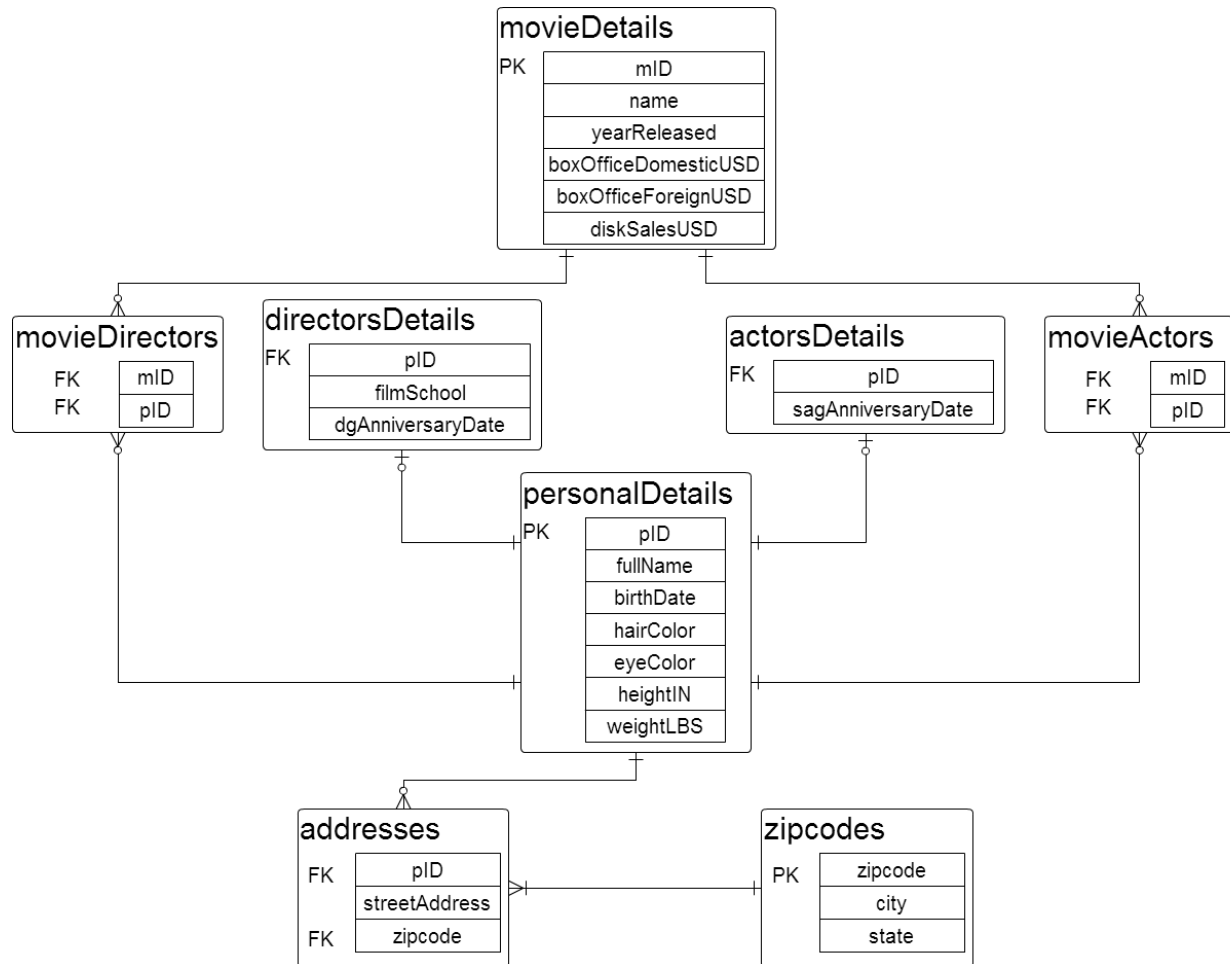


Cassandra Graves

Lab 8

4/4/2014

1) E/R Diagram



2) SQL Create Statements

```
CREATE TABLE movieDetails(  
    mID          TEXT NOT NULL,  
    name         TEXT NOT NULL,  
    yearReleased INT,  
    boxOfficeDomesticUSD NUMERIC(7,2),  
    boxOfficeForeignUSD NUMERIC(7,2),  
    diskSalesUSD  NUMERIC(7,2),  
    PRIMARY KEY(mID)  
);
```

```
CREATE TABLE personalDetails(  
    pID          TEXT NOT NULL,  
    fullName     TEXT NOT NULL,  
    birthDate    DATE,  
    hairColor    TEXT,  
    eyeColor     TEXT,  
    heightIN     INT,  
    weightLBS    INT,  
    PRIMARY KEY(pID)  
);
```

```
CREATE TABLE movieDirectors(  
    mID          TEXT NOT NULL REFERENCES movieDetails(mID),  
    pID          TEXT NOT NULL REFERENCES personalDetails(pID)  
);
```

```
CREATE TABLE movieActors(  
    mID          TEXT NOT NULL REFERENCES movieDetails(mID),  
    pID          TEXT NOT NULL REFERENCES personalDetails(pID)  
);
```

```
CREATE TABLE directorsDetails(  
    pID          TEXT NOT NULL REFERENCES personalDetails(pID),  
    filmSchool   TEXT,  
    dgAnniversaryDate DATE  
);
```

```
CREATE TABLE actorsDetails(  
    pID          TEXT NOT NULL REFERENCES personalDetails(pID),  
    sagAnniversaryDate DATE  
);
```

```
CREATE TABLE zipcodes(
    zipcode          INT NOT NULL,
    city             TEXT NOT NULL,
    state            TEXT NOT NULL,
    PRIMARY KEY(zipcode)
);
```

```
CREATE TABLE addresses(
    pID              TEXT NOT NULL REFERENCES personalDetails(pID),
    streetAddress    TEXT,
    zipcode           INT REFERENCES zipcodes(zipcode)
);
```

3) SQL Insert Statements

movieDetails

```
INSERT INTO movieDetails
