CREATE STATEMENTS

DROP TABLE IF EXISTS ActorData; DROP TABLE IF EXISTS DirectorData; DROP TABLE IF EXISTS PeopleData; DROP TABLE IF EXISTS MovieData; DROP TABLE IF EXISTS SalesData; DROP TABLE IF EXISTS CastData;

```
CREATE TABLE ActorData (
       PID int,
       BirthDate date,
       HairColor varchar(255),
       EyeColor varchar(255),
       HeightInInches int,
       Weight int,
       FavoriteColor varchar(255),
       ScreenActorsGuildAnniversaryDate date
);
CREATE TABLE DirectorData (
       PID int,
       FilmSchoolAttended varchar(255),
       DirectorsGuildAnniversaryDate date,
       FavoriteLensMaker varchar(255)
);
CREATE TABLE PeopleData (
       PID int,
       FirstName varchar(255),
       LastName varchar(255),
       Address varchar(255),
       SpouseName varchar(255)
);
CREATE TABLE MovieData (
       MPAANumber int,
       MovieName varchar(255),
       YearReleased int
);
CREATE TABLE SalesData (
       MPAANumber int,
       DomesticBoxOfficeSales int,
       ForeignBoxOfficeSales int,
       DVD_Blu_RaySales int
);
CREATE TABLE CastData (
       PID int,
       MPAANumber int,
       FirstName varchar(255),
       LastName varchar(255)
);
```

#3 - FUNCTIONAL DEPENDENCIES

Functional Dependencies for the ActorData Table...

{PID} → {BirthDate, HairColor, EyeColor, HeightInInches, WeightInLbs, FavoriteColor, ScreenActorsGuildAnniversaryDate}

Functional Dependencies for the DirectorData Table...

{PID} → {FilmSchoolAttended, DirectorsGuildAnniversaryDate, FavoriteLensMaker}

Functional Dependencies for the PeopleData Table...

{PID} → {FirstName, LastName, Address, SpouseName}

Functional Dependencies for the MovieData Table...

{MPAANumber} → {Name, YearReleased}

Functional Dependencies for the SalesData Table...

{MPAANumber} → {DomesticBoxOfficeSales, ForeignBoxOfficeSales, DVD BluRaySales}

Functional Dependencies for the CastData Table...

 $\{\} \rightarrow \{PID, MPAANumber, Role\}$

#4 – QUERY EXAMPLE

SELECT D.PID
FROM DirectorData D INNER JOIN ActorData A ON D.PID = A.PID
WHERE FirstName = 'Roger'
AND LastName = 'Moore';