(mID, name, yearReleased, boxOfficeDomesticUSD, boxOfficeForeignUSD, diskSalesUSD)
VALUES('m001','Dr. No',1962,5555.55,4444.44,11212.12);
```

```
INSERT INTO movieDetails
(mID, name, yearReleased, boxOfficeDomesticUSD, boxOfficeForeignUSD, diskSalesUSD)
VALUES('m002','Moonraker',1979,6666.66,5555.55,11919.19);
```

```
INSERT INTO movieDetails
(mID, name, yearReleased, boxOfficeDomesticUSD, boxOfficeForeignUSD, diskSalesUSD)
VALUES('m003','Skyfall',2012,2222.22,1111.11,10000.04);
```

```
INSERT INTO movieDetails
(mID, name, yearReleased, boxOfficeDomesticUSD, boxOfficeForeignUSD, diskSalesUSD)
VALUES('m004','Winner',2013,8888.88,7777.77,2999.99);
```

personalDetails

```
INSERT INTO personalDetails
(pID, fullName, birthDate, hairColor, eyeColor, heightIN, weightLBS)
VALUES('p001','Sean Connery','1930-8-25','grey','brown',74,180);
```

```
INSERT INTO personalDetails
(pID, fullName, birthDate, hairColor, eyeColor, heightIN, weightLBS)
VALUES('p002','Roger Moore','1927-10-14','black','blue',73,190);
```

```
INSERT INTO personalDetails
(pID, fullName, birthDate, hairColor, eyeColor, heightIN, weightLBS)
VALUES('p003','Daniel Craig','1968-3-2','brown','blue',70,200);
```

```
INSERT INTO personalDetails
(pID, fullName, birthDate, hairColor, eyeColor, heightIN, weightLBS)
VALUES('p004','Terence Young','1915-6-20','grey','brown',68,170);
```

```
INSERT INTO personalDetails
(pid, fullName, birthDate, hairColor, eyeColor, heightIN, weightLBS)
VALUES('p005','Lewis Gilbert','1920-3-6','white','brown',65,165);
```

```
INSERT INTO personalDetails
(pid, fullName, birthDate, hairColor, eyeColor, heightIN, weightLBS)
VALUES('p006','Sam Mendes','1965-8-1','grey','blue',70,185);
```

movieDirectors

```
INSERT INTO movieDirectors(mID,pID)
VALUES('m001','p004');
```

```
INSERT INTO movieDirectors(mID,pID)
VALUES('m002','p005');
```

```
INSERT INTO movieDirectors(mID,pID)
VALUES('m003','p006');
```

```
INSERT INTO movieDirectors(mID,pID)
VALUES('m004','p001');
```

```
INSERT INTO movieDirectors(mID,pID)
VALUES('m004','p005');
```

movieActors

```
INSERT INTO movieActors(mID,pID)
VALUES('m001','p001');
```

```
INSERT INTO movieActors(mID,pID)
VALUES('m002','p002');
```

```
INSERT INTO movieActors(mID,pID)
VALUES('m003','p003');
```

```
INSERT INTO movieActors(mID,pID)
VALUES('m004','p001');
```

```
INSERT INTO movieActors(mID,pID)
VALUES('m004','p002');
```

directorsDetails

```
INSERT INTO directorsDetails(pid, filmSchool, dgAnniversaryDate)
VALUES('p004','Cambridge','2014-1-25');
```

```
INSERT INTO directorsDetails(pid, filmSchool, dgAnniversaryDate)
VALUES('p005','RADA','2013-2-2');
```

```
INSERT INTO directorsDetails(pID, filmSchool, dgAnniversaryDate)
VALUES('p006','Cambridge','2014-1-25');
```

```
INSERT INTO directorsDetails(pID, filmSchool, dgAnniversaryDate)
VALUES('p001','Marist','2014-1-25');
```

actorsDetails

```
INSERT INTO actorsDetails(pID, sagAnniversaryDate)
VALUES('p001','2014-1-18');
```

```
INSERT INTO actorsDetails(pID, sagAnniversaryDate)
VALUES('p002','2014-1-18');
```

```
INSERT INTO actorsDetails(pID, sagAnniversaryDate)
VALUES('p003','2014-1-18');
```

```
INSERT INTO actorsDetails(pID, sagAnniversaryDate)
VALUES('p005','2014-1-18');
```

zipcodes

```
INSERT INTO zipcodes(zipcode, city, state)
VALUES(10940,'Middletown','NY');
```

```
INSERT INTO zipcodes(zipcode, city, state)
VALUES(12601,'Poughkeepsie','NY');
```

```
INSERT INTO zipcodes(zipcode, city, state)
VALUES(10924,'Goshen','NY');
```

addresses

```
INSERT INTO addresses(pID, streetAddress, zipcode)
VALUES('p001','1 Main St',10924);
```

```
INSERT INTO addresses(pID, streetAddress, zipcode)
VALUES('p002','3 Blue Ave',10940);
```

```
INSERT INTO addresses(pID, streetAddress, zipcode)
VALUES('p003','7 Park Pl',10924);
```

```
INSERT INTO addresses(pID, streetAddress, zipcode)
VALUES('p004','9 Ridge Rd',10924);
```

```
INSERT INTO addresses(pID, streetAddress, zipcode)
VALUES('p005','15 Stratford Ln',10940);
```

```
INSERT INTO addresses(pID, streetAddress, zipcode)
VALUES('p006','200 North Rd',12601);
```

4) Functional Dependencies

movieDetails

mID \rightarrow name, yearReleased, boxOfficeDomesticUSD, boxOfficeForeignUSD, diskSalesUSD

personalDetails

pID \rightarrow fullName, birthdate, hairColor, eyeColor, heightIN, weightLBS

directorsDetails

pID \rightarrow filmSchool, dgAnniversaryDate

actorsDetails

pID \rightarrow sagAnniversaryDate

zipcodes

zipcode \rightarrow city, state

addresses

pID \rightarrow streetAddress, zipcode

5) SQL Query: All directors with whom Actor Sean Connery has worked.

```
select fullName as DirectorsNames
```

```
from personalDetails
```

```
where pID in (select pID
              from movieDirectors
              where mID in (select mID
                           from movieActors
                           where pID in (select pID
                                          from personalDetails
                                          where fullName = 'Sean Connery'
                                          )
                           )
              )
;
